

U.S.\$ 615,000,000

**Comisión Federal de Electricidad***(a Productive State Enterprise of the Federal Government of the United Mexican States)***5.00% Notes due 2049****jointly and severally guaranteed by****CFE Distribución, CFE Suministrador de Servicios Básicos, CFE Transmisión, CFE Generación I, CFE Generación II, CFE Generación III, CFE Generación IV, CFE Generación V and CFE Generación VI  
(each, a Subsidiary Productive Enterprise of Comisión Federal de Electricidad)**

Comisión Federal de Electricidad (the "Issuer"), a productive state enterprise of the Federal Government (the "Mexican government") of the United Mexican States ("Mexico"), is offering U.S.\$ 615,000,000 aggregate principal amount of 5.00% notes due 2049, which we refer to as the "notes." The payment of principal of and interest and Additional Amounts (as defined under "Description of the Notes—Additional Amounts") will be unconditionally and irrevocably guaranteed jointly and severally by CFE Distribución, CFE Suministrador de Servicios Básicos, CFE Transmisión, CFE Generación I, CFE Generación II, CFE Generación III, CFE Generación IV, CFE Generación V and CFE Generación VI (each, a "guarantor" and, collectively, the "guarantors"), each of which is a subsidiary productive enterprise of the Issuer. The Issuer's payment obligations under the notes, and the payment obligations of the guarantors under their respective guaranties of the notes, will at all times rank without any preference among themselves and equally with all other unsubordinated public external indebtedness of the Issuer or of such guarantor, respectively. The Mexican government does not guarantee or secure the Issuer's obligations or those of the guarantors and has no obligation to pay the principal, interest or any other amounts payable on the notes in the event that the Issuer's cash flows and/or assets or those of the guarantors are not sufficient to make any such payments. The notes do not grant in any way rights over the ownership, control or assets of the Issuer or any of the guarantors. The notes will not be secured by any of the Issuer or the guarantors' assets or properties.

Interest on the notes will accrue from July 30, 2019 and will be payable on January 30 and July 30 of each year, beginning on January 30, 2020. Principal on the notes will be payable in annual installments on July 30 of each year, commencing on July 30, 2020, in accordance with the amortization schedule set forth herein. The notes will mature on July 30, 2049.

In the event of certain changes to applicable laws and regulations or certain changes in the interpretation or application of such laws and regulations that result in an increase in the applicable rate of Mexican withholding tax in respect of payments of interest under the notes, the Issuer or any guarantor may redeem the notes, in whole but not in part, prior to maturity, at a price equal to 100% of their principal amount, plus accrued and unpaid interest to the redemption date (and Additional Amounts, if any). In addition, upon the occurrence of certain fundamental changes in our ownership or business (including, among others, if the Issuer ceases to be a public sector entity of, or majority-owned by, the Mexican government), the Issuer will be required to offer to purchase the notes at a price equal to 100% of their principal amount, plus accrued and unpaid interest to the purchase date. See "Description of the Notes—Redemption and Purchase."

The notes will contain provisions, commonly known as "collective action clauses." Under these provisions, which differ from the terms of the Issuer's public external indebtedness issued prior to June 16, 2015, the Issuer may amend the payment provisions of any series of debt securities issued under the indenture (including the notes) and other reserved matters listed in the indenture, with the consent of the holders of: (1) with respect to a single series of debt securities, more than 75% of the aggregate principal amount of the outstanding debt securities of such series; (2) with respect to two or more series of debt securities, if certain "uniformly applicable" requirements are met, more than 75% of the aggregate principal amount of the outstanding debt securities of all series affected by the proposed modification, taken in the aggregate; or (3) with respect to two or more series of debt securities, more than 66<sup>2</sup>/<sub>3</sub>% of the aggregate principal amount of the outstanding debt securities of all series affected by the proposed modification, taken in the aggregate, and more than 50% of the aggregate principal amount of the outstanding debt securities of each series affected by the proposed modification, taken individually. See "Description of the Notes—Meetings, Amendments and Waivers."

We will apply to admit the notes for listing on the Official List of the Luxembourg Stock Exchange and for trading on the Euro MTF Market of the Luxembourg Stock Exchange.

Application will also be made to the Taipei Exchange (formerly known as GreTai Securities Market) (the "TPEX") for the listing of, and permission to deal in, the notes by way of debt issues to "professional institutional investors" as defined under Paragraph 2, Article 4 of the Financial Consumer Protection Act of the Republic of China (the "ROC") only and such permission is expected to become effective on or about July 30, 2019.

The TPEX is not responsible for the content of this offering memorandum and any supplement or amendment hereto and no representation is made by the TPEX as to the accuracy or completeness of this offering memorandum and any supplement or amendment hereto. The TPEX expressly disclaims any and all liability for any losses arising from, or as a result of the reliance on, all or part of the contents of this offering memorandum and any supplement or amendment hereto. Admission to the listing and trading of the notes on the TPEX shall not be taken as an indication of the merits of the Issuer, the guarantors or the notes. No assurance can be given that such applications will be granted or that the TPEX listing will be maintained.

The notes have not been, and shall not be, offered, sold or re-sold, directly or indirectly, to investors other than “professional institutional investors” as defined under Paragraph 2, Article 4 of the Financial Consumer Protection Act of the ROC, which currently include: (i) overseas or domestic banks, securities firms, futures firms and insurance companies (excluding insurance agencies, insurance brokers and insurance surveyors), the foregoing as further defined in more detail in Paragraph 3 of Article 2 of the Organization Act of the Financial Supervisory Commission of the ROC, (ii) overseas or domestic fund management companies, government investment institutions, government funds, pension funds, mutual funds, unit trusts, and funds managed by financial service enterprises pursuant to the ROC Securities Investment Trust and Consulting Act, the ROC Future Trading Act or the ROC Trust Enterprise Act or investment assets mandated and delivered by or transferred for trust by financial consumers, and (iii) other institutions recognized by the Financial Supervisory Commission of the ROC. Purchasers of the notes are not permitted to sell or otherwise dispose of the notes except by transfer to a professional institutional investor.

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Investing in the notes involves risks. See “Risk Factors” beginning on page 15.

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ISSUE PRICE: 100.00%, PLUS ACCRUED INTEREST, IF ANY, FROM JULY 30, 2019

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**THE INFORMATION CONTAINED IN THIS OFFERING MEMORANDUM IS EXCLUSIVELY OUR RESPONSIBILITY AND HAS NOT BEEN REVIEWED OR AUTHORIZED BY THE MEXICAN *COMISIÓN NACIONAL BANCARIA Y DE VALORES* (NATIONAL BANKING AND SECURITIES COMMISSION, OR THE “CNBV”). THE NOTES HAVE NOT BEEN AND WILL NOT BE REGISTERED WITH THE MEXICAN *REGISTRO NACIONAL DE VALORES* (NATIONAL SECURITIES REGISTRY) MAINTAINED BY THE CNBV AND, THEREFORE, THE NOTES MAY NOT BE PUBLICLY OFFERED OR SOLD IN MEXICO. HOWEVER, THE NOTES MAY BE OFFERED, ON A PRIVATE PLACEMENT BASIS, IN MEXICO TO INVESTORS THAT QUALIFY AS INSTITUTIONAL OR ACCREDITED INVESTORS UNDER MEXICAN LAW, PURSUANT TO THE PRIVATE PLACEMENT EXEMPTION SET FORTH IN THE MEXICAN *LEY DEL MERCADO DE VALORES* (THE “SECURITIES MARKET LAW”) AND REGULATIONS THEREUNDER. AS REQUIRED UNDER THE MEXICAN SECURITIES MARKET LAW, WE WILL NOTIFY THE CNBV OF THE OFFERING OF THE NOTES OUTSIDE OF MEXICO TO COMPLY WITH ARTICLE 7, SECOND PARAGRAPH, OF THE MEXICAN SECURITIES LAW AND REGULATIONS THEREUNDER FOR INFORMATIONAL AND STATISTICAL PURPOSES ONLY, AND THE FILING OR RECEIPT OF SUCH NOTICE BY THE CNBV IS NOT A REQUIREMENT FOR THE VALIDITY OF THE NOTES AND DOES NOT IMPLY ANY CERTIFICATION AS TO THE INVESTMENT QUALITY OF THE NOTES, OUR SOLVENCY, LIQUIDITY OR CREDIT QUALITY OR THE ACCURACY OR COMPLETENESS OF THE INFORMATION SET FORTH HEREIN.**

The notes have not been, and will not be, registered under the U.S. Securities Act of 1933, as amended (the “Securities Act”), or the securities laws of any other jurisdiction, and are being offered only outside the United States to non-U.S. persons in compliance with Regulation S under the Securities Act. For certain restrictions on the transfer of the notes, see “Transfer Restrictions.”

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The managers expect to deliver the notes in book-entry form through the facilities of Euroclear Bank S.A./N.V., as operator of the Euroclear System (“Euroclear”), and Clearstream Banking, *société anonyme* (“Clearstream”), against payment on or about July 30, 2019.

J.P. Morgan Securities LLC is acting as structuring agent in connection with the offering. J.P. Morgan Securities LLC is not a licensed or regulated entity in the ROC, and has not offered or sold, and will not subscribe for or sell or underwrite, any notes offered hereby.

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*Joint Bookrunners*

**HSBC**

*(Lead Manager)*

**Morgan Stanley**

*Co-Manager*

**Taishin International Bank Co., Ltd.**

*Structuring Agent*

**J.P. Morgan**

July 12, 2019

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You should carefully review the entire offering memorandum before making an investment decision. None of the Issuer, the managers or the structuring agent have authorized anyone to provide you with different information. The Issuer is offering to sell, and is seeking offers to buy, the notes only in jurisdictions where offers and sales are permitted. This offering memorandum does not constitute an offer to sell, or a solicitation of an offer to buy, any notes by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation. Neither the delivery of this offering memorandum nor any sale made under it implies that there has been no change in our affairs or that the information in this offering memorandum is correct as of any date after the date of this offering memorandum.

This offering memorandum has been prepared by us solely for use in connection with the placement of the notes. The Issuer and the managers reserve the right to reject any offer to purchase for any reason.

**Neither the U.S. Securities and Exchange Commission (the “SEC”), the CNBV, any state securities commission nor any other regulatory authority has approved or disapproved the offering of the notes or the notes; nor have any of the foregoing authorities passed upon or endorsed the merits of this offering or the accuracy or adequacy of this offering memorandum. Any representation to the contrary is a criminal offense.**

You must:

- comply with all applicable laws and regulations in force in any jurisdiction in connection with the possession or distribution of this offering memorandum and the purchase, offer or sale of the notes, and
- obtain any consent, approval or permission required to be obtained by you for the purchase, offer or sale by you of the notes under the laws and regulations applicable to you in force in any jurisdiction to which you are subject or in which you make such purchases, offers or sales; and none of the Issuer or the managers nor the structuring agent shall have any responsibility therefor.

See “Transfer Restrictions” for information on transfer restrictions applicable to the notes.

You acknowledge that:

- you have been afforded an opportunity to request from us, and to review, all additional information considered by you to be necessary to verify the accuracy of, or to supplement, the information contained in this offering memorandum;
- you have not relied on the managers, the structuring agent or any person affiliated with the managers or the structuring agent in connection with your investigation of the accuracy of such information or your investment decision; and
- no person has been authorized to give any information or to make any representation concerning us or the notes, other than as contained in this offering memorandum and, if given or made, any such other information or representation should not be relied upon as having been authorized by us, the managers or the structuring agent.

The notes may not be transferred or resold, except as permitted under the indenture governing the notes, the Securities Act and applicable U.S. state securities laws. You may be required to bear the financial risks of this investment for an indefinite period of time.

We have taken reasonable care to ensure that the information contained in this offering memorandum is true and correct in all material respects and is not misleading in any material respect as of the date of this offering memorandum, and that there has been no omission of information that, in the context of the issuance of the notes, would make any statement of material fact in this offering memorandum misleading in any material respect, in light of the circumstances existing as of the date of this offering memorandum. We accept responsibility accordingly.

No representation or warranty, express or implied, is made or given by the managers, the structuring agent or the trustee as to the accuracy, completeness or sufficiency of the information contained in this offering memorandum, and nothing contained in this offering memorandum is, or shall be relied upon as, a promise, representation or warranty by the managers, the structuring agent or the trustee. To the fullest extent permitted by law, none of the managers, the structuring agent or the trustee accepts any responsibility for the contents of this offering memorandum or for any other statement made or purported to be made by the managers, the structuring agent or the trustee or on their behalf in connection with the Issuer or the issue and offering of the notes. Each of the managers, the structuring agent and the trustee accordingly disclaims all and any liability whether arising in tort or contract or otherwise which it might otherwise have in respect of this offering memorandum or any such statement. This offering memorandum is not intended to provide the basis of any credit or other evaluation nor should it be considered as a recommendation by the Issuer, the managers, the structuring agent, the trustee or any other person that any recipient of this offering memorandum should purchase the notes. Each potential purchaser of the notes should determine for itself the relevance of the information contained in this offering memorandum and its purchase of the notes should be based upon such investigations with its own tax, legal, business and financial advisors as it deems necessary. The managers and the structuring agent assume no obligation, responsibility or liability to update the information contained herein, or to inform investors of any change of the information or any issues that come to their attention.

In making an investment decision, you must rely on your own examination of us and the terms of the offering, including the merits and risks involved. See “Risk Factors” for a discussion of certain factors to be considered in connection with an investment in the notes. Each person receiving this offering memorandum acknowledges that such person has not relied on the managers, the structuring agent, the trustee or any person affiliated with any of such persons in connection with its investigation of the accuracy of such information or its investment decision. By purchasing the notes, you will be deemed to have acknowledged that you have made certain acknowledgments, representation and agreements as set forth above and under “Transfer Restrictions.”

None of us, the managers or the structuring agent, nor any of our or their respective representatives, is making any representation to you regarding the legality of an investment in the notes. You should consult with your own advisors as to legal, tax, business, financial, regulatory and related aspects of an investment in the notes. You must comply with all laws applicable in any place in which you buy, offer or sell the notes or possess or distribute this offering memorandum, and you must obtain all applicable consents and approvals. None of us, the managers or the structuring agent, nor any of our or their respective representatives shall have any responsibility for any of the foregoing legal requirements.

## ENFORCEABILITY OF CIVIL LIABILITIES

The Issuer is an *empresa productiva del Estado* (productive state enterprise) of the Mexican government and the guarantors are *empresas productivas subsidiarias* (subsidiary productive enterprises of the Issuer), all of which have been created under applicable law. The Issuer and the guarantors have irrevocably submitted to the jurisdiction of the U.S. federal courts located in the Borough of Manhattan in The City of New York and, to the extent permitted by law, have waived immunity from the jurisdiction of these courts in connection with any action based upon the notes brought by any holder of notes. The Issuer and the guarantors have, however, reserved the right to plead immunity under the U.S. Foreign Sovereign Immunities Act of 1976 (the “Foreign Sovereign Immunities Act”) in actions brought against them under the U.S. federal securities laws or any U.S. state securities laws. Unless the Issuer or the guarantors waive their immunity against such actions, a U.S. court judgment could be obtained against the Issuer or the guarantors only if a U.S. court were to determine that the Issuer or the guarantors are not entitled to sovereign immunity under the Foreign Sovereign Immunities Act with respect to that action.

The Issuer’s and the guarantors’ directors and officers, as well as certain experts named in this offering memorandum, reside outside the United States, and all or a substantial portion of assets of the Issuer and the guarantors, and their respective directors and officers, are located outside of the United States. As a result, it may not be possible for holders of the notes to effect service of process outside of Mexico upon the Issuer or the guarantors, its or their directors or officers or those experts, or to enforce against such parties judgments of courts located outside Mexico predicated upon civil liabilities under the laws of jurisdictions other than Mexico, including judgments predicated upon the civil liability provisions of the U.S. federal securities laws or other laws of the United States.

Neither the Issuer, as a productive state enterprise of the Mexican government, nor the guarantors, as subsidiary productive enterprises of the Issuer, are subject to the Mexican *Ley de Concursos Mercantiles* (Commercial Bankruptcy Act) and thus cannot be declared in reorganization or bankrupt (*en concurso mercantil o en quiebra*). Under applicable Mexican law, the Issuer may be liquidated and dissolved by the Mexican Congress if it determines that the Issuer ceases to fulfill the purpose for which the Issuer was created or for any other reason. In addition, the guarantors may be liquidated and dissolved at any time by the *Consejo de Administración* of the Issuer (the “Board of Directors”), upon a proposal of the Issuer’s General Director. In the event that the Issuer is liquidated and dissolved by the Mexican Congress, or the guarantors are liquidated and dissolved as a result of a determination made by the Board of Directors, it is uncertain whether or to what extent the rights of holders of the notes would be honored. The Mexican government does not guarantee the Notes and is not required to assume or make payments under the Notes.

Under the CFE Law (as defined below), real property owned by the Issuer and the guarantors shall be deemed to be property of the public domain and, under Article 4 of the *Ley General de Bienes Nacionales* (General Law of Public Property), neither attachment prior to judgment nor attachment in aid of execution will be ordered by Mexican courts against any such real property. As a result, a Mexican court would not recognize an attachment order against any such real property. In addition, under the Mexican *Ley de la Industria Eléctrica* (Electric Industry Law), the transmission and distribution of electric energy, which are deemed a public service, are reserved to the Mexican government, through us, and to that extent, the assets related thereto are subject to immunity. As a result, the ability to enforce judgments against the Issuer or the guarantors in the courts of Mexico may be substantially limited.

Neither the Issuer nor the guarantors can predict whether Mexican courts would enforce judgments of U.S. courts based on the civil liability provisions of the U.S. federal securities laws. Therefore, even if a judgment of a U.S. court against the Issuer or any guarantor were obtained, a holder of notes may not be able to obtain a judgment in Mexico that is based on that U.S. court judgment. Moreover, a holder of notes may not be able to enforce a judgment against the property of the Issuer or any guarantor in the United States except under the limited circumstances specified in the Foreign Sovereign Immunities Act. If an action were to be brought in Mexico seeking to enforce the obligations of the Issuer or the guarantors under the notes or the guaranty agreement (in respect of the notes), satisfaction of those obligations may be made in Mexican pesos, pursuant to the laws of Mexico, at the rate of exchange in effect on the date on which payment is made. Such rate of exchange is currently determined by *Banco de México* every business day in Mexico based on an average of wholesale foreign exchange market quotes and is published on *Banco de México*’s website ([www.banxico.org.mx](http://www.banxico.org.mx)) and the following business banking day in the *Diario Oficial de la Federación* (Official Gazette of the Federation). See “Exchange Rates.”

## WHERE YOU CAN FIND MORE INFORMATION

We prepare annual audited consolidated financial statements and quarterly unaudited condensed consolidated financial information in both Spanish and English. This information is available on our website ([www.cfe.mx](http://www.cfe.mx)). In addition, we are required to file certain annual, quarterly and other reports and information with the *Bolsa Mexicana de Valores, S.A.B. de C.V.* (the “BMV”) with respect to our debt securities listed on the BMV. You may inspect and copy these reports and other information related to us at the offices of the BMV located at Paseo de la Reforma 255, Colonia Cuauhtémoc, Alcaldía Cuauhtémoc, C.P. 54124, Ciudad de México, México. Our BMV filings are available to you on the BMV’s website ([www.bmv.com.mx](http://www.bmv.com.mx)).

The Issuer is a productive state enterprise of the Mexican government. However, the Mexican government does not guarantee or secure the Issuer’s obligations and has no obligation to pay the principal or interest on the notes in the event that the Issuer’s cash flows and/or assets are not sufficient to make any such payments. Macroeconomic and other information relating to the Mexican government is available to the public on the websites of *Banco de México* ([www.banxico.org.mx](http://www.banxico.org.mx)), the Mexican *Secretaría de Hacienda y Crédito Público* (Ministry of Finance and Public Credit, or the “Ministry of Finance”) ([www.gob.mx/hacienda](http://www.gob.mx/hacienda)) and the Mexican *Instituto Nacional de Estadística y Geografía* (National Institute of Statistics and Geography, or “INEGI”) ([www.inegi.org.mx](http://www.inegi.org.mx)). In addition, Mexico publishes ongoing reports with the SEC. Such reports are available on the SEC’s website ([www.sec.gov](http://www.sec.gov)).

The information contained in the foregoing websites is not incorporated by reference in this offering memorandum.

## **PRESENTATION OF FINANCIAL AND OTHER INFORMATION**

Unless otherwise specified or the context otherwise requires, references in this offering memorandum to “CFE,” “we,” “us” and “our” are to Comisión Federal de Electricidad, together with its subsidiary productive enterprises, all of which are the guarantors hereunder, and to the “Issuer” are solely to Comisión Federal de Electricidad.

This offering memorandum includes our audited consolidated financial statements as of and for the years ended December 31, 2018, 2017 and 2016 (our “annual financial statements”), and our unaudited condensed consolidated interim financial statements as of March 31, 2019 and for the three-month periods ended March 31, 2019 and 2018 (our “interim financial statements” and, together with our annual financial statements, our “financial statements”). Our annual financial statements as of and for the years ended December 31, 2018, 2017 and 2016 were audited by KPMG Cárdenas Dosal, S.C., an independent public accounting firm.

Our financial statements are expressed in Mexican pesos and have been prepared in accordance with International Financing Reporting Standards (“IFRS”), as adopted by the International Accounting Standards Board (the “IASB”). All comparative financial information as of and for the years ended December 31, 2017 and 2016 have been restated to reflect the adoption of IFRS 9 “Financial Instruments” and IFRS 15 “Revenue from Contracts with Customers” using the full retrospective approach as of January 1, 2016.

### **Currency Information**

References in this offering memorandum to “U.S.\$” and “U.S. dollars” are to the lawful currency of the United States and references to “Ps.” and “Mexican pesos” are to the lawful currency of Mexico. See “Exchange Rates” for certain historical Mexican peso/U.S. dollar exchange rates.

This offering memorandum contains translations of certain Mexican peso amounts into U.S. dollars at specified rates solely for the convenience of the reader. Unless otherwise indicated, U.S. dollar equivalent information for amounts in Mexican pesos is based upon the rate published on the Official Gazette of the Federation on March 28, 2019 for payment obligations due on March 29, 2019, which was Ps. 19.3201 per U.S.\$ 1.00. These translations should not be construed as representations that the Mexican peso amounts actually represent such U.S. dollar amounts or that have been or could be converted into U.S. dollars at the rate indicated or any other rate.

### **Rounding**

Certain figures included in this offering memorandum have been rounded for ease of presentation. Percentage figures included in this offering memorandum have been calculated on the basis of such amounts prior to rounding, not on the basis of rounded figures. For this reason, percentage amounts in this offering memorandum may vary from those obtained by performing the same calculations using the figures in our financial statements. Certain numerical figures shown as totals in some tables may not be an arithmetic aggregation of the figures that preceded them due to rounding.

## FORWARD-LOOKING STATEMENTS

This offering memorandum contains words, such as “believe,” “plan,” “intend,” “estimate,” “target,” “expect,” “anticipate,” “should,” “potential,” “seek,” “consider,” “assume,” “forecasts” and similar expressions that identify forward-looking statements, which reflect our views about future events and financial performance. Examples of such forward-looking statements include projections or statements as to the following:

- changes in the legal and regulatory regime applicable to the Mexican electricity sector, or the interpretation thereof;
- our future operating revenues, net income (loss), capital expenditures, indebtedness levels or other financial items or ratios;
- our plans, objectives or goals, including those related to our competition, regulation and rates;
- our future financial performance;
- the future economic performance of Mexico;
- interest rates, currency exchange rates, restrictions on convertibility, devaluations and foreign securities markets; and
- availability and cost of external financing for our operations, which have been affected by the stress experienced by the global financial markets.

Actual results could differ materially from those projected in such forward-looking statements as a result of various factors that may be beyond our control. These factors include, but are not limited to:

- significant economic or political developments in Mexico, particularly developments affecting the electricity sector;
- changes in the economic policies or priorities of the Mexican government;
- changes in our or Mexico’s domestic and international credit ratings;
- interruptions or failures in our technology systems;
- economic, political and regulatory developments in the United States or elsewhere;
- legal action initiated by us or our suppliers or contractual counterparties, in connection with contractual terms and breaches thereunder;
- adjustments to the rates that we charge our customers;
- availability of funds under income laws and budgets approved annually for our operations;
- effects on us from increases in fuel oil or natural gas prices;
- our inability to meet efficiency or cost reduction objectives or increases in our operating costs;
- terrorist and organized criminal activities as well as geopolitical events;
- changes in interest rates or access to sources of financing on competitive terms and inflation levels;
- foreign currency exchange fluctuations relative to the U.S. dollar or the Mexican peso and potential currency exchange control risks;
- effects on us from competition, including on our ability to hire and retain skilled personnel; and



- changes in our regulatory environment, including tax and environmental regulations, or the interpretation thereof.

Accordingly, you should not place undue reliance on these forward-looking statements. In any event, these statements speak only as of their dates, and we undertake no obligation to update or revise any of them, whether as a result of new information, future events or otherwise.

For a more detailed discussion of important factors that could cause actual results to differ materially from those contained in any forward-looking statement, see “Risk Factors.”

## TECHNICAL TERMS RELATING TO THE ELECTRICITY INDUSTRY

“capacity” means the installed capacity an electric system must have to meet peak hour demand plus a reserve sufficient to cover unplanned outages. Some of our installed capacity is idle during periods when there is lower demand for energy output and, during those periods, some of the potential output is not generated. Capacity is generally measured in megawatts.

“demand” means, for an integrated electric system, the amount of power demanded by consumers of energy at any point in time, including energy lost during transmission and distribution to consumers. It is often expressed in kilowatts.

“distribution” means the part of the electric power system that takes power from a bulk power substation to customer switches. It includes distribution substations, circuits that extend from distribution substations to every distribution transformer, metering equipment and customer location.

“generation” means the production of electricity in the large quantities required to supply electric power systems in generating stations, or power plants. Generation of electricity is achieved by converting the heat of fuel (*e.g.*, coal, gas or uranium), the hydraulic energy of water, or other forms of energy (*e.g.*, wind or solar) into electric energy. A generating station or facility may consist of several independent generating units.

“GW” means gigawatt. One gigawatt equals one billion watts, one million kilowatts or one thousand megawatts.

“GWh” means gigawatt-hour, or one million kilowatt-hours. The GWh is often used to measure the annual energy output from large power generators.

“GVA” means gigavolt-amperes. The capacity of our transmission network is normally measured in terms of gigavolt-amperes, where one GVA is one billion volt-amperes.

“kW” or “kilowatt” means one thousand watts.

“kWh” means kilowatt-hour—the standard unit of energy used in the electric utility industry to measure consumption. One kilowatt-hour is the amount of energy that would be produced by a generator producing one thousand watts for one hour.

“MW” or “megawatt” means one million watts or one thousand kilowatts.

“MWh” means megawatt-hour, or one thousand kilowatt-hours.

“photovoltaic” means a method of generating electrical power by converting solar radiation into direct current electricity using semiconductors.

“reserve” means, in the electricity industry, the generating capacity that is accessible on short notice to meet unplanned increases in demand for electricity or losses of generation capacity.

“substation” means an assembly of equipment through which electrical energy delivered by transmission circuits is passed in order to convert it to voltages suitable for use by consumers.

“thermal” means a type of electric generating station in which the source of energy for the prime mover is heat.

“transmission line” means an electrical connection between two points on a power system for the purpose of transferring high voltage electrical energy between the points. Generally, a transmission line consists of large wires, or conductors, held aloft by towers.

“TW” means terawatt. One terawatt equals one trillion watts, one billion kilowatts, one million megawatts or one thousand gigawatts.

“TWh” means terawatt-hour—a unit of electrical energy equal to the work done by one TW acting for one hour.

“volt-ampere” means the unit used to measure the apparent power in an electrical circuit.

“voltage” means the energy level of electrons flowing in an electric current. A high voltage line carries electrons that are at a high energy level and can transmit more power than a low voltage line with the same current flowing in it.

## SUMMARY

*This summary highlights selected information described in more detail elsewhere in this offering memorandum. This summary may not include all of the information you should consider before making a decision to invest in the notes. You should carefully read this entire offering memorandum, including the risk factors and financial statements.*

### Comisión Federal de Electricidad

#### Overview

We are the national electric power company of Mexico and, following the energy reform described below, we remain 100% owned by the Mexican government. We generate approximately 79.4% of the electricity consumed in Mexico, which includes electricity generated by independent power producers (“IPPs”) (27.5%), and we are the only company responsible for the transmission and distribution of electricity for public service purposes throughout Mexico. The remaining 20.6% is generated by PEMEX, the Mexican state-owned oil and gas company, and by private producers. As of March 31, 2019, we provided electricity to 43.7 million customer accounts, which we estimate represented 98.7% of the Mexican population.

We were created in 1937 by presidential decree, and then converted by the Mexican Congress in 1949 into an *organismo público descentralizado de la Administración Pública Federal* (decentralized public entity of the Mexican government). Pursuant to the CFE Law, in accordance with the Energy Reform Decree and Secondary Legislation (each as defined below), we were converted into an *empresa productiva del Estado* (productive state enterprise) in October 2014, subject to a new legal regime and with a corporate purpose of creating economic value. In addition, pursuant to the CFE Law, we have undertaken a vertical and horizontal separation of each of our key electric sector activities — electricity generation, transmission, distribution and commercialization— by the creation of nine *empresas productivas subsidiarias* (subsidiary productive enterprises) and four *empresas filiales* (affiliates). See “Comisión Federal de Electricidad—General Regulatory Framework—Organizational Structure of CFE.”

On December 20, 2013, amendments to Articles 25, 27 and 28 of the Mexican Constitution were published as the Energy Reform Decree, in the Official Gazette of the Federation, which took effect on December 21, 2013. The Energy Reform Decree outlines the general framework for the Secondary Legislation. On August 11, 2014, the Secondary Legislation was published in the Official Gazette of the Federation. The Secondary Legislation includes nine laws including, among others, the new CFE Law and the Electric Industry Law. On October 31, 2014, the President of Mexico published in the Official Gazette of the Federation 26 regulations and amendments in respect of the Secondary Legislation including, among others, the Regulations to the CFE Law and the Regulations to the Electric Industry Law. See “Comisión Federal de Electricidad—General Regulatory Framework” for more details regarding the laws and regulations applicable to us.

We have undertaken several steps aimed at consolidating our new organizational and operational structure, including the following measures:

- we entered into a new collective bargaining agreement in May 2016, which was then amended in May 2018, and has led to a reduction in our long-term employee benefit obligations and related costs;
- we are in the process of examining new financing mechanisms including public-private partnerships;
- we created a Fibra E through our affiliate CFECapital, S. de R.L. de C.V. Fibra E aims to attract new private investors to finance infrastructure investments in energy generation, transmission and distribution projects and has the benefit of (i) increasing our equity, (ii) not being considered as part of our public indebtedness and (iii) allowing us to retain ownership and control over strategic assets. In February 2018, our Fibra E conducted an offering of *Certificados Bursátiles Fiduciarios de Inversión en Energía e Infraestructura* (“CBFEs”) to finance transmission projects. In the future, our Fibra E may offer to sell additional CBFEs to finance generation, transmission and distribution projects;
- we reduced our generation costs by converting certain plants that use fuel oil to natural gas; and

- we reduced our technical and non-technical losses in the transmission and distribution process from 11.6% in 2017 to 11.2% in 2018.

See “Comisión Federal de Electricidad—General Regulatory Framework—Mexican Energy Reform.”

During 2018, we reported net income of Ps.47.9 billion (U.S.\$ 2.5 billion), as compared to a net income of Ps. 108.2 billion (U.S.\$ 5.6 billion) in 2017, due to an increase in the cost of fuel. In 2018, we received a Ps. 81.4 billion (U.S.\$4.2 billion) subsidy from the Mexican government related to the subvention of electricity rates that we charge certain customers. The Federal Budget for 2019 contemplates a subsidy transfer from the Mexican government to us of approximately Ps. 52.1 billion (U.S.\$ 2.7 billion) during 2019. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations.” As of March 31, 2019, we had received a subsidy transfer of Ps. 10.4 billion (U.S.\$ 0.5 billion) from the Mexican government.

In January 2016, the *Mercado Eléctrico Mayorista* (Wholesale Electricity Market) began operations and the rates set by the CRE for our transmission and distribution activities became effective. In addition, in December 2017, the CRE published for the first time a schedule of consumer rates as well as the methodology used for their determination. In December 2018, the CRE extended indefinitely the methodology used for the determination of such rates, which are reviewed on a yearly basis. Generally, consumer rates are calculated based on the regulated rates applicable to transmission and distribution activities, certain electricity costs and the subsidy from the Mexican government. The energy and capacity costs in consumer final rates are calculated month by month according to market signals.

Beginning in 2016, the CRE has received various registration applications from private companies that seek to convert into *suministradores calificados* (qualified suppliers). Qualified suppliers duly registered with the CRE are permitted to compete with us by supplying electricity to *usuarios calificados* (qualified users) at unregulated rates and to represent private electricity producers in the Wholesale Electricity Market. As of March 31, 2019, there were 28 registered qualified suppliers.

### ***Our Business***

Our business is divided into four main areas: generation, transmission, distribution and commercialization. Pursuant to the 2019-2033 *Programa de Desarrollo del Sistema Eléctrico Nacional* (“PRODESEN”) prepared by the *Secretaría de Energía* (Ministry of Energy) of the Mexican government, our generation market share as of the date of this offering memorandum is estimated at 79.4%, including IPPs. We have a 100% market share of the transmission and distribution markets.

We continually invest in electricity generation, transmission and distribution infrastructure in order to address Mexico’s growing electricity demand. In 2018, the last year of former president Peña Nieto’s administration, we paid a net amount of Ps. 46.1 billion (U.S.\$ 2.4 billion) for the acquisition of plants, facilities and equipment; being its last year in office, the Mexican government instructed us to reduce expenses. The Board of Directors defines our five-year business plan, determines our annual budget and approves investment priorities and projects. Our *balance financiero* (financial condition target), *techo de gasto de servicios personales* (expenditure ceiling) and *techo de endeudamiento neto* (net debt ceiling) are updated annually and require the approval of the Mexican Congress. Our expected investment for 2019, approved in the *Presupuesto de Egresos de la Federación para el Ejercicio Fiscal 2019* (Mexican Federal Budget for 2019) is approximately Ps. 31.0 billion (U.S.\$ 1.6 billion), of which we had paid a net amount of Ps. 12.0 billion (U.S.\$ 0.6 billion) for the acquisition of plants, facilities and equipment as of March 31, 2019.

Our service area is divided into 16 regions and extends to some of the most remote regions of Mexico.



Source: CFE.

The majority of our electricity generation activities (including nuclear, coal-fired and geothermal) are undertaken through thermal and hydroelectric power plants. A small percentage of our electricity generation comes from other sources, including wind-driven and photovoltaic power plants. Since 1992, IPPs have been permitted under Mexican law to build and operate electricity generation plants in Mexico and sell the generated power exclusively to us.

As of March 31, 2019, our total debt, including obligations in respect of our *Proyectos de Inversión de Infraestructura Productiva con Registro Diferido en el Gasto Público* (“PIDIREGAS”) and lease liabilities, was Ps. 802.7 billion (U.S.\$ 41.5 billion) and our total equity was Ps. 661.8 billion (U.S.\$ 34.3 billion). Our total assets were Ps.1.9 trillion (U.S.\$ 99.6 billion) as of March 31, 2019.

Our total revenues and net loss for the three-month period ended March 31, 2019 were Ps. 119.5 billion (U.S.\$ 6.2 billion) and Ps. 13.9 billion (U.S.\$ 0.7 billion), respectively, as compared to Ps. 93.1 billion of total revenues and Ps. 11.4 billion of net loss in the comparable period of 2018.

Our total revenues and net income for 2018 were Ps. 547.3 billion (U.S.\$ 28.3 billion) and Ps. 47.9 billion (U.S.\$ 2.5 billion), respectively. Our total revenues and net income for 2017 were Ps. 489.6 billion (U.S.\$ 25.3 billion) and Ps. 108.2 billion (U.S.\$ 5.6 billion), respectively. Our total revenues and net income for 2016 were Ps. 349.0 billion (U.S.\$ 18.1 billion) and Ps. 94.2 billion (U.S.\$ 4.9 billion), respectively.

## Recent Developments

### *Second Quarter Outlook*

We are still in the process of closing our financial statements as of and for the three months ended June 30, 2019 and intend to release these financial statements at the end of July, in accordance with applicable Mexican regulations. To the best of our knowledge, our operating results for the three months ended June 30, 2019 will be similar to our operating results for the three-month period ended March 31, 2019.

The foregoing is based on preliminary, unaudited internal data, which has not been approved by our Board of Directors. Our actual audited results of operations could differ from these estimates.

## Business Strategy

As a result of Mr. Andrés Manuel López Obrador’s presidential win and Mr. Manuel Bartlett’s designation as new *Director General* (General Director) of CFE, we are in the process of designing and implementing a new strategy that better reflects the current administration’s principles, values and objectives. In order to implement this strategy, we are finalizing our strategic program, which we expect to present to the Board of Directors by the end of July 2019.

The new strategic program defines our new mission, vision and objectives.

- *Mission:* to provide the energy inputs and goods required for Mexico's productive and social development in an efficient, sustainable, affordable and inclusive manner, through a policy that prioritizes national energy security and sovereignty.
- *Vision:* to strengthen our position as a leading electric power company in Mexico and Latin America under criteria of profitability, competitiveness and sustainability, thanks to skilled and qualified human capital, advanced technology, efficient organization and environmentally responsible practices, always committed to customer satisfaction and to Mexico's economic and social development.

To achieve our new mission and vision, we have defined six primary objectives:

- Satisfy the electricity demand required by Mexico's economic and social development under quality, reliability and efficiency conditions that prioritize national security and sovereignty.
- Contribute to the achievement of the sustainable development goals committed to by the Mexican government in international treaties, agreements and conventions by promoting the use of renewable energy sources and environmentally responsible practices.
- Strengthen our human, technical and financial capabilities to increase its productivity and ensure the company's long-term success and leadership role both nationally and internationally.
- Improve our relationship with stakeholders, including social and indigenous communities, during the development of energy and infrastructure projects, as a way to bolster inclusive development processes.
- Increase the quality of all processes related to the public electricity service in order to improve customer satisfaction and our institutional image on a nationwide basis.
- Promote the development of economic activities linked to electricity infrastructures in order to access new sectors and businesses, with the prospect of increasing and diversifying our revenue sources and optimally diversifying the company's risks.

Our business strategy remains focused on maximizing our overall performance in our four main business lines: generation, transmission, distribution and commercialization, through the following key strategies.

### ***Improve our Electricity Generation Performance***

We intend to maximize our current electricity generation capacity through the optimization and segmentation of our generation plants, the incorporation of new technologies and by replacing currently-underperforming thermal power plants. Currently, we are building seven new power plants and rehabilitating and modernizing two others, which together are expected to represent an additional 4,879 MW of capacity.

Our market share of electricity generation is approximately 79.4%, and, between 2010 and 2018, our generation output, including through IPPs, increased by 7.3% (17.7 TWh). Our goal is to increase our electricity output at a rate that will correspond with the anticipated increase in electricity demand in Mexico, while improving the profitability of our business portfolio. We also intend to increase the competitiveness of our generation plants.

We also plan to expand our generation capacity in clean and renewable energy sources. We rely, and expect to continue to rely, on the use of cleaner burning fuels, such as natural gas, in our generation activities (as compared to fuels that emit higher levels of contaminants into the environment, such as fuel oil). As of March 31, 2019, 72.7%

of our electricity generation capacity derived from fossil fuels (natural gas, coal, diesel and fuel oil). The remaining 27.3% of our electricity generation capacity derived from clean sources (including nuclear).

Our goal is to maintain or improve this allocation between fuel types in the future; however, our actual allocation will depend in part on the global supply of such fuels and pricing considerations. In addition, we rely, and expect to continue to rely, on clean generation technology, such as hydroelectric, geothermal and wind-driven power generation, each of which use renewable primary sources of energy.

#### ***Modernize our Transmission and Distribution Networks and Reduce Technical and Non-Technical Losses***

Transmission and distribution remain strategic activities for the Mexican government and represent our core business line. Our main objective in the mid- to long-term is to reduce our technical losses and the quantity of electricity that is used in Mexico but not paid for (i.e., “non-technical losses”). Our goal is to reduce non-technical losses through the modernization of our metering systems, strengthening our commercial processes, regularizing our services in areas affected by irregular land-use and strengthening our electric infrastructure.

Modernization of our equipment and technology, including the replacement of aging transmission and distribution substations and power lines, is integral to providing reliable electricity service to our customers. We intend to dedicate a significant portion of our financial and human resources as we seek to ensure that our transmission and distribution networks employ state of the art technology and are in good working condition. In addition, we intend to further develop our “smart-grid” technology, which will include a two-way digital communication system between our customers and us, through which we will be able to monitor the electricity needs of our customers in real time and, accordingly, improve the efficiency with which we provide electricity. We expect that the implementation of smart-grid technology will also help reduce our non-technical losses.

We seek to reduce electricity service interruptions. Much of our equipment is installed outdoors and is subject to the varying weather conditions and natural disasters that affect Mexico from time to time. As a result, this equipment (including, in particular, our transmission towers and utility poles) often incurs weather-related damage, which in certain instances causes electricity service interruptions for our customers. We maintain a well-trained staff of technicians that repair damaged equipment upon our receipt of notice of any such damage. Between 2011 and 2018, the duration of service interruptions resulting from failures in our distribution network decreased by 49.0%, and the duration of service interruptions per user as of December 2018 has been reduced to 26.7 minutes per year. We continually assess the quality and speed of these repairs, and we expect that our dedication to delivering fast and effective repair services will continue into the future.

#### ***Supply and Commercialization***

A key aspect of our growth strategy is increasing the profitability of our commercialization activities in the medium to long-term. We intend to continue servicing our approximately 43.7 million customers and future qualified users by developing client-focused strategies that focus on differentiating our clients by segment. We also plan to take advantage of our client base to develop new lines of business and increase our overall commercialization capacity.

In parallel, we plan to continue to develop our transportation and commercialization of natural gas business. Under our new structure, CFEnérgía, S.A. de C.V. and CFE International LLC, two entities wholly owned by us, participate in the business of buying, selling, transporting and storing gas, fuel oil, coal and other fuels.

We currently are the most important purchaser of the natural gas that is consumed in Mexico, and within five years we expect to become the main consumer of natural gas in North America. Considering our unique position in the industry and the opportunities available in Mexico’s undeveloped sector, we seek to gradually increase our presence in the market as we continue to commercialize, import, export, transport and store natural gas in Mexico and the United States.

Our transformation strategy is based on strategic pillars that will support each of our business lines:

#### ***Organizational and Operational Structure and Strong Performance Culture***



We are in the process of consolidating our organizational and operational structure that we expect will allow us and our affiliates to operate in a competitive and efficient manner, attract high-skilled employees, improve our strong performance culture and enhance result-oriented strategies. For further information, see “Comisión Federal de Electricidad—General Regulatory Framework—Organizational Structure of CFE.”

Our organizational transformation requires us to reduce our financing costs and improve our financial risk management controls, for which we will centralize our budgetary, human resources, accounting and financing activities, as well as public relations through our corporate center.

#### *Services and Support*

We are in the process of implementing an operational model in which the Issuer will provide administrative support and other services to its subsidiary productive enterprises and affiliates to create synergies. This model will include financial and operational metrics to continually evaluate each subsidiary productive enterprise and affiliate. We may also transfer certain of our servicing areas to subsidiary productive enterprises or affiliates, including those areas that currently provide administrative support. These subsidiaries are expected to service third parties as well as to continue servicing our businesses and affiliates, thus optimizing the value of our assets through more efficient processes.

#### *Investments and Financing Capabilities*

Our program of contracting with IPPs has allowed private companies to bid and operate electricity generation plants in Mexico and sell the generated power to us. Under the program, we have entered into long-term agreements (25 years), under which IPPs are responsible for the construction, operation and maintenance of the electricity generation facility during the life of the agreement, and we are obligated to purchase the electricity produced by that facility. The use of IPPs has historically helped us meet electricity generation demands without the cost of construction.

The IPP program has also allowed us to obtain competitive prices for the purchased electricity via an international bidding process, in which we award projects to bidders that offer the lowest price per kWh for the sale of electricity to us. As of March 31, 2019, CFE had a total of 31 IPP contracts signed relating to generation facilities that were operational (500 units, which include combined and wind-driven).

The OPF program addresses our infrastructure needs with respect to the transmission and distribution of electricity and for generation projects that cannot be structured using IPPs. We enter into relatively short-term agreements (1-2 years), under which a private company, which we select in an international public bidding process, is responsible for the construction of a project, but not for its ongoing operation and maintenance. Bidders that are selected for OPF agreements receive a total payment upon the completion of the project. The main advantage of this program is that we avoid risks relating to the development of the project that may arise during the construction stage, such as cost escalation and failure of the completed project to meet technical specifications. As with IPPs, we are able to secure competitive prices for the OPFs as a result of an international bidding process. For Mr. Obrador’s presidential term, a total of five new generation projects have been authorized for construction. As of the date of this offering memorandum, we are assessing alternative investments schemes, such as joint ventures and public private partnerships, under which we may raise private capital in order to meet our investment needs.

We also intend to increase competition during the bidding processes for procurement contracts, reduce our financing costs and improve our risk-management policies.

In the past, our financings have been mostly limited to public and private financing transactions in the Mexican loan and bond markets, and certain private financings in the United States, Europe and Japan. In May 2011, February 2012, October 2013, June 2015, September 2016, October 2016, July 2017, October 2017 and March 2018, we sought financing in the international bond markets. We believe that the further development of this financing option, together with our objective to diversify our financing sources, will improve our liquidity and debt maturity profile and help fund our investment activities.

### *Long-Term Employee Benefit Obligation Costs Optimization and Productivity*

As of December 31, 2018, our long-term employee benefit liabilities represented 35% of our total liabilities. As a result of the new collective bargaining agreement, signed on May 19, 2016, between *Sindicato Único de Trabajadores Electricistas de la República Mexicana* (“SUTERM”) and us, our long-term employee benefit obligations were reduced by Ps. 167.5 billion (U.S.\$ 8.7 billion) and were further reduced by another Ps. 161.0 billion (U.S.\$ 8.3 billion) by the end of 2016 as a result of the Mexican government’s agreement to match the savings as set forth in the *Acuerdo por el que se emiten las disposiciones de carácter general relativas a la asunción por parte del Gobierno Federal de obligaciones de pago de pensiones y jubilaciones a cargo de la Comisión Federal de Electricidad* (Agreement setting forth the general provisions related to the assumption by the Mexican government of our labor liabilities), published in the Official Gazette of the Federation on November 14, 2016.

### *Strategic Regulatory Action*

As a productive state enterprise, we intend to have an active role in the implementation of the new policies and regulations to develop the National Power System. We will continue to develop our relationship with our regulators. In particular, regarding our rate-regulated business, we will coordinate and maintain a channel of communication aimed to align the rates that we charge our customers with our costs and operating expenses.

Additionally, the energy reform established the creation of the *Centro Nacional de Control de Energía* (“CENACE”), the independent energy system operator of the National Power System and the entity in charge of overseeing all the activities (generation, transmission and distribution) of the Wholesale Electricity Market and its participants as well as managing the electricity spot market.

### *Social Responsibility*

We will continue to operate as a last resort provider of electric power and we intend to continue to proactively face any electric emergencies. As a productive state enterprise, we expect to continue to monitor and assist the regulatory authorities in establishing reasonable and fair rates.

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Our principal executive office is located at Paseo de la Reforma 164, Col. Juárez, 06600 Ciudad de México. Our telephone number at that address is +52(55) 5229-4000.

## The Offering

*The following summary is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing throughout this offering memorandum. For a more complete description of the terms of the notes, see “Description of the Notes.”*

**Issuer** ..... Comisión Federal de Electricidad.

**Guarantors**..... CFE Distribución, CFE Suministrador de Servicios Básicos, CFE Transmisión, CFE Generación I, CFE Generación II, CFE Generación III, CFE Generación IV, CFE Generación V and CFE Generación VI.

**Notes Offered**..... U.S.\$ 615,000,000 aggregate principal amount of 5.00% notes due 2049.

**Issue Date**..... July 30, 2019.

**Issue Price**..... 100.00% of the principal amount thereof, plus accrued interest, if any, from July 30, 2019.

**Amortization**..... The aggregate principal amount of the notes will amortize on an annual basis according to the schedule set forth below:

<u>Year</u>	<u>Amortization Date</u>	<u>Amortization Amount</u>	<u>Outstanding Aggregate Principal Amount</u>
1	July 30, 2020	U.S.\$20,500,000	U.S.\$594,500,000
2	July 30, 2021	U.S.\$20,500,000	U.S.\$574,000,000
3	July 30, 2022	U.S.\$20,500,000	U.S.\$553,500,000
4	July 30, 2023	U.S.\$20,500,000	U.S.\$533,000,000
5	July 30, 2024	U.S.\$20,500,000	U.S.\$512,500,000
6	July 30, 2025	U.S.\$20,500,000	U.S.\$492,000,000
7	July 30, 2026	U.S.\$20,500,000	U.S.\$471,500,000
8	July 30, 2027	U.S.\$20,500,000	U.S.\$451,000,000
9	July 30, 2028	U.S.\$20,500,000	U.S.\$430,500,000
10	July 30, 2029	U.S.\$20,500,000	U.S.\$410,000,000
11	July 30, 2030	U.S.\$20,500,000	U.S.\$389,500,000
12	July 30, 2031	U.S.\$20,500,000	U.S.\$369,000,000
13	July 30, 2032	U.S.\$20,500,000	U.S.\$348,500,000
14	July 30, 2033	U.S.\$20,500,000	U.S.\$328,000,000
15	July 30, 2034	U.S.\$20,500,000	U.S.\$307,500,000
16	July 30, 2035	U.S.\$20,500,000	U.S.\$287,000,000
17	July 30, 2036	U.S.\$20,500,000	U.S.\$266,500,000
18	July 30, 2037	U.S.\$20,500,000	U.S.\$246,000,000
19	July 30, 2038	U.S.\$20,500,000	U.S.\$225,500,000
20	July 30, 2039	U.S.\$20,500,000	U.S.\$205,000,000
21	July 30, 2040	U.S.\$20,500,000	U.S.\$184,500,000
22	July 30, 2041	U.S.\$20,500,000	U.S.\$164,000,000
23	July 30, 2042	U.S.\$20,500,000	U.S.\$143,500,000
24	July 30, 2043	U.S.\$20,500,000	U.S.\$123,000,000
25	July 30, 2044	U.S.\$20,500,000	U.S.\$102,500,000
26	July 30, 2045	U.S.\$20,500,000	U.S.\$82,000,000
27	July 30, 2046	U.S.\$20,500,000	U.S.\$61,500,000
28	July 30, 2047	U.S.\$20,500,000	U.S.\$41,000,000

29	July 30, 2048	U.S.\$20,500,000	U.S.\$20,500,000
30	July 30, 2049	U.S.\$20,500,000	

**Maturity Date** ..... July 30, 2049.

**Interest Rate** ..... The notes will bear interest at the rate of 5.00% per annum from July 30, 2019. Interest on the notes will be based upon a 360-day year consisting of twelve 30-day months.

**Interest Payment Dates** ..... Interest on the notes will be payable semi-annually on January 30 and July 30 of each year, beginning on January 30, 2020.

**Currency of Payment** ..... The notes will be denominated in U.S. dollars and the Issuer will pay principal, interest, Additional Amounts (as defined under “Description of the Notes—Additional Amounts”) and any premium in U.S. dollars.

**Guarantees** ..... Payments of principal, premium, if any, interest, Additional Amounts and any other amounts due in respect of the notes (whether at stated maturity, upon redemption, purchase pursuant to an offer to purchase, acceleration or otherwise) will be irrevocably and unconditionally, jointly and severally, guaranteed by the guarantors.

**Status** ..... The notes will constitute the Issuer’s direct, general, unconditional, unsecured and unsubordinated Public External Indebtedness (as defined below). The notes will rank without any preference among themselves and equally with all of the Issuer’s other unsubordinated Public External Indebtedness. It is understood that this provision shall not be construed so as to require the Issuer to make payments under the notes ratably with payments being made under any of its other Public External Indebtedness.

The guarantees will constitute the direct, general, unconditional, unsecured and unsubordinated Public External Indebtedness (as defined below) of the guarantors. The guarantees will rank without any preference among themselves and equally with all other unsubordinated Public External Indebtedness of such guarantor. It is understood that this provision shall not be construed so as to require any guarantor to make payments under the notes ratably with payments being made under any of its other Public External Indebtedness.

The Mexican government does not guarantee or secure the Issuer’s obligations or those of the guarantors and has no obligation to pay the principal or interest on the notes in the event that the Issuer’s cash flows and/or assets or those of the guarantors are not sufficient to make any such payments. The notes do not grant in any way recourse against the Mexican government or rights over the ownership, control or assets of the Issuer or of the guarantors.

See “Description of the Notes—General—Status.”

**Payments of Additional**

**Amounts** ..... The Issuer and the guarantors are required by current Mexican law to deduct Mexican withholding taxes from payments of interest, and amounts deemed to be interest, to investors who are not residents of Mexico for tax purposes as described under “Taxation—Mexican Tax Considerations,” and to pay such deducted taxes to the Mexican tax authorities. The Issuer and the guarantors will pay Additional Amounts in respect of those payments of interest, so that the amount holders receive after Mexican withholding tax, will equal the amount that

they would have received if no such Mexican withholding taxes had been applicable, subject to certain limitations and exceptions as described under “Description of the Notes—Additional Amounts.”

**Negative Covenants**..... The indenture governing the notes contains certain negative covenants relating to the Issuer and the guarantors, including:

- a negative pledge, under which the Issuer has agreed to a limitation on its and the guarantors’ ability to incur certain liens securing Public External Indebtedness; and
- a limitation on fundamental changes, under which the Issuer and the guarantors have agreed not to engage in certain mergers, consolidations or sales of assets.

These covenants are subject to significant qualifications and exceptions. See “Description of the Notes—Negative Covenants.”

**Tax Redemption** ..... The Issuer and each guarantor may redeem the notes in whole, but not in part, prior to maturity, at a price equal to 100% of the outstanding principal amount of the notes, plus accrued and unpaid interest to the redemption date (and Additional Amounts, if any), upon notice, if the Issuer or such guarantor is obligated to pay any Additional Amounts under the notes in excess of those Additional Amounts attributable to a Mexican withholding tax rate of 4.9% in respect of payments of interest, as a result of certain changes in Mexican tax laws and regulations applicable to payments under the notes or certain changes in the interpretation or application of such laws. See “Description of the Notes—Redemption and Purchase—Redemption for Taxation Reasons.”

**Purchase at the Option of Holders** ..... Upon the occurrence of certain fundamental changes in the ownership or business of the Issuer (including, among others, if the Issuer ceases to be a public-sector entity of, or majority-owned by, the Mexican government) and, in certain circumstances, of the Issuer and the guarantors, the Issuer will be required to offer to purchase the notes, at a price equal to 100% of their principal amount, plus accrued interest to the purchase date. See “Description of the Notes—Redemption and Purchase—Purchase at the Option of Holders.”

**Further Issues** ..... To the extent permitted by relevant ROC authorities and subject to the receipt of all necessary regulatory and listing approvals from such authorities, including but not limited to the TPEx and the Taiwan Securities Association, the Issuer may, from time to time without the consent of the holders of notes, issue additional notes having the same terms and conditions as the notes in all respects, except for the issue date, issue price and, if applicable, the date of first payment of interest, the date from which interest will accrue, ISIN and/or other securities numbers and, to the extent necessary, certain temporary securities law transfer restrictions; provided, however, that any such additional notes issued with the same ISIN as the notes issued pursuant to this offering memorandum shall be issued either in a qualified reopening for U.S. federal income tax purposes or with no more than *de minimis* original issue discount for U.S. federal income tax purposes. Additional notes issued in this manner will, only to the extent permitted by the relevant ROC authorities and subject to the receipt of all necessary regulatory and listing approvals from such authorities, including but not limited to, the TPEx and the Taiwan Securities Association, increase the aggregate principal amount of, and be consolidated with and form a single series with, the previously outstanding notes.

<b>Collective Action Clauses .....</b>	<p>The notes will contain “collective action clauses.” Under these provisions, which differ from the terms of the Issuer’s Public External Indebtedness issued prior to June 16, 2015, the Issuer may amend the payment provisions of any series of debt securities issued under the indenture (including the notes) and other reserved matters listed in the indenture with the consent of the holders of: (1) with respect to a single series of debt securities, more than 75% of the aggregate principal amount of the outstanding debt securities of such series; (2) with respect to two or more series of debt securities, if certain “uniformly applicable” requirements are met, more than 75% of the aggregate principal amount of the outstanding debt securities of all series affected by the proposed modification, taken in the aggregate; or (3) with respect to two or more series of debt securities, whether or not the “uniformly applicable” requirements are met, more than 66<sup>2</sup>/<sub>3</sub>% of the aggregate principal amount of the outstanding debt securities of all series affected by the proposed modification, taken in the aggregate, <i>and</i> more than 50% of the aggregate principal amount of the outstanding debt securities of each series affected by the proposed modification, taken individually. See “Description of the Notes—Meetings, Amendments and Waivers.”</p>
<b>Transfer Restrictions .....</b>	<p>The notes have not been and will not be registered under the Securities Act and are subject to transfer restrictions. See “Transfer Restrictions.”</p> <p>The Notes have not been and will not be registered with the <i>Registro Nacional de Valores</i> maintained by the CNBV and, therefore, the Notes may not be publicly offered or sold in Mexico. The Notes may be offered, on a private placement basis, to investors in Mexico that qualify as institutional or accredited investors under Mexican law.</p>
<b>Form and Denomination .....</b>	<p>The notes will be issued in fully registered book-entry form, with a minimum denomination of U.S.\$ 200,000 and integral multiples of U.S.\$ 1,000 in excess thereof.</p> <p>The notes will be evidenced by one or more notes in global form (each, a “global note”), which will be deposited with a common depositary for the account of Euroclear and Clearstream. See “Form of Notes, Clearing and Settlement.”</p>
<b>Use of Proceeds.....</b>	<p>The Issuer intends to use the net proceeds from the offering of the notes to pay off certain <i>Obras Públicas Financiadas</i> (“OPF”) projects in accordance with the Mexican laws and regulations applicable to the Issuer.</p>
<b>Listing .....</b>	<p>We will apply to admit the notes for listing on the Official List of the Luxembourg Stock Exchange and for trading on the Euro MTF Market of the Luxembourg Stock Exchange. No assurance can be given that such application will be granted or that the Luxembourg listing will be maintained.</p> <p>Application will also be made to the TPEx for the listing of, and permission to deal in, the notes by way of debt to “professional institutional investors” as defined under Paragraph 2, Article 4 of the Financial Consumer Protection Act of the ROC only and such permission is expected to become effective on or about July 30, 2019. No assurance can be given that such applications will be granted or that the TPEx listing will be maintained. The TPEx is not responsible for the content of this offering memorandum and any supplement or amendment hereto and no representation is made by the TPEx to the accuracy or completeness of this offering memorandum or any supplement or amendment hereto. The TPEx expressly disclaims any and all liability for any losses arising from, or as a result of the reliance on, all or part of the contents of this offering memorandum and any supplement or amendment hereto. Admission to the listing and trading of the</p>

notes on the TPEx shall not be taken as an indication of the merits of the Issuer, the guarantors, the notes or the guarantees.

**Trustee .....** Deutsche Bank Trust Company Americas.

**Principal Paying Agent.....** Deutsche Bank AG, London Branch.

**Luxembourg Registrar,  
Transfer Agent and Listing  
Agent .....** Deutsche Bank Luxembourg S.A.

**Governing Law.....** The indenture is, and the notes will be, governed by, and construed in accordance with, the laws of the State of New York, except that matters relating to the authorization and execution of the indenture and the notes by the Issuer are governed by and construed in accordance with the laws of Mexico.

**Risk Factors.....** Prospective purchasers of the notes should consider carefully all of the information set forth in this offering memorandum and, in particular, the information set forth under “Risk Factors” in this offering memorandum, before making an investment in the notes.

## Summary Financial and Operating Information

The summary financial information set forth below has been derived from our audited consolidated financial statements as of and for the years ended December 31, 2018, 2017 and 2016, and our unaudited condensed consolidated interim financial information as of March 31, 2019 and for the three-month periods ended March 31, 2019 and 2018. This summary of financial information should be read in conjunction with, and are qualified in their entirety by reference to, our financial statements included elsewhere in this offering memorandum.

Our financial statements are expressed in thousands of Mexican pesos and have been prepared in accordance with IFRS, as issued by the IASB. All comparative financial information as of and for the years ended December 31, 2017 and 2016 have been restated to reflect the adoption of IFRS 9 “Financial Instruments” and IFRS 15 “Revenue from Contracts with Customers” using the full retrospective approach as of January 1, 2016.

	As of and for the Three-Month Period Ended March 31,						As of and for the Year Ended December 31,							
	2019		2019		2018		2018		2018		2017		2016	
	(in millions of U.S. dollars, except for ratios, percentages and GWh) (1)		(in millions of Mexican pesos, except for ratios, percentages and GWh)		(in millions of U.S. dollars, except for ratios, percentages and GWh) (1)		(in millions of Mexican pesos, except for ratios, percentages and GWh)							
Statement of Comprehensive Income (Loss)														
Total revenues .....	U.S.\$	6,183	Ps.	119,458	Ps.	93,115	U.S.\$	28,330	Ps.	547,346	Ps.	489,606	Ps.	348,983
Total operating costs and expenses .....		(6,489)		(125,363)		(114,348)		(26,628)		(514,445)		(441,784)		(188,904)
Operating income (loss) .....	U.S.\$	(306)	Ps.	(5,905)	Ps.	(21,233)	U.S.\$	1,703	Ps.	32,901	Ps.	47,821	Ps.	160,079
Financing gain (cost) .....		(188)		(3,635)		11,339		(1,933)		(37,347)		(12,976)		(65,840)
Income (loss) before income tax and other comprehensive income .....	U.S.\$	(494)	Ps.	(9,540)	Ps.	(9,894)	U.S.\$	(230)	Ps.	(4,446)	Ps.	34,846	Ps.	94,239
Income tax benefit (expense) .....	U.S.\$	(228)	Ps.	(4,400)	Ps.	(1,511)	U.S.\$	(2,710)	Ps.	52,363	Ps.	73,338	Ps.	-
Net income (loss) .....	U.S.\$	(722)	Ps.	(13,941)	Ps.	(11,406)	U.S.\$	2,480	Ps.	47,917	Ps.	108,184	Ps.	94,239
Statement of Financial Position (2)														
Current assets .....	U.S.\$	8,518	Ps.	164,570	Ps.	193,197	U.S.\$	10,000	Ps.	193,197	Ps.	176,948	Ps.	119,529
Plants, facilities and equipment, net .....		60,953		1,177,615		1,186,590		64,364		1,243,526		1,252,938		1,287,172
Derivative financial instruments .....		665		12,856		17,783		920		17,783		16,085		15,646
Long-term loans to workers ....		659		12,730		12,368		640		12,368		12,339		11,194
Deferred income tax .....		8,950		172,920		176,617		8,155		157,562		76,868		-
Other assets .....		19,816		382,855		371,775		1,775		34,289		32,837		32,644
Total assets .....	U.S.\$	99,562	Ps.	1,923,544	Ps.	1,958,330	U.S.\$	85,855	Ps.	1,658,724	Ps.	1,568,016	Ps.	1,466,185
Long-term employee benefit obligations (3) .....	U.S.\$	17,066	Ps.	329,712	Ps.	327,453	U.S.\$	16,949	Ps.	327,453	Ps.	361,780	Ps.	361,114
Short-term debt and leases (4) .....		2,097		40,513		48,406		2,505		48,406		56,620		41,728
Other current liabilities (5) .....		5,587		107,947		116,668		6,039		116,668		113,103		64,985
Documented debt and leases (6) .....		39,453		762,228		766,301		21,854		422,226		401,157		413,982
Other long-term liabilities .....		1,106		21,362		20,451		1,059		20,451		23,425		50,157
Total equity .....		34,254		661,781		679,051		37,449		723,520		611,931		534,218
Total liabilities and equity .....	U.S.\$	99,562	Ps.	1,923,544	Ps.	1,958,330	U.S.\$	85,855	Ps.	1,658,724	Ps.	1,568,016	Ps.	1,466,185
Other Financial and Operating Information														
Adjusted EBITDA (7) .....	U.S.\$	1,047	Ps.	20,225	Ps.	4,309	U.S.\$	5,744	Ps.	110,977	Ps.	155,192	Ps.	101,635
Ratio of adjusted EBITDA to interest paid .....		N/A		3.9x		0.6x		N/A		5.0x		5.9x		6.5x
Ratio of debt to adjusted EBITDA .....		N/A		4.3x		21.1x		N/A		4.2x		2.9x		4.5x
Ratio of debt to equity .....		N/A		53%		53%		N/A		65%		75%		85%
Capital expenditures .....	U.S.\$	624	Ps.	12,055	Ps.	7,725	U.S.\$	2,387	Ps.	46,114	Ps.	69,788	Ps.	50,908
GWh sold .....		N/A		47,105		48,117		N/A		218,083		215,310		218,072



N/A = Not applicable.

- (1) Mexican peso amounts have been translated into U.S. dollars, solely for the convenience of the reader, at the Mexican peso/U.S. dollar exchange rate of Ps. 19.3201 = U.S.\$ 1.00, as published on the Official Gazette of the Federation on March 28, 2019 for payment obligations due on March 29, 2019. Such translations should not be construed as a representation that the Mexican peso amounts have been or could be converted into U.S. dollars at the foregoing or any other rate.
- (2) The Statement of Financial Position as of March 31, 2019 reflects the adoption of IFRS 16 “Leases” as of January 1, 2019. For comparative purposes, we have reflected such adoption in the Statement of Financial Position as of March 31, 2018. For more information, see our interim financial statements and Note 22 to our annual financial statements.
- (3) Represents employee benefits plus provision for long-term employee benefit obligations upon retirement.
- (4) As of December 31, 2018, 2017 and 2016, represents current portion of documented debt plus PIDIREGAS and capital lease obligations. As of March 31, 2019 and 2018, represents long term documented debt plus PIDIREGAS and capital lease obligations and lease liabilities under IFRS 16 “Leases.”
- (5) Represents liabilities derived from suppliers and contractors plus taxes and fees payable plus other accounts payable and accrued liabilities plus deposits from users and contractors.
- (6) As of December 31, 2018, 2017 and 2016, represents long term documented debt plus PIDIREGAS and capital lease obligations. As of March 31, 2019 and 2018, represents long term documented debt plus PIDIREGAS and capital lease obligations and lease liabilities under IFRS 16 “Leases.”
- (7) Adjusted EBITDA equals operating income (loss) before depreciation and net cost (income) of long-term benefit obligation costs. Operating EBITDA and the ratios of adjusted EBITDA to net interest expense, debt to adjusted EBITDA and debt to equity are presented in this offering memorandum because we believe that they are widely accepted as financial indicators of our ability to internally fund capital expenditures and service or incur debt. Adjusted EBITDA and such ratios should not be considered as indicators of our financial performance, as alternatives to cash flow, as measures of liquidity or as being comparable to other similarly titled measures of other companies.

Reconciliation of our adjusted EBITDA to operating income (loss) is as follows:

	For the Three-Month Period Ended March 31,				For the Year Ended December 31,			
	2019	2019	2018	2018	2018	2017	2016	
	(in millions of U.S. dollars) <sup>(1)</sup>	(in millions of Mexican pesos)	(in millions of U.S. dollars) <sup>(1)</sup>	(in millions of Mexican pesos)				
Operating income (loss) .....	U.S.\$ (306)	Ps. (5,905)	Ps. (21,234)	U.S.\$ (1,159)	Ps. 32,901	Ps. 47,821	Ps. 160,079	
Depreciation.....	903	17,446	14,042	766	57,536	59,467	53,384	
Net cost (income) of long-term benefit obligations (2).....	449	8,684	11,500	628	20,540	47,903	(111,828)	
Adjusted EBITDA.....	U.S.\$ 1,047	Ps. 20,225	Ps. 4,308	U.S.\$ 235	Ps. 110,977	Ps. 155,192	Ps. 101,635	

- (1) Mexican peso amounts have been translated into U.S. dollars, solely for the convenience of the reader, at the Mexican peso/U.S. dollar exchange rate of Ps. 19.3201 = U.S.\$ 1.00, as published on the Official Gazette of the Federation on March 28, 2019 for payment obligations due on March 29, 2019. Such translations should not be construed as a representation that the Mexican peso amounts have been or could be converted into U.S. dollars at the foregoing or any other rate.
- (2) Represents our reserve for pension and seniority premiums in respect of our defined benefits plan, as determined by an independent actuarial study on an annual basis, which is established for employees that were employed prior to the inception of our defined contribution plan on August 18, 2008.

The figures in Mexican pesos shown for the purpose of reconciling the adjusted EBITDA are presented in thousands of Mexican pesos in the consolidated statements of cash flows for the corresponding periods.

## RISK FACTORS

*An investment in the notes is subject to the risks described below. You should carefully review the following risk factors, together with the other information contained in this offering memorandum, before deciding whether this investment is suited to your particular circumstances. Any of these risks could have a material adverse effect on our business, financial condition and results of operations, which could, in turn, affect our ability to repay our indebtedness, including the notes. The trading price of the notes could decline due to any of these risks, and investors may lose all or part of their investment. The risks described below are those known to us and what we currently believe may materially affect us. Additional risks not presently known to us or that we currently consider immaterial may also impair our business.*

### **Risk Factors Related to Mexico**

***Economic conditions, political events and government policies in Mexico and elsewhere may have a material impact on our operations and financial performance***

Substantially all of our operations and assets are located in Mexico and our revenues, therefore, are indirectly related to economic conditions in Mexico, including, among other factors, changes in its gross domestic product (“GDP”), per capita disposable income, unemployment rates, the value of the Mexican peso as compared to the U.S. dollar, regulations affecting convertibility, inflation, changes in oil prices, interest rates, regulation, taxation, social instability, and other political social and economic developments. These events could also lead to increased volatility in the foreign exchange and financial markets, thereby affecting our ability to obtain new financing and service our debt, including the notes. The Mexican government cut spending for the 2019 budget as part of the current Mexican president’s austerity policy and it may cut spending in the future. See “—Risk Factors Related to the Issuer and the Guarantors—The Mexican government controls us and could limit our ability to satisfy our external debt obligations.” These cuts, although not applicable to us, could adversely affect the Mexican economy and, consequently, our business, financial condition, operating results and prospects.

Political events in Mexico may significantly affect Mexican economic policy and, consequently, our operations. The Mexican government has exercised, and continues to exercise, significant influence over the Mexican economy. Mexican government actions concerning the economy and regulation of certain industries, including the energy sector, could have a significant effect on us and on market conditions in Mexico. Presidential and federal congressional elections in Mexico were held on July 1, 2018. Mr. Andrés Manuel López Obrador, a member of the *Movimiento Regeneración Nacional* (National Regeneration Movement, or Morena), was elected President of Mexico and took office on December 1, 2018, replacing Mr. Enrique Peña Nieto, a member of the *Partido Revolucionario Institucional* (Institutional Revolutionary Party, or PRI). The new President’s term will expire on September 30, 2024. The newly-elected members of the Mexican Congress took office on September 1, 2018. The Mexican president influences new policies and governmental actions regarding the Mexican economy, and the new administration could implement substantial changes in law, policy and regulations in Mexico, which could negatively affect our business, financial condition and results of operations. As of the date of this offering memorandum, the National Regeneration Movement holds an absolute majority in the *Cámara de Diputados* (Chamber of Deputies) and in 20 local congresses. We cannot predict the impact that political developments in Mexico will have on the Mexican economy nor can provide any assurances that these events, over which we have no control, will not have an adverse effect on our business, financial condition and results of operations.

In the past, Mexico has experienced several periods of slow or negative economic growth, high inflation, high interest rates, currency devaluation (in particular with respect to the Mexican peso-U.S. dollar exchange rate), convertibility restrictions and other economic problems. These problems may worsen or reemerge, as applicable, in the future and could adversely affect our business and ability to service our debt. During 2018 and the three-month period ended March 31, 2019, *Banco de México* increased its reference rate by 100 basis points, from 7.25% to 8.25%. Future increases in interest rates may adversely affect our results of operations by increasing our financing cost. In addition a worsening of international financial or economic conditions, such as a slowdown in growth or recessionary conditions in Mexico’s trading partners, including the United States, or the emergence of a new financial crisis, could have adverse effects on the Mexican economy, our financial condition and our ability to service our debt, including the notes.

***Social, political and economic developments in other countries may adversely affect us, including the prices of our debt securities***

Social, political, economic conditions in other countries may, to varying degrees, affect the market value of securities of Mexican companies, including the notes. Although social, political and economic conditions in other countries may differ significantly from social, political and economic conditions in Mexico, investors' reactions to social, political or economic developments in other countries may have an adverse effect on the market value of securities of Mexican companies, including the notes.

***Economic, political and regulatory developments in the United States may adversely affect the Mexican economy***

Changes in economic, political and regulatory conditions in the United States or in laws and policies governing foreign trade could create uncertainty in the international markets and could have a negative impact on the Mexican economy. Economic conditions in Mexico are highly correlated with economic conditions in the United States. This correlation is due, in part, to the high degree of economic activity between the two countries generally, including the trading facilitated by the North American Free Trade Agreement ("NAFTA"), as well as physical proximity.

On November 30, 2018, the presidents of Mexico, the United States and Canada signed the United States-Mexico-Canada Agreement ("USMCA"), which, if ratified by the legislatures of the three countries, would replace NAFTA. As of the date of this offering memorandum, there is uncertainty about whether the USMCA will be ratified, as well as the timing thereof, and the potential for further re-negotiation, or even termination, of NAFTA. The government of the United States also threatened not to cause the USMCA to be ratified if Mexico did not control its borders to prevent illegal immigration into the United States from Mexico. Because the Mexican economy is heavily influenced by the U.S. economy, the re-negotiation, or even termination, of NAFTA, alongside with the delay of USMCA's ratification, and/or other U.S. trade policies that may be adopted by the U.S. government may adversely affect economic conditions in Mexico. These developments could, in turn, have an adverse effect on CFE's financial condition, results of operations and ability to repay its debt, including the notes.

In addition, the 2016 U.S. presidential election and the change in the U.S. administration have had an impact on the worldwide economy and in Mexico. The current policies of the U.S. government towards Mexico have created instability, uncertainty and may adversely affect the Mexican economy. For example, President Donald Trump has instituted import tariffs and enforced measures intended to control illegal immigration from Mexico, each of which has created friction between the U.S. and Mexican governments and may reduce economic activity between these countries. Further, in June 2019, the Trump administration announced plans to impose an escalating series of tariffs on Mexico unless the Mexican government enacted certain policy changes. While the Mexican and U.S. governments were able to reach an understanding, we cannot assure you that such understanding will remain in place or that the U.S. government will not impose other tariffs on Mexico in the future and that we will not be materially adversely affected by such tariffs or policies in the future.

***Changes in exchange rates or in Mexico's exchange controls may adversely affect our ability to service our foreign currency-denominated indebtedness***

The Mexican government does not currently restrict the ability of Mexican companies or individuals to convert Mexican pesos into U.S. dollars or other currencies, and Mexico has not had foreign exchange controls policy since 1982. However, in the future, the Mexican government could impose a restrictive exchange control policy or devalue the Mexican peso, as it has done in the past. We cannot provide assurances that the Mexican government will maintain its current policies with regard to the Mexican peso or that the Mexican peso's value will not fluctuate significantly in the future.

The Mexican peso has been subject to significant devaluations against the U.S. dollar in the past and has recently been subject to significant fluctuations. Mexican government policies affecting the value of the Mexican peso could prevent us from paying our foreign currency obligations.

Depreciation of the Mexican peso against the U.S. dollar and/or volatility in the financial markets could adversely affect our operational and financial results. In particular, a depreciation in the value of the Mexican peso relative to the U.S. dollar could increase our costs because our main raw materials are hydrocarbons, whose prices are referenced to the U.S. dollar. In addition, more than half of our debt (54.7% as of March 31, 2019) is denominated in U.S. dollars or other foreign currencies, and we may incur additional indebtedness denominated in

U.S. dollars or other foreign currencies in the future. The value of the Mexican peso in U.S. dollar terms appreciated by 0.5% in 2018 as compared to a 4.8% appreciation of the Mexican peso in U.S. dollar terms in 2017. During the three-month period ended March 31, 2019, the value of the Mexican peso appreciated by 1.9 % in U.S. dollar terms. However, future declines in the value of the Mexican peso relative to the U.S. dollar or other foreign currencies would increase our interest and repayment costs in Mexican pesos and may result in foreign exchange losses.

***Regulatory developments in Mexico could have a negative impact on our results of operations and financial condition***

We operate in an industry that is heavily regulated by the Mexican government. As a result, our results of operations are closely linked to certain factors that are under the control of the Mexican government, such as the regulation of electricity rates throughout Mexico. Consequently, a change in applicable law, regulations or policies in Mexico, or the interpretation thereof, if adverse to us, could have a negative impact on our business, financial condition and results of operations. See “Comisión Federal de Electricidad—General Regulatory Framework.”

**Risk Factors Related to the Issuer and the Guarantors**

***The Mexican government controls us and could limit our ability to satisfy our external debt obligations***

The primary source of funds for us to make payments under the notes is our results of operations and cash flows. The Mexican government does not guarantee or secure our obligations and has no obligation to pay the principal or interest on the notes in the event that our cash flows and/or assets are not sufficient to make any such payments. The notes do not grant in any way rights over the ownership, control or assets of the Issuer or the guarantors.

Pursuant to the CFE Law, in October 2014, the Issuer was converted from an *organismo público descentralizado de la Administración Pública Federal* (decentralized public entity of the Mexican government) into a productive state enterprise of the Mexican government. In addition, the Board of Directors has been empowered to create additional subsidiaries or participate in affiliates without the need to obtain approval from the Mexican Congress. We have additional technical, managerial and budgetary autonomy, which is designed to allow us to compete with other companies participating in the Mexican energy sector. See “Comisión Federal de Electricidad—General Regulatory Framework.” Notwithstanding this increased autonomy, we remain under the Mexican government’s supervision and regulation, and the Minister of Energy acts as chairman of the Board of Directors. Our activities are monitored by the Ministry of Energy and the CRE, and our annual budget can be adjusted by the Mexican government in certain respects, as it has been adjusted in the recent past. The influence by the Mexican government may cause our business and activities to be driven by political factors that may not be aligned with increasing our efficiency and/or profitability. In addition, our financial condition target, expenditure and net debt ceiling are included in the overall public sector financing plans and expenditure budget, which requires the approval of the Mexican Congress. The maximum amount we may pay in connection with indebtedness incurred is fixed, on a yearly basis, by the Mexican Chamber of Deputies. As a result, our financing and payment capacity is directly aligned with that of the Mexican government, which could adversely affect our ability to make payments under any securities issued by us, including the notes. Although we are wholly owned by the Mexican government, our financing obligations do not constitute obligations of, and are not guaranteed by, the Mexican government. In addition, the Mexican government has the power, upon further amendment to the Mexican Constitution and applicable federal law, to reorganize us, including transferring of all or a portion of our assets to an entity not controlled by the Mexican government. The reorganization contemplated by the Energy Reform Decree and the Secondary Legislation, or any other reorganization implemented by the Mexican government in the future could adversely affect our operations, cause a disruption in our workforce and cause us to default on certain obligations. See “Comisión Federal de Electricidad—General Regulatory Framework.”

The Mexican government’s agreements with international creditors may affect our external debt obligations, including the notes. In certain past debt restructurings of the Mexican government, our external indebtedness was treated on the same terms as the debt of the Mexican government and other public sector entities, and it may be treated on similar terms in any future debt restructuring. In addition, Mexico has in the past entered into agreements with official bilateral creditors to reschedule public sector external debt.

***Our operating costs may not be fully covered by our electricity rates, which are set by the Mexican government; as a result, a reduction of our electricity rates could adversely affect our results of operations and financial condition***

The Mexican government may set some of our consumer electricity rates at levels below our operating costs in order to maintain the affordability of electricity, in particular with respect to our residential and agricultural customers, which rates will continue to be determined by the Mexican government following the implementation of the Secondary Legislation. In addition, upon the repeal of the LSPEE and the Issuer's conversion into a productive state enterprise, we are no longer subject to the public use tax and "rate insufficiency" regime that was historically applicable to us.

Certain electricity rates were historically set at levels below our operating costs. To avoid absorbing the impact of subsidies granted to consumers by the Mexican government, through 2014 we were permitted to offset certain taxes through the "rate insufficiency" regime, which allowed us to transfer losses incurred from subsidized electricity rates to the Mexican government. The subsidy we currently receive is included in the *Presupuesto de Egresos de la Federación* ("Federal Budget") and transferred in 10 monthly payments from February to November of each year. If the Mexican government maintains or continues to set some of our electricity rates at levels below our operating costs, we may be required to absorb the impact of the subsidies granted to consumers by the Mexican government and our business, financial condition and results of operations may be adversely affected. We can provide no assurances that we will not have to absorb such impact in the future and that, if we have to absorb it, our results of operations and financial position will not be adversely affected.

***Any significant increase in fuel prices could adversely affect our results of operations and financial condition***

Our operations require substantial amounts of fossil fuel (fuel oil, natural gas, liquefied natural gas, coal and diesel), since a substantial percentage of our installed capacity for generation (including through the IPPs model) is derived from plants powered by these fuels. We purchase our fuel oil from PEMEX and other suppliers through our commercialization affiliates. We currently purchase natural gas from PEMEX and other suppliers in Mexico (including Gas de Litoral, S. de R.L. de C.V., IEnova LNG, S. de R.L. de C.V. and Grupo Iberdrola and its affiliates) at indexed prices pursuant to long-term (15-year) contracts awarded pursuant to an international bidding process. For 2018 and the three-month period ended March 31, 2019, fuel oil and natural gas accounted for 57.6% and 62%, respectively, of the aggregate amounts that we spent for the generation of electricity. As of December 31, 2018, approximately 14% of our installed capacity relied on the use of coal, which we purchase pursuant to three-year contracts with various foreign suppliers that we select through international bidding processes. A small percentage of our generating plants use diesel fuel, which we purchase from PEMEX at prices regulated by the Mexican government.

Any variation in fuel prices could affect our results of operations and financial condition, since an increase in fuel prices has a direct impact on our net operating cost. Since 2006, increased demand for natural gas in Mexico and diminished national supply has forced PEMEX to limit the amount of natural gas it makes available to us, which has, in turn, increased our demand for fuel oil and placed upward pressure on the prices we pay for natural gas and fuel oil from PEMEX. To mitigate our exposure to fuel prices, the electricity rates that we charged our industrial, commercial and high-consumption residential customers, which accounted for 79.9% of our revenues from electricity sales in 2018, were adjusted on a monthly basis pursuant to a formula that accounts for changes in fuel costs. However, in the future, we may not be able to successfully reduce our exposure to the volatility of fuel prices and their impact on our results of operations and financial condition. Additionally, we could face a combination of increased fuel prices and depreciation of the Mexican peso, which could adversely affect our operational and financial results.

***We have substantial debt that could adversely affect our results of operations and financial condition***

We have incurred and, pursuant to our capital expenditures program, will continue to incur substantial amounts of indebtedness. Neither the indenture governing the notes, nor any of our loan agreements, or the other documents governing our indebtedness contain covenants restricting the incurrence of indebtedness by us. However, because we are subject to certain budgetary controls by the Mexican government and the Mexican Chamber of Deputies, we may not be able to exceed limits on net indebtedness established for us, which are reevaluated annually by the Mexican Congress.

Our ability to repay our indebtedness, including the notes, depends primarily on our results of operations and cash flow. If our operating revenues and cash flows are significantly affected by any factor, including, for example, serious technical failures in the functioning of our generation facilities, or increases in fuel prices or labor costs, we may have difficulties making payments as they come due on our indebtedness, including the notes.

***The occurrence of certain events could result in an obligation to prepay, or accelerate, our indebtedness***

We have incurred indebtedness in Mexico and in the international markets that is subject to certain conditions that, if not met by us, could give rise to an obligation to prepay or an event of default under such indebtedness. For example, a mandatory prepayment event or an event of default under certain of our indebtedness may occur if (i) we cease to be a public sector entity of the Mexican government, (ii) the Mexican government ceases to be our majority owner, (iii) we cease to be a public sector entity authorized to generate, transmit and distribute electricity in Mexico or (iv) our share of the electricity market in Mexico with respect to other public sector entities were to be reduced below 75% (unless the Mexican government were to formally assume or guarantee all of our obligations). The Issuer would have an obligation to offer to repurchase such indebtedness, including the notes, early if the events described above were to occur, but we cannot assure you that we would have the resources available to do so if such an event were to occur. Moreover, if a mandatory prepayment event or an event of default under our indebtedness were to occur and our repayment obligations are accelerated, our business, financial condition and results of operations could be adversely affected.

***We are subject to anti-corruption, anti-bribery and anti-money laundering laws. Our failure to comply with these laws could result in penalties, which could harm our reputation and have an adverse effect on our business, results of operations and financial condition***

We are subject to anti-corruption, anti-bribery and anti-money laundering laws. Although we maintain policies and processes intended to comply with these laws, including the review of our internal control over financial reporting, we cannot ensure that these compliance policies and processes will prevent intentional, reckless or negligent acts committed by our officers or our employees. If we, our officers or our employees fail to comply with any applicable anti-corruption, anti-bribery or anti-money laundering laws, we and our officers and our employees may be subject to criminal, administrative or civil penalties and other remedial measures, which could have material adverse effects on our business, financial condition and results of operations. Any investigation of potential violations of anti-corruption, anti-bribery or anti-money laundering laws by governmental authorities in Mexico or other jurisdictions could result in an inability to prepare our financial statements in a timely manner. This could adversely impact our reputation, ability to access the financial markets and ability to obtain contracts, assignments, permits and other government authorizations necessary to participate in our industry, which, in turn, could have adverse effects on our business, results of operations and financial condition.

***The Issuer is a productive state enterprise and depends on the results of operations of its subsidiary productive enterprises, including to meet its obligations under the notes***

The Issuer is a productive state enterprise with no independent operations or substantial assets other than assets of its subsidiary productive enterprises. See “Comisión Federal de Electricidad—General Regulatory Framework—Organizational Structure of CFE.” Accordingly, it depends on the results of operations of its subsidiary productive enterprises. The Issuer’s ability to service its debt and other obligations, including the notes, will depend on its subsidiary productive enterprises’ generation of cash flow and their ability to make such cash available to the Issuer. In the event that the Issuer does not receive cash from its subsidiary productive enterprises, the Issuer may be unable to make required principal and interest payments on its indebtedness, including the notes, or honor its other obligations. Any adverse change in the financial condition or results of operations of the Issuer’s subsidiary productive enterprises could affect our business, results of operations and financial condition.

***Increased competition in the electricity sector could adversely affect our business and financial performance***

As a result of the Energy Reform Decree and the enactment of the Secondary Legislation and the applicable regulations, we expect a greater involvement of the private sector in the power industry, including power generation, transmission and distribution and commercialization, creating greater competition. Electricity generation and commercialization will be opened to private sector participation, except for the sale of electricity to residential consumers and small and medium industrial and commercial consumers, and the new legislation allows high margin industrial consumers to purchase electricity from other independent producers. In addition, private companies are allowed to enter into partnerships or agreements with us or the Ministry of Energy for the financing, installation,

maintenance, management, operation and expansion of transmission and distribution infrastructure. See “Comisión Federal de Electricidad—General Regulatory Framework—Private Participation in the Electricity Sector.” These changes could result in increased competition in some of the sectors in which we operate, and could make it more difficult for us to hire and retain skilled personnel. If we are unable to compete successfully with private-sector companies in these sectors, our results of operations and financial performance may be adversely affected.

***We plan to engage in the sale of natural gas to industrial customers, which would be a new line of business for us; however, we cannot provide assurance that an expansion into this line of business will succeed***

We plan to engage in the transportation, storage and sale of natural gas, coal and other fuels, which are activities in which we have limited experience. We have also announced that we will engage in the sale of natural gas to industrial customers. An expansion into this or any other area of the Mexican energy sector in which we have not been previously engaged is subject to the expenses, difficulties and risks inherent in establishing a new line of business. Failure to successfully develop this or other new lines of business in conjunction with our existing operations may have an adverse effect on our business, financial condition and results of operations.

***We may suffer from a significant interruption of service, which could adversely affect our results of operations and financial condition***

Although we conduct a comprehensive maintenance program, we may not be able to prevent service interruptions due to technical or technological failures. Much of our equipment is installed outdoors and is subject to the varying weather conditions that affect Mexico from time to time. As a result, this equipment, including, in particular, our transmission towers and utility poles, often incurs weather-related damage as well as wear-and-tear from aging, which in certain instances causes electricity service interruptions for our customers. Furthermore, we may suffer from significant and prolonged interruptions of service in any one or more of our facilities due to natural disasters (e.g., hurricanes, earthquakes, flooding and/or tsunamis), accidents, sabotage, terrorist acts, copper wire theft or failure of our technical systems or emergency maintenance plans, which could adversely affect our business, financial condition and results of operations.

Additionally, as demand for electricity in Mexico increases in the future, our ability to maintain the quality of our service and avoid service interruptions may depend in part on our ability to expand our labor force accordingly. However, because we are subject to certain budgetary controls, any expansion of our labor force is subject to the authorization of the Mexican government and the Mexican Chamber of Deputies. We cannot assure you that we will be able to obtain such authorization.

***We are subject to environmental risks and possible claims and lawsuits inherent to the generation, transmission and distribution of electricity***

There are environmental risks inherent to electricity generation, transmission, and distribution activities, and accordingly, we are subject to claims and lawsuits for damages arising from our operations. In particular, we are subject to environmental risks relating to the operation of our nuclear generation plant. Although we monitor the emissions of all our generation plants on a daily basis, we are subject to environmental audits ordered and performed by the *Procuraduría Federal de Protección al Ambiente* (Federal Environmental Protection Agency), which is part of the *Secretaría del Medio Ambiente y Recursos Naturales* (Ministry of Environment and Natural Resources), without prior notice, which could subject us to fines or remedial action. Furthermore, our nuclear facility is also subject to the regulation of the International Nuclear Regulators Association (“INRA”) and certain other international organizations. Our nuclear facility currently has a safety rating of “two” out of “five” on a five-point scale used by international regulators of nuclear facilities to measure safety, including INRA, where “one” is the rating given to the world’s safest plants. This rating is based in part on certain deficiencies in the qualifications and size of the personnel that manage our nuclear facility as compared to the personnel that would be required to obtain the highest safety rating.

Furthermore, a wide range of general and industry-specific Mexican federal and state environmental laws and regulations apply to our operations; these laws and regulations are often costly to comply with and carry substantial penalties for non-compliance. Such regulatory burden increases our costs as it may require significant capital expenditures.

We maintain a general liability insurance policy (which includes environmental risk insurance) and a civil liability insurance policy for the operation of our nuclear plant; however, such coverage may not be adequate or available to protect us in the event of a claim, or our coverage could be canceled or otherwise terminated. A major claim for damages could have a material impact on our business, financial condition, results of operations or prospects.

Natural disasters, such as hurricanes, earthquakes or massive rain storms could adversely affect our operations, in particular the supply of energy to the affected regions. On September 8, 2017 and September 19, 2017, Mexico was hit by two powerful earthquakes that registered a magnitude of 8.2 and 7.1, respectively, on the Richter scale, resulting in loss of life and significant damage to the affected regions. Both earthquakes resulted in power outages in regions of Mexico in which we operate. In particular, because the epicenter of the September 19 earthquake was located about 100 miles away from Mexico City and near other highly populated cities in six other states, approximately 4.8 million consumers were affected by power supply disruptions. While we were able to reestablish approximately 99% of power supply within four days of the September 19 earthquake, and we have contingency plans in place and insurance against some or all of these risks, we cannot assure you that we will be able to respond to the effects of future natural disasters in an effective manner or that our insurance coverage will be adequate.

***Unfavorable hydrologic conditions may adversely affect our operations***

Our power generation activities depend, to a certain extent, on adequate flows and supplies of water, as 22% of our total installed capacity as of March 31, 2019 was from hydroelectric sources. Hydrological conditions largely influence plant dispatch and generation and therefore affect our operations. In the event of adverse hydrologic conditions and if alternative sources of generation are not available to us at a low cost, our financial performance may be negatively affected.

***We may not be successful in implementing our business strategies***

As part of our overall business strategy, we plan to undertake new, or expand ongoing, projects. Such projects include improving our clean and renewable energy generation capabilities, increasing the use throughout Mexico of energy-efficient appliances and light fixtures and further developing “smart grid” technology to improve the operational efficiency of our electricity transmission and distribution network.

Because of inherent uncertainties affecting these strategic initiatives, we are exposed to a number of risks and challenges, including, among others, the following:

- new and expanded business activities may require additional and unanticipated capital expenditures and increased regulatory compliance costs;
- new and expanded business activities may result in lower profits than we currently anticipate and there can be no guarantee that such activities will become profitable at the levels we desire or at all; and
- we may need to hire new personnel and/or retrain existing personnel to oversee and operate the relevant new business activities.

***Labor unrest, employee benefits obligations and labor-related lawsuits may adversely affect our business, financial condition and results of operations***

As of March 31, 2019, approximately 79% of our employees were members of SUTERM. Historically, our relationship with SUTERM has been cordial and respectful despite our differing interests. Every two years, we renegotiate the terms of our *contrato colectivo* (collective bargaining agreement) with SUTERM, while wages are reviewed and negotiated on an annual basis. We cannot guarantee the future stability of our relationship with SUTERM, and any labor related conflict with SUTERM may adversely affect our business, results of operations and financial condition.

In addition, as of March 31, 2019, we reported a liability of Ps.329.7 million (U.S.\$ 17.1 million) on our statement of financial position in respect of our labor obligation costs, which represented 26% of our total liabilities



as of such date. Any inability to meet these obligations at any time in the future may result in labor unrest, which could adversely affect our business, financial condition and results of operations.

As of March 31, 2019, we had 18,708 labor-related lawsuits filed against us by current and past employees. As of March 31, 2019, we had established a provision for employee benefits of Ps. 5.9 billion for our estimated liability in respect of these lawsuits, which provision is based on the trend of labor-related lawsuits resolved in the last five years. Although we have established reserves that we believe are sufficient to cover the risks associated with these lawsuits, we cannot guarantee that the assumptions underlying the establishment of our reserves will prove to be accurate, nor can we assure you that we will not become the subject of a further lawsuits that may have an adverse effect on our business, results of operations and financial condition.

***Our failure to timely file required financial information in Mexico may have adverse consequences***

We are required, pursuant to the *Disposiciones de carácter general aplicables a las emisoras de valores y a otros participantes del mercado de valores* (General Provisions Applicable to Issuers and other Participants of the BMV, or the “CUE”), to publish our financial results in Mexico within specified timeframes. On April 29, 2019, we publicly announced that, due to the adoption of IFRS 16 “Leases,” effective January 1, 2019, our financial results for the three-month period ended March 31, 2019 and for the year ended December 31, 2018 would be published with delays. We published our financial results for the three-month period ended March 31, 2019 on May 31, 2019 and our financial results for the year ended December 31, 2018 on May 30, 2019. As a result of our failure to timely file our financial results for the three-month period ended March 31, 2019 within the required timeframe, the BMV temporarily suspended public trading in our securities listed on that exchange. Such suspension was lifted on May 31, 2019.

Although delays of this type are infrequent and we have procedures in place to avoid similar delays, we cannot guarantee that unforeseen events or changes in accounting policies will not result in similar delays in the future.

**Risk Factors Related to the Notes**

***The notes will contain provisions that permit CFE to amend the payment terms of a series of notes without the consent of all the holders***

The notes will contain provisions regarding acceleration and voting on amendments, modifications and waivers that are commonly referred to as “collective action clauses.” Under these provisions, certain key terms of a series of the notes may be amended, including the maturity date, interest rate and other payment terms, without the consent of all the holders. See “Description of the Notes—Meetings, Amendments and Waivers.”

***An active trading market for the notes may fail to develop, which could adversely affect the market prices and liquidity of the notes***

Currently, there is no established trading market for the notes. Application will be made to have the notes admitted for listing on the Official List of Luxembourg Stock Exchange, and on the TPEX. Even if the notes become listed on either exchange, we may delist the notes from such exchange. If the notes fail to, or cease to be listed on the Luxembourg Stock Exchange or on the TPEX, certain investors may not invest in, or continue to hold or invest in, the notes. A trading market for the notes may not develop, or if a market for the notes were to develop, the notes may trade at a discount from their initial offering price, depending upon many factors, including prevailing interest rates, the market for similar securities, general economic conditions and our financial condition. The managers are not under any obligation to make a market with respect to the notes, and we cannot assure you that trading markets will develop or be maintained. Accordingly, we cannot assure you as to the development or liquidity of any trading market for the notes. If an active market for the notes does not develop or is interrupted, the market price and liquidity of the notes may be adversely affected.

***We may choose to redeem the notes and you may be unable to reinvest the proceeds at the same or a higher rate of return***

In the event of certain changes in Mexican tax laws or certain changes in the interpretation or application of such laws, we will have the right to redeem the notes, in whole but not in part, prior to their maturity at a price equal

to 100% of the outstanding principal amount of the notes plus accrued and unpaid interest to the redemption date (and Additional Amounts, if any). See “Description of the Notes—Redemption and Purchase—Redemption for Taxation Reasons.” We may choose to redeem the notes at times when prevailing interest rates may be relatively low. Accordingly, you may not be able to reinvest the redemption proceeds in a comparable security with an effective interest rate as high as that of the notes being redeemed.

***The notes are subject to certain transfer restrictions***

The notes have not been and will not be registered under the Securities Act or any U.S. state or other securities laws, and we are not required to make and currently do not plan on making any such registration in the immediate future. Accordingly, the notes may not be offered or sold except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and applicable U.S. state or other securities laws, as applicable. Prospective investors should be aware that investors may be required to bear the financial risks of an investment in the notes for an indefinite period of time. See “Transfer Restrictions” for a full explanation of these restrictions.

***Our credit ratings do not reflect all risks of investing in the notes***

Our credit ratings are an assessment by the rating agencies of our ability to pay our debts as they mature. Consequently, actual or anticipated changes in our credit ratings generally affect the market value of the notes. The ratings do not constitute a recommendation to buy, sell or hold securities and may be revised or withdrawn at any time by the rating agency. Our credit rating from each rating agency should be evaluated independently of ratings by any other rating agencies.

***We are not subject to the bankruptcy laws of Mexico, and certain of our assets cannot be attached by creditors***

Neither the Issuer, as a productive state enterprise of the Mexican government, nor the guarantors, as subsidiary productive enterprises of the Issuer, are subject to the Commercial Bankruptcy Act and thus cannot be declared in reorganization or bankrupt. Under applicable Mexican law, the Issuer may be liquidated and dissolved by the Mexican Congress if it determines that the Issuer ceases to fulfill the purpose for which the Issuer was created or for any other reason. In addition, the guarantors may be liquidated and dissolved at any time by the Board of Directors, upon a proposal of the Issuer’s General Director. In the event that the Issuer is liquidated and dissolved by the Mexican Congress, or the guarantors are liquidated and dissolved as a result of a determination made by the Board of Directors, it is uncertain whether or to what extent the rights of holders of the notes would be honored. The Mexican government does not guarantee the Notes and is not required to assume or make any payments under the Notes.

Under the CFE Law, real property owned by the Issuer and the guarantors is deemed to be property in the public domain, and under Article 4 of the General Law of Public Property neither attachment prior to judgment nor attachment in aid of execution will be ordered by Mexican courts against our real property. As a result, a Mexican court would not recognize an attachment order against such assets. In addition, under the Electric Industry Law, the transmission and distribution of electric energy as a public service are reserved to the Mexican government, through us, and to that extent, the assets related thereto are subject to immunity. As a result, the ability to enforce judgments against the Issuer or the guarantors in the courts of Mexico may be limited.

The Issuer and the guarantors have irrevocably submitted to the jurisdiction of the U.S. federal courts located in the Borough of Manhattan in The City of New York and, to the extent permitted by law, have waived immunity from the jurisdiction of these courts in connection with any action based upon the notes brought by any holder of notes. However, a holder of notes would not be able to enforce that judgment against the Issuer’s or the guarantors’ property in the United States except under the limited circumstances specified in the Foreign Sovereign Immunities Act. Moreover, most of the Issuer’s and the guarantors’ assets are located in Mexico, not in the United States. Therefore, even if a U.S. judgment against the Issuer or the guarantors were obtained, and an action to enforce that judgment were to be brought in Mexico, or an action seeking to enforce the obligations of the Issuer or the guarantor under the notes or the guaranty agreement (in respect of the notes) were brought against us in Mexico, satisfaction of those obligations may be made in Mexican pesos, pursuant to the laws of Mexico, at the rate of exchange in effect on the date on which payment is made. This rate of exchange is currently determined by *Banco de México* every business day in Mexico, based on an average of wholesale foreign exchange market quotes, and is published on *Banco de México*’s website ([www.banxico.org.mx](http://www.banxico.org.mx)) and the following business banking day in the Official Gazette of the Federation. See “Exchange Rates.”

***Holders of the notes may not be able to enforce civil liabilities against us or our directors and officers***

The Issuer is a productive state enterprise of Mexico and the guarantors are subsidiary productive enterprises of the Issuer. While the Issuer and the guarantors have irrevocably submitted to the jurisdiction of the federal courts located in the Borough of Manhattan in The City of New York and, to the extent permitted by law, have waived immunity from the jurisdiction of these courts in connection with any action based upon the notes brought by any holder of notes, the Issuer and the guarantors have reserved the right to plead immunity under the Foreign Sovereign Immunities Act in actions brought against the Issuer or the guarantors under the U.S. federal securities laws or any U.S. state securities laws. Unless the Issuer or the guarantors waive their immunity against such actions, a U.S. court judgment could be obtained against the Issuer or any guarantor only if a U.S. court were to determine that the Issuer or any guarantor is not entitled to sovereign immunity under the Foreign Sovereign Immunities Act with respect to that action.

The Issuer's and the guarantors' directors and officers, as well as certain experts named in this offering memorandum, reside outside the United States, and all or a substantial portion of their assets are located outside of the United States. As a result, it may not be possible for holders of the notes to effect service of process outside Mexico upon the Issuer or the guarantors, its or their directors or officers, or those experts, or to enforce against such parties judgments of courts located outside Mexico predicated upon civil liabilities under the laws of jurisdictions other than Mexico, including judgments predicated upon the civil liability provisions of the U.S. federal securities laws or other laws of the United States.

***Mexican law does not require us to pay our foreign-currency judgments or foreign currency-denominated liabilities in a currency other than Mexican pesos***

Although our obligations to pay U.S. dollars outside Mexico are valid and enforceable, under Article 8 of the Mexican *Ley Monetaria de los Estados Unidos Mexicanos* (Mexican Monetary Law), if proceedings are brought in Mexico seeking to enforce in Mexico our obligations under the notes, whether as a result of an initial action before Mexican courts or in connection with the enforcement of a judgment issued by a non-Mexican court through a Mexican court, we would not be required to discharge such obligations in Mexico in a currency other than Mexican currency. Pursuant to such Article 8, an obligation that is payable in Mexico in a currency other than Mexican currency may be satisfied in Mexican currency at the rate of exchange in effect on the date and in the place payment occurs. Such rate currently is determined by *Banco de México* every business banking day in Mexico and published the following business banking day in the Official Gazette of the Federation. It is unclear, however, whether the applicable rate of exchange applied by the Mexican court to determine the Mexican judgment currency is the rate prevailing at the time when the judgment is rendered or when the judgment is paid. Provisions that purport to limit our liability to discharge our obligations in Mexican currency as described above, or to give any party an additional course of action seeking indemnity or compensation for possible deficiencies arising or resulting from variations in rates of exchange, will not be enforceable in Mexico.

***Payment dates with respect to the notes shall be determined in accordance with the time zone applicable to The City of New York***

All payment dates with respect to the notes, whether at maturity, upon earlier redemption or on any interest payment date, shall be determined in accordance with the time zone applicable to The City of New York. Because of time-zone differences, the interest payment date on which we make payment may not be the same business day in the applicable jurisdiction of the relevant holder of notes. In addition, deliveries, payments and other communications involving the notes are likely to be carried out through Euroclear and Clearstream, which means such transactions can only be carried out on days when those systems are open for business. Those systems may not be open for business on days when banks, brokers and other institutions are open for business in the United States or Taiwan.

## **USE OF PROCEEDS**

We estimate that the net proceeds from the sale of the notes, after payment of the managers' commissions and structuring agent's fees and estimated transaction expenses payable by us, will be approximately U.S.\$ 613 million. We intend to use the net proceeds from the offering of the notes to pay for certain OFP projects in accordance with the Mexican laws and regulations applicable to us.

## EXCHANGE RATES

Mexico has a free market for foreign exchange, and the Mexican government allows the Mexican peso to float freely against the U.S. dollar. There can be no assurance, however, that the Mexican government will maintain its current policies with respect to the Mexican peso or that the Mexican peso will not depreciate or appreciate significantly in the future.

The following table sets forth, for the periods indicated, the period-end, average, high and low exchange rates between the Mexican peso and the U.S. dollar published by *Banco de México*. These exchange rates are currently determined by *Banco de México* every business day in Mexico, based on an average of wholesale foreign exchange market quotes and published on *Banco de México*'s website ([www.banxico.org.mx](http://www.banxico.org.mx)) and the following business banking day in the Official Gazette of the Federation. The rates shown below are stated in Mexican pesos that have not been restated in constant currency units. No representation is made that the Mexican peso amounts referred to in this offering memorandum could have been or could be converted into U.S. dollars at any particular rate or at all.

<b>Year ended December 31,</b>	<b>Exchange Rate</b>			
	<b>End of Period</b>	<b>Average<sup>(1)</sup></b>	<b>High</b>	<b>Low</b>
2014 .....	14.741	13.303	14.785	12.846
2015 .....	17.249	15.881	17.377	14.566
2016 .....	20.619	18.689	21.051	17.177
2017 .....	19.663	18.907	21.908	17.494
2018 .....	19.651	19.237	20.716	17.979
<b>Month,</b>				
February 2019.....	19.261	19.205	19.408	19.080
March 2019.....	19.378	19.248	19.523	18.869
April 2019.....	19.010	18.986	19.228	18.772
May 2019.....	19.643	19.120	19.643	18.976
June 2019.....	19.039	19.165	19.607	18.928
July 2019 (through July 10, 2019).....	19.243	19.049	19.243	18.911

<sup>(1)</sup> The average of the exchange rate for Mexican pesos is calculated taking daily quotations during the relevant period.  
Source: *Banco de México*

The exchange rate published on the Official Gazette of the Federation on March 28, 2019 for payment obligations due on March 29, 2019, was Ps. 19.3201 per U.S. dollar.

## CAPITALIZATION

The following table sets forth our short-term debt and our capitalization on an actual basis as of March 31, 2019 and as adjusted to reflect the issuance and sale of the notes, but not the use of proceeds therefrom.

		As of March 31, 2019			
		Actual (in millions of Mexican pesos)	Actual (in millions of U.S. dollars) <sup>(1)</sup>	As Adjusted for this Offering (in millions of Mexican pesos)	As Adjusted for this Offering (in millions of U.S. dollars) <sup>(1)</sup>
<b>Debt</b>					
Current portion of long-term debt .....	Ps.	15,623	U.S.\$ 809	Ps.	15,623 U.S.\$ 809
Current portion of the lease of plants, installation, equipment and PIDIREGAS .....		24,890	1,288		24,890 1,288
<b>Total short-term debt</b> .....	<b>Ps.</b>	<b>40,513</b>	<b>U.S.\$ 2,097</b>	<b>Ps.</b>	<b>40,513 U.S.\$ 2,097</b>
Long-term documented debt .....	Ps.	197,361	U.S.\$ 10,215	Ps.	197,361 U.S.\$ 10,215
5.00% Notes due 2049 offered hereby <sup>(2)</sup> .....		-	-		11,882 615
Long-term leases of plants, installation, equipment and PIDIREGAS (excluding the 5.00% Notes due 2049 offered hereby) .....		564,868	29,237		564,868 29,237
<b>Total long-term debt</b> .....	<b>Ps.</b>	<b>762,228</b>	<b>U.S.\$ 39,453</b>	<b>Ps.</b>	<b>774,111 U.S.\$ 40,067</b>
<b>Total debt</b> .....	<b>Ps.</b>	<b>802,742</b>	<b>U.S.\$ 41,550</b>	<b>Ps.</b>	<b>814,624 U.S.\$ 42,164</b>
<b>Equity</b>					
Accumulated results .....	Ps.	86,397	U.S.\$ 4,472	Ps.	86,397 U.S.\$ 4,472
Contributions from the Mexican government .....		5	-		5 -
Contributions in kind received from the Mexican government .....		95,004	4,917		95,004 4,917
Other comprehensive income .....		462,877	23,958		462,877 23,958
Non-controlling interest .....		17,496	906		17,496 906
<b>Total equity</b> .....	<b>Ps.</b>	<b>661,781</b>	<b>U.S.\$ 34,253</b>	<b>Ps.</b>	<b>661,779 U.S.\$ 34,253</b>
<b>Total capitalization (total debt and equity)...</b>	<b>Ps.</b>	<b>1,464,521</b>	<b>U.S.\$ 75,803</b>	<b>Ps.</b>	<b>1,476,403 U.S.\$ 76,417</b>

(1) Mexican peso amounts have been translated into U.S. dollars, solely for the convenience of the reader, at the Mexican peso/U.S. dollar exchange rate of Ps. 19.3201 = U.S.\$ 1.00, as published on the Official Gazette of the Federation on March 28, 2019 for payment obligations due on March 29, 2019.

(2) Does not include issuance costs.

## **MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

The following discussion and analysis is based on and should be read in conjunction with our audited consolidated financial information and unaudited condensed consolidated interim financial information and related notes thereto included elsewhere in this offering memorandum and should also be read in conjunction with "Presentation of Financial Information," "Summary—Summary Financial and Operating Information" and other financial information contained in this offering memorandum.

We prepare our financial statements in accordance with IFRS, which require our management to make certain estimates and assumptions to determine the valuation of certain items included in our financial statements and to make the appropriate disclosures therein. Although actual results may differ from such estimates, our management believes that the estimates and assumptions used were adequate under the circumstances.

Effective January 1, 2018, we adopted the new accounting standards IFRS 15 "Revenue from Contracts with Customers" and IFRS 9 "Financial Instruments" using a full retrospective approach as of January 1, 2016. Accordingly, we restated comparative financial information as of and for the years ended December 31, 2017 and 2016. For a description of the effect of the adoption of IFRS 15 and IFRS 9, see Note 2 to our audited consolidated financial statements as of and for the year ended December 31, 2018.

Effective January 1, 2019, we also adopted the new accounting standard IFRS 16 "Leases." As a result of the adoption of IFRS 16, retained earnings as of January 1, 2018 were adjusted from Ps. 101.1 billion (U.S.\$ 5.2 billion) to Ps. 61.9 billion (U.S.\$ 3.2 billion), representing a decrease of 38.2%. For more information on the impact of the adoption of IFRS 16, see Note 22 to our audited consolidated financial statements as of and for the year ended December 31, 2018 and Note 9 to our unaudited consolidated financial statements as of March 31, 2019.

### **Significant Accounting Policies**

The following is a summary of the significant accounting policies that we follow in preparing our financial information, including our financial statements included herein. See Note 3 to our annual financial statements and Note 2 to our interim financial statements.

#### ***Basis of Consolidation***

The financial information of CFE Distribución, CFE Transmisión, CFE Generación I, CFE Generación II, CFE Generación III, CFE Generación IV, CFE Generación V, CFE Generación VI, CFE Suministrador de Servicios Básicos, CFE Calificados, S.A. de C.V., CFE International, LLC., CFENERGÍA, S.A. de C.V., CFE Intermediación de Contratos Legados, S. A. de C. V., CFE Capital, S. de R. L. de C. V. and the three trusts over which we have control were consolidated in the financial statements included herein.

#### ***Non-controlling Interest***

Changes in our ownership interest in a subsidiary that do not result in a loss of control are recorded as equity transactions.

#### ***Transactions in Foreign Currency***

Foreign currency-denominated transactions are recorded at the current exchange rate on the date on which they are carried out. Foreign currency monetary assets and liabilities are valued in local currency at the exchange rate in effect at the date of the financial statements. Foreign exchange fluctuations are recorded as profit or loss as part of our financing cost.

### ***Cash and Cash Equivalents***

Cash and cash equivalents are represented by cash, bank deposits, and temporary and short-term investments. Cash and bank deposits are presented at nominal value and returns on these investments are recognized in the income statement as they accrue. Marketable investments with short-term maturities are valued at fair value.

### ***Financial Instruments***

Financial assets (except for accounts receivable that do not contain a significant financing component) or financial liabilities are initially recorded at fair value plus, in the case of items not measured at fair value through profit or loss, the transaction costs that are directly attributable to the purchase or issuance.

IFRS 9 “Financial Instruments” establishes the requirements for the recognition and measurement of financial assets, financial liabilities and other purchase or sale contracts for non-financial items. IFRS 9 replaced IAS 39 “Financial Instruments: Recognition and Measurement” on January 1, 2018. However, IFRS 9 retains almost all of the existing requirements from IAS 39 regarding the classification and measurement of financial liabilities. Therefore, the adoption of IFRS 9 did not have a significant impact on our accounting policies related to financial liabilities and derivative financial instrument.

### ***Derivative Financial Instruments and Hedge Accounting***

Derivative financial instruments are recognized at fair value in our statement of financial position, and changes are generally recognized through profit or loss.

The fair value of derivative financial instruments is determined using generally accepted valuation techniques. In line with the risk strategy adopted, we enter into derivative financial instruments to mitigate foreign exchange and interest rate exposure, through contracting interest-rate swaps, cross-currency swaps and foreign exchange forwards.

The effectiveness of hedge derivatives is assessed prior to their designation as hedges, as well as during the hedging period, which is reassessed at least quarterly. If the hedge is not highly effective, we cease to treat the relevant derivative financial instrument as a hedge.

We suspend cash flow hedge accounting when a derivative expires, has been cancelled or executed, is not effective enough to offset the changes in the fair value or cash flows of the hedged item, or when we decide to cease to treat the relevant derivative financial instrument as a hedge.

### ***Finance Income and Finance Costs***

Our finance income and finance costs include:

- interest income;
- interest expense;
- the foreign currency gain or loss on financial assets and financial liabilities;
- impairment losses (and reversals) on investments in debt securities carried at amortized cost or fair value through other comprehensive income;
- hedge ineffectiveness recognized in profit or loss; and
- the reclassification of net gains and losses previously recognized in other comprehensive income on cash flow hedges of interest rate risk and foreign currency risk for borrowings.



Interest income or expense is recognized using the effective interest method. Dividend income is recognized in profit or loss on the date on which our right to receive payment is established.

The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument to:

- the gross carrying amount of the financial asset; or
- the amortized cost of the financial liability.

In calculating interest income and expense, the effective interest rate is applied to the gross carrying amount of the asset (when the asset is not credit-impaired) or to the amortized cost of the liability. However, for financial assets that have become credit-impaired subsequent to initial recognition, interest income is calculated by applying the effective interest rate to the amortized cost of the financial asset. If the asset is no longer credit-impaired, then the calculation of interest income reverts to the gross basis.

### ***Inventory of Operating Materials and Costs of Consumption***

Inventories of operating materials are recorded at the lower of their acquisition cost or net realizable value. Operating materials inventory unit costs are calculated using the average cost method.

When required, we record provisions to recognize write-downs in the value of our inventories due to impairment, obsolescence, low turnover and other circumstances that indicate that the recovery values of the inventories are less than their carrying amounts.

### ***Plants, Facilities and Equipment***

Plants, facilities and equipment are recorded at their acquisition cost. Borrowing costs incurred in financing of both direct and general construction in progress for a period longer than six months are capitalized as part of the cost of such asset.

In addition to the acquisition costs and other costs directly attributable to preparing the asset (so it can operate in the location and conditions foreseen by our technicians), the asset cost also includes estimated retirement costs and restoring costs.

Plants, facilities and equipment used for generation, transmission and distribution of electricity are subsequently revalued to adjust such cost to fair value, net from accumulated depreciation. We have established the policy of reviewing the fair value of our fixed assets every five years. Any increase in the revaluation of those plants, facilities and equipment is recognized as a surplus in other comprehensive income, except if such increase reverts a revaluation decrease previously recognized in the results of operations, in which case the increase is credited to the results of the period to the extent it reduces the expense previously recognized. A decrease in the carrying value generated by the revaluation of those plants, facilities, and equipment is recorded in the results of operations to the extent it exceeds the revaluation in plants, facilities and equipment, if any.

Depreciation of plants, facilities and equipment used for generation, transmission and distribution of electricity is recognized in net income and calculated by using the straight-line method as of the initial operating date of assets, considering depreciation rates based on the respective useful lives of the assets. In the event of a subsequent sale or retirement of revaluated property, the revaluation surplus attributable to the revaluation reserve of the remaining properties is transferred directly to retained earnings. Depreciation rates based on the useful lives of the assets are determined by CFE-employed specialists as follows:

	<b>Useful Life (Years)</b>
Geothermal power plants.....	27 to 50
Steam power plants.....	34 to 75
Hydroelectric power plants.....	40 to 80
Internal combustion power plants.....	34 to 75
Turbogas and combined-cycle power plants .....	34 to 75
Nuclear power plants.....	40
Substations.....	39 to 75
Transmission lines.....	34 to 75
Distribution networks .....	30 to 59

The estimated useful life, residual value and depreciation method are reviewed periodically, and the effect of any change on the estimate recorded is recognized prospectively. Capitalized replacement parts are depreciated from the time at which they are available for use.

Real property and assets allocated to offices and general services are depreciated in accordance with the following rates:

<b>Real property</b>	<b>Useful Life Years</b>
Buildings.....	20
Office furniture and equipment .....	10
Computer equipment .....	4
Transportation equipment.....	4
Other assets.....	10

Land is not depreciated.

There is a periodical evaluation to determine whether there is an indication of impairment of plants, facilities and equipment allocated to offices and general services.

### ***Intangible Assets and Other Assets***

Intangible assets acquired separately are recognized at cost and we estimate the useful life of each intangible asset. Intangibles with an indefinite useful life are classified as intangible assets with indefinite useful lives, mainly rights of way.

The other assets line item is largely comprised of security deposits provided under real estate leases, as well as guarantees provided to third parties under agreements for goods and/or services provided.

### ***Employee Benefits***

#### **Direct employee benefits.**

Direct employee benefits are determined based on services rendered and considering the current salaries of employees. The related liability is recorded as the benefits accrue. Direct employee benefits are mostly comprised of productivity incentives, vacation days, vacations premiums, bonuses and seniority awards granted to our temporary, contingent and permanent staff.

#### Pension benefits and other benefits.

We provide retirement pensions to our employees.

A defined benefit pension plan is given to employees who started their employment relationship on or before August 18, 2008, and a defined contribution pension plan applies to our employees whose employment started on or after August 19, 2008.

Obligations for contributions to defined contribution plans are expensed as the related service is provided. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in future payments is available.

In addition, there are defined contribution pension plans established by the Mexican government, which must make contributions on behalf of workers. The pension costs for defined contribution pension plans are recognized in our results as incurred and are calculated by applying the percentages indicated in the relevant regulations on the amount of wages and eligible wages, and deposited in the retirement fund chosen by our employees and the Mexican Social Security Institute.

According to the Mexican *Ley Federal del Trabajo* (Federal Labor Law), there is a requirement to provide for a seniority premium as well as to make certain payments to staff for terminations under certain circumstances.

The cost of the defined contribution pension plans is recognized in profit or loss as they are incurred. Our net obligation in respect of defined benefit plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in the current and prior periods, discounting that amount and deducting the fair value of any plan assets.

#### Defined Benefit Plans.

The calculation of defined benefit obligations is performed annually by a qualified actuary using the projected unit credit method. When the calculation results in a potential asset for us, the recognized asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. To calculate the present value of economic benefits, consideration is given to any applicable minimum funding requirements.

Remeasurements of the net defined benefit liability, which comprises actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest), are recognized immediately in other comprehensive income. We determine the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the net defined benefit liability (asset), taking into account any changes in the net defined benefit liability (asset) during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognized in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognized immediately in profit or loss. We recognize gains and losses on the settlement of a defined benefit plan when the settlement occurs.

#### Termination Benefits.

Termination benefits are expensed at the earlier of: (i) when we can no longer withdraw the offer of those benefits and (ii) when we recognize costs for a restructuring. These benefits are discounted when they are not expected to be wholly settled within 12 months of the reporting date.

#### ***Income Tax***

Income tax expense comprises current and deferred tax.

Current-year income tax is recognized as a short-term liability, net of prepayments made during the year.

Deferred tax is recognized using the asset and liability method, based on temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes at the date of the consolidated statement of financial position.

Deferred tax is measured at the tax rates that are expected to be in force when the assets materialize or the liabilities are settled using tax rates enacted or substantively enacted at the reporting date.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be used. Unrecognized deferred tax assets are reassessed at each reporting date and recognized to the extent that it has become probable that future taxable profits will be available against which they can be used.

Deferred taxes are recognized in profit or loss except for the items related to other comprehensive income.

### ***Revenue Recognition***

Our revenue recognition policies are as follows:

Sale of electricity: revenue is recognized when the electricity is delivered to the customers, which is considered to be the point in time at which the customer accepts the electricity and the risks and benefits related to the transfer of ownership. Other criteria applied for revenue recognition include that: (i) both the revenue and costs can be reliably measured by the entity, (ii) it is probable that the economic benefits associated with the transaction will flow to the entity and (iii) the entity does not retain continuing involvement over the goods sold.

IFRS 15 “Revenue from Contracts with Customers” establishes a complete conceptual framework for determining whether to recognize income from ordinary activities, when to recognize it and in what amount. This standard replaced the existing revenue recognition guideline, including IAS 18 “Income from Ordinary Activities,” IAS 11 “Construction Contracts” and IFRIC 13, on January 1, 2018.

Under IFRS 15, revenue is recognized when a customer obtains control of a good or service. Among other requirements, IFRS 15 requires that the collectability of a contract be reasonably assured to be able to recognize the revenue under that contract. We determined that certain divisions have problems related to regularization of rates and social resistance, and our customers in those divisions no longer have the capacity or willingness to pay the amounts owed. We reassessed our contracts with those customers and have preliminarily determined that they do not meet the revenue recognition requirement prescribed by IFRS 15. Therefore, we did not recognize the revenue for the electricity delivered under those contracts. As a result of the adoption of IFRS 15, revenue from the sale of electricity as of December 31, 2016 was adjusted from Ps. 316.2 billion (U.S.\$ 16.4 billion) to Ps. 313.1 billion (U.S.\$ 16.2 billion), and revenue from the sale of electricity as of December 31, 2017 was adjusted from Ps. 369.6 billion (U.S.\$ 19.1 billion) to Ps. 365.4 billion (U.S.\$ 18.9 billion).

Sale of fuel: revenue is recognized when the fuel is delivered to customers.

Transmission and distribution services: revenue is recognized over time, as the public electricity transmission services are provided.

Third-party contributions: revenue from contributions received from customers to connect them to the national transmission and distribution network is recorded in the statement of comprehensive income after their request is satisfied. This revenue is included under other revenue.

Revenue from subsidies: revenue from subsidies received from the Ministry of Finance is recognized when we receive the subsidies.

### ***Transactions with Mexican Federal, State and Municipal Governments***

The main transactions carried out with the Mexican federal, state and municipal governments and their accounting treatment are as follows:

(1) Transactions with the Mexican government:

- **Invested equity.** In accordance with the Federal Revenue Law, the Ministry of Finance can impose a dividend payment on the invested equity which, if applicable, should be paid to the Mexican government and recorded as a decrease in equity. Similarly, the executive branch of the Mexican government can determine its reinvestment annually in entities as an equity contribution for the Issuer. The Federal Revenue Law for 2019 does not contemplate a dividend payment to the Mexican government.
- **Subsidy.** Certain electricity rates have been historically set at levels below our operating costs. To avoid absorbing the impact of subsidies granted to consumers by the Mexican government, we receive transfers from the Mexican government to compensate for the subvention of such electricity rates.

	<b>Subsidy</b>				
	<b>Three-Month Period Ended</b>		<b>Year Ended December 31,</b>		
	<b>March 31,</b>				
	<b>2019</b>	<b>2018</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
	<b>(in millions of Mexican pesos)</b>				
Subsidy paid by the Mexican government .....	10,417	9,886	81,405	65,915	30,000

(2) Transactions with Mexican state and municipal governments:

- Until December 31, 2016, contributions received from the Mexican state and municipal governments to provide electricity to rural populations and low-income settlements, for expansions of the distribution network and for other specified purposes, are recorded as unrealized proceeds, which will be realized in accordance with the useful life of the assets for which such contributions have been made.
- Beginning on January 1, 2017, contributions received from the Mexican state and municipal governments to connect a customer to the network and provide electricity are recorded as deferred income and recognized as income in the consolidated statement of comprehensive income once we have concluded the customer connection to the network. Once connected, certain customers will be able to select between us or our competitors to supply electricity.

### ***Provisions***

Accrued liabilities are recognized when there is a present obligation, either legal or assumed, which is the result of a past event, that is likely to require the use of economic resources to settle the obligation and can be reasonably estimated.

In cases where the effect of the value of money over time is important, the amount of the provision is discounted to present value, based on disbursements we estimate will be required to settle the obligation in question. The discount rate is before tax and reflects market conditions at the time of our statement of financial position and, where appropriate, the risks specific to the liability. In the case of contingent liabilities, we recognize the corresponding provision only when an outflow of resources for its settlement is probable. In this case, the increase in the provision is recognized as financing cost.

## ***Measurement of Fair Values***

A number of our accounting policies and disclosures require the measurement of fair values for both financial and non-financial assets and liabilities. We have an established control framework with respect to the measurement of fair values. This includes a valuation team that has overall responsibility for overseeing all significant fair value measurements and reports directly to the CFO.

The valuation team regularly reviews significant unobservable inputs and valuation adjustments. If third party information, such as broker quotes or pricing services, is used to measure fair values, then the valuation team assesses the evidence obtained from the third parties to support the conclusion that these valuations meet the requirements of IFRS, including the level in the fair value hierarchy in which the valuations should be classified.

## **Factors Affecting our Revenues and Expenses**

Our revenues and expenses are principally affected by economic conditions in Mexico, changes in the price of fuel oil and natural gas, fluctuations in the prevailing interest rates and changes in foreign exchange rates.

## ***Economic Conditions in Mexico***

Because our operations, facilities and customers are located in Mexico, we are affected by general economic conditions in the country. In particular, the general performance of the Mexican economy affects demand for electricity, and inflation primarily affects our business by leading to increases in wages and other operating costs, while at the same time reducing our net income if electricity prices do not increase at the same pace as inflation.

During 2014, GDP growth increased by 2.3% as compared to 2013, primarily due to increased activities in the services sector, mainly wholesale and retail trade. During 2015, GDP growth increased by 2.6% as compared to 2014. During 2016, GDP growth increased by 2.3% as compared to 2015, primarily due to increased private consumption. During 2017, GDP growth increased by 2.1% as compared to 2016, due to an expansion in the service sector, in addition to an increase in international demand, which benefited our exports and manufacturing industry. During 2018, GDP growth increased by 2.0% as compared to 2017, primarily due to an expansion in the primary sector. Finally, during the three-month period ended March 31, 2019, GDP growth increased by 0.1% in annualized terms as compared to the same period in 2018.

The following table sets forth the year-over-year changes in Mexico of various economic indicators, including GDP, the national consumer price index, the national producer price index, merchandise export growth and interest rates, as well as a comparison of these changes to the changes in the demand for electricity in Mexico for the years indicated.

### **Selected Economic Indicators for the Years Ended December 31, 2014 through 2018**

	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Real GDP (% change)(1) .....	2.3	2.6	2.3	2.1	2.0
National consumer price index (% change) (2) .....	4.1	2.1	3.4	6.8	4.7
National producer price index without oil (% change) (1) .....	3.3	2.8	8.5	4.7	6.4
Merchandise export growth without oil (% change) (1) .....	14.4	(5.4)	4.7	8.6	6.0
Interest rates (average % based on 28-day Cetes) (2) .....	3.0	3.0	4.2	6.8	7.6
Change in Electricity Demand in Mexico (% change) (3) .....	3.1	2.9	3.7	3.4	4.3

Sources: (1) INEGI, (2) *Banco de México*, and (3) PRODESEN Chapter VI.

## ***Changes in the Rates CFE Charges Consumers***

The Electric Industry Law establishes that the rates that we charge for regulated services are to be determined by the *Comisión Reguladora de Energía* (“CRE”). In December 2017, the CRE published for the first time a schedule of consumer rates as well as the methodology used for their determination. During 2018, following some discussions with the CRE, consumer rates were revised and the average price per kWh of our electricity retail

sales during 2018 reached Ps. 1.79 per kWh, an increase of 4.1%, from Ps. 1.72 per kWh during 2017. See “Comisión Federal de Electricidad—Electricity Rates” for a more detailed description of the new system.

### ***Changes in the Prices of Electricity, Fuel Oil and Natural Gas Paid by CFE***

Our margins are substantially dependent on the prices that we charge for electricity and that we are required to pay for the fuel that powers our generation activities. For the year ended December 31, 2018, fuel oil represented 25.8% of the various primary sources on which we rely for our generation activities and natural gas represented 31.8% or, a total of 57.6%. Fuel oil and natural gas, together, represented 62% of the cost of our fuels for the three-month period ended March 31, 2019, each excluding IPPs. Although several of our generating plants can use either fuel oil or natural gas, our generation plants are generally limited to the use of a single fuel type. As a result, our ability to change fuel sources in the event of a price increase is limited.

The prices we pay for fuel oil and natural gas have been and may continue to be affected by, among other factors, the availability of fuel oil and natural gas in Mexico, our ability to enter into agreements with local companies producing or transporting fuel oil and natural gas, the prices established by the Mexican government for these products and international supply and demand. Any significant increase in fuel prices could adversely affect our results of operations and financial condition.

The electricity rates we currently charge to residential and agricultural customers are determined annually by the Mexican government. Electricity rates reflect our anticipated production and long-term marginal costs, as well as other variables including the category and location of the consumer and the time of day that the electricity is expected to be consumed.

### ***Changes in Interest Rates***

As of March 31, 2019, we had Ps. 802.7 billion (U.S.\$ 41.5 billion) in total indebtedness (including obligations in respect of PIDIREGAS and lease liabilities) of which Ps. 100.8 billion (U.S.\$ 5.2 billion) accrued interest at floating interest rates. If the interest rates applicable to our floating rate debt increase, we will incur a corresponding increase in our interest expense, which may reduce our net income. We have entered into interest rate swaps covering 6.3% of our floating rate Mexican peso-denominated debt and 36.3% of our floating rate foreign currency-denominated debt.

### ***Changes in Exchange Rates***

Our external debt denominated in foreign currencies represented 20.8% (after hedging) of our total indebtedness as of March 31, 2019. We have incurred indebtedness in several currencies, with the most substantial portion being denominated in U.S. dollars. We have entered into hedging transactions to minimize our exposure to foreign exchange risk with respect to a portion of our U.S. dollar-denominated debt, but the majority of our U.S. dollar-denominated debt is not swapped into Mexican pesos. If the Mexican peso depreciates against the U.S. dollar, we may need to apply a higher percentage of our revenues to the servicing of our U.S. dollar-denominated debt, which may reduce our net income.

### ***Labor Relations and Employee Benefits***

As of March 31, 2019, approximately 79% of our employees were members of SUTERM. Historically, our relationship with SUTERM has been cordial and respectful despite our differing interests. Every two years, we renegotiate the terms of our collective bargaining agreement with SUTERM, while wages are reviewed on an annual basis.

The current collective bargaining agreement was renegotiated in April 2018 and amended in May 2018; as a result, our employees' wages were adjusted. In addition, as of March 31, 2019, we reported a liability of Ps. 329.7 million (U.S.\$ 17.1 million) on our statement of financial position related to labor obligation costs, which represented 26% of our total liabilities as of such date.

As a result of the collective bargaining agreement signed on May 19, 2016, between SUTERM and us, our long-term employee benefit obligations were reduced by Ps. 167.5 billion (U.S.\$ 8.7 billion), and were further

reduced by another Ps. 161.0 billion (U.S.\$ 8.3 billion) by the end of 2016 as a result of the Mexican government's agreement to match the savings achieved under the collective bargaining agreement.

In 2008, as a result of our collective bargaining negotiations with SUTERM, we entered into a "defined contribution" employee benefits program, wherein we have agreed to establish individual retirement accounts for each employee that we hire after August 18, 2008. As currently set forth in the collective bargaining agreement with SUTERM, employees subject to the defined contribution plan are required to contribute 5% of their monthly salary into their individual retirement account, and we provide a corresponding contribution in the amount of 7.5% of each employee's monthly salary (although these percentages are subject to change in accordance with the terms of the collective bargaining agreement). This new program replaces our previous "defined benefits" plan, which entitled our employees to certain retirement benefits, including a pension and health insurance, which were allocated to our retired employees in amounts that corresponded, in large part, to their years of service and seniority level at CFE. The new defined contribution plan does not apply retroactively to our employees that were employed as of or prior to August 18, 2008, nor does it apply to temporary employees. Labor unrest, employee benefits obligations and labor-related lawsuits may adversely affect our business, financial condition and results of operations.

### ***Competition in Supply and Generation***

As a result of the Energy Reform Decree and the enactment of the Secondary Legislation, we expect greater involvement from third parties in the power industry, which could create greater competition. The new legislation allows high margin industrial consumers to purchase electricity from other independent producers, which could have a significant impact on our results of operations and financial performance. Increased competition in the electricity sector could adversely affect our business and financial performance.

### **Results of Operations**

#### ***Three-Month Period Ended March 31, 2019 Compared to Three-Month Period Ended March 31, 2018***

##### ***Total Revenues***

During the three-month period ended March 31, 2019, we reported total revenues of Ps. 119.4 billion (U.S.\$ 6.2 billion), which represented a 28.2% increase as compared to our total revenues of Ps. 93.1 billion (U.S.\$ 4.8 billion) for the same period in 2018. This revenue increase was mainly due to an increase in revenues from electricity sales, as described below.

In January 2016, the *Mercado Eléctrico Mayorista* (Wholesale Electricity Market) began operations and the rates set by the CRE for our transmission and distribution activities became effective. In addition, in December 2017, the CRE published for the first time a schedule of consumer rates as well as the methodology used for their determination. In December 2018, the CRE extended indefinitely the methodology used for the determination of such rates, which are reviewed on a yearly basis. During the three-month period ended March 31, 2019, we sold 47.1 TWh of electricity (excluding sales through the wholesale channel under CFE Calificados, S.A. de C.V.), which represented a 2.1% decrease in total sales volume as compared to the same period in 2018 (48.1 TWh). However, we had an increase in our customer accounts from 42.5 million as of March 31, 2018, to 43.7 million as of March 31, 2019.

Our revenues from electricity sales attributable to retail sales of electricity during the three-month period ended March 31, 2019 were Ps. 92.2 billion (U.S.\$ 4.8 billion) as compared to the Ps. 72.8 billion (U.S.\$ 3.8 billion) for the same period in 2018. This increase was due primarily to an increase of 4.1% in the average price per kWh of our retail sales, which reached Ps. 1.79 per kWh during 2018, compared to Ps. 1.72 per kWh during 2017.

Total revenues attributable to direct sales of electricity to each of our customer types during the three-month period ended March 31, 2019, as compared to the same period in 2018, is set forth in the following table.



### Revenues from Electricity Sales

Customer Type	March 31,		% Change
	2019	2018	
	(in billions of Mexican pesos)		
Residential .....	16.6	16.6	0.0
Commercial.....	11.4	9.1	25.5
Agricultural.....	1.3	1.5	(10.6)
Industrial.....	57.0	38.7	47.2
Services.....	3.8	3.6	6.3
<b>Total (1) .....</b>	<b>90.2</b>	<b>69.5</b>	<b>29.8</b>

Source: CFE.

- (1) Totals do not reflect electricity that has been (i) exported or (ii) sold domestically but for which the billing process has not been completed; however, such amounts are reflected in revenues from electricity sales set forth in our financial statements.

### Total Operating Costs and Expenses

Our costs of generating, transmitting and distributing electricity (collectively, “operating costs”) increased by 14.3% during the three-month period ended March 31, 2019 as compared to the same period in 2018. This increase in operating costs was the result of an increase in the price of fuel oil, as well as an increase in the price of energy purchased from external producers and in the Wholesale Electricity Market. Our total operating costs and expenses, which include operating costs, depreciation, administrative expenses and long-term employee benefit costs, increased by Ps. 11.0 billion (U.S.\$ 0.6 billion), as a result of the increase in our operating costs described above.

The table below presents our costs and expenses for the three-month period ended March 31, 2019 as compared to the same period in 2018:

### Total Operating Costs and Expenses

	Three-Month Period Ended March 31,		% Change
	2019	2018	
	(in billions of Mexican pesos)		
Labor costs.....	17.0	16.1	5.6
Energy and fuel supplies.....	78.2	64.5	21.2
Maintenance and services & materials .....	2.5	4.7	(46.8)
Taxes and duties .....	0.8	0.9	(11.1)
Wholesale Electricity Market	0.7	0.6	16.7
<b>Operating costs .....</b>	<b>99.2</b>	<b>86.8</b>	<b>14.3</b>
Depreciation and amortization.....	17.4	14.0	24.3
Long-term employee benefit costs.....	8.7	11.5	(24.3)
<b>Other .....</b>	<b>-</b>	<b>1.9</b>	<b>(100.0)</b>
<b>Total operating costs and expenses .....</b>	<b>125.4</b>	<b>114.3</b>	<b>9.7</b>

Source: CFE.

### Operating (Loss) Income

We had an operating loss of Ps. 5.9 billion (U.S.\$ 0.3 billion) for the three-month period ended March 31, 2019 as compared to an operating loss of Ps. 21.2 billion (U.S.\$ 1.1 billion) during the same period in 2018. This reduction was mainly due to an increase in electricity sales, other income, income from the sale of fuel to third parties and subsidy income.

The following table sets forth our non-operating revenues, costs and expenses for the three-month period ended March 31, 2019 as compared to the same period in 2018:

### Non-Operating Revenues, Costs and Expenses

	Three-Month Period Ended March 31,		
	2019	2018	% Change
	(in billions of Mexican pesos)		
<b>Financing Cost:</b>			
Interest income (expense), net.....	(13.9)	(10.7)	29.9
Foreign exchange gain (loss), net.....	10.3	22.0	(53.6)
<b>Financing Cost, net .....</b>	<b>(3.6)</b>	<b>11.3</b>	<b>(132.7)</b>

Source: CFE.

#### *Financing Cost*

Financing cost reflects interest income (including gains and losses on certain derivative instruments), interest expense and foreign exchange gain or loss. We had a financial loss for the three-month period ended March 31, 2019 of Ps. 3.6 billion (U.S.\$ 0.2 billion), as compared to a financial gain for the same period in 2018 of Ps. 11.3 billion (U.S.\$ 0.6 billion). This decrease in financial gain was mainly due to an increase in financial expenses and interest, and a decrease in foreign exchange gain due to an increase in the exchange rates during the first quarter of 2019 as compared to foreign exchange fluctuations during the first quarter of 2018.

#### *Income Tax Regime*

We are obligated to pay income taxes based on our income, as are all corporate entities in Mexico. Our taxable income represents the difference between our taxable revenues, including profits, capital gains and passive income, and our expenses. We made monthly estimated income tax payments that amounted to Ps. 4.4 billion (U.S.\$ 0.2 billion) during the three-month period ended March 31, 2019, as compared to monthly estimated income tax payments that amounted to Ps. 1.5 billion (U.S.\$ 0.1 billion) during the same period in 2018.

#### *Net Income (Loss)*

Net income decreased from a net loss of Ps. 11.4 billion (U.S.\$ 0.6 billion) during the three-month period ended March 31, 2018 to a net loss of Ps. 13.9 billion (U.S.\$ 0.7 billion) for the same period in 2019, mainly due to an increase in financial expenses and an increase in monthly estimated income tax payments, as described above.

### *Year Ended December 31, 2018 Compared to Year Ended December 31, 2017*

#### *Total Revenues*

During 2018, we reported total revenues of Ps. 547.3 billion (U.S.\$ 28.3 billion), which represented an 11% increase as compared to our revenues of Ps. 489.6 billion (U.S.\$ 25.3 billion) for 2017. This revenue increase was mainly due to higher income from energy sales, other income and earnings, subsidy income and income from the sale of fuel to third parties.

The average price per kWh of our electricity retail sales increased by 4.1%, from Ps. 1.72 per kWh in 2017 to Ps.1.79 per kWh in 2018, mainly due to a rate adjustment starting in the second quarter of 2018. During 2018, we sold 213,514 GWh of electricity, which represented a 0.8% decrease in total sales volume as compared to 2017 (215,310 GWh).

Total revenues attributable to direct sales of electricity to each of our customer types during 2018, as compared to 2017, is set forth in the following table:

### Revenues from Electricity Sales

	Year Ended December 31,		% Change
	2018	2017	
	(in billions of Mexican pesos)		
<b>Customer Type:</b>			
Residential .....	64.3	63.0	(2.1)
Commercial.....	49.3	50.6	(2.6)
Agricultural .....	6.3	6.9	(8.7)
Industrial .....	242.0	205.8	17.6
Services.....	14.7	22.4	(34.3)
<b>Total (1).....</b>	<b>376.6</b>	<b>348.7</b>	<b>8.0</b>

Source: CFE.

- (1) Totals do not reflect electricity that has been (i) exported or (ii) sold domestically but for which the billing process has not been completed; however, such amounts are reflected in revenues from electricity sales set forth in our financial statements.

### Total Operating Costs and Expenses

Our operating costs increased by 28.1% in 2018 as compared to 2017, mainly due to an increase in the price of fuel oil, as well as an increase in the price of energy purchased from external producers and in the Wholesale Electricity Market. Our total operating costs and expenses, which include operating costs, depreciation, other expenses and long-term employee benefit costs increased by 16.4% in 2018 as compared to 2017.

The table below presents our costs and expenses for 2018 as compared to 2017:

	Year Ended December 31,		% Change
	2018	2017	
	(in billions of Mexican pesos)		
Labor costs.....	63.2	57.9	9.1
Fuel .....	335.4	251.9	33.1
Maintenance and services & materials .....	23.3	19.6	18.9
Taxes and duties .....	3.8	2.6	46.2
Wholesale Electricity Market .....	3.0	2.7	11.1
<b>Operating costs .....</b>	<b>428.7</b>	<b>334.7</b>	<b>28.1</b>
Depreciation and impairment .....	57.5	59.4	(3.2)
Long-term employee benefit costs.....	20.5	47.9	(57.2)
Other .....	7.7	(0.2)	3,950
<b>Total operating costs and expenses .....</b>	<b>514.4</b>	<b>441.8</b>	<b>16.4</b>

Source: CFE.

### Operating (Loss) Income

Our operating income decreased from Ps. 47.8 billion (U.S.\$ 2.5 billion) in 2017 to Ps. 32.9 billion (U.S.\$ 1.7 billion) in 2018, mainly due to the increase in operating costs described above.

The following table sets forth our non-operating revenues, costs and expenses for 2018 as compared to 2017:

**Non-Operating Revenues, Costs and Expenses**

	Year Ended December 31,		% Change
	2018	2017	
	(in billions of Mexican pesos)		
<b>Financing Cost:</b>			
Interest income (expense), net .....	(38.9)	(23.5)	65.5
Foreign exchange gain (loss), net .....	1.6	10.6	(84.9)
<b>Financing Cost, net .....</b>	<b>(37.3)</b>	<b>(13.0)</b>	<b>189.1</b>

Source: CFE.

*Financing Cost*

Financing cost reflects interest income or expense (including gains and losses on certain derivative instruments) and foreign exchange gain or loss. Our financing cost increased from a cost of Ps. 13.0 billion (U.S.\$ 0.7 billion) in 2017 to a cost of Ps. 37.3 billion (U.S.\$ 1.9 billion) in 2018. This increase was primarily due to an increase in financial expenses and interest, and a decrease in foreign exchange gain due to an increase in the exchange rates during 2018 when compared to foreign exchange fluctuations during 2017.

*Income Tax Regime*

We recognized a Ps. 52.4 billion (U.S.\$ 2.7 billion) income tax benefit in 2018, as compared to an income tax benefit of Ps. 73.3 billion (U.S.\$ 3.8 billion) in 2017. This decrease was the result of a reduction in our deferred income tax in 2018.

*Net Income (Loss)*

Net income decreased from Ps. 108.2 billion (U.S.\$ 5.6 billion) in 2017 to Ps. 47.9 billion (U.S.\$ 2.5 billion) in 2018. This decrease in net income was primarily due to the increase in operating costs and financing costs described above, as well as a reduction in the income tax benefit described above.

***Year Ended December 31, 2017 Compared to Year Ended December 31, 2016***

*Total Revenues*

During 2017, we reported total revenues of Ps. 489.6 billion (U.S.\$ 25.3 billion), which represented a 40.3% increase as compared to our total revenues of Ps. 349.0 billion (U.S.\$ 18.1 billion) for 2016.

This revenue increase was mainly due to the increase in electricity sales during 2017 described below, coupled with a Ps. 65.9 billion (U.S.\$ 3.4 billion) subsidy paid by the Mexican government in 2017 and an additional Ps. 22.0 billion (U.S.\$ 1.1 billion) in revenue from sales of fuel. We also reported other income of Ps 31.3 billion (U.S.\$ 1.6 billion).

The average price per kWh of our electricity retail sales increased by 19%, from Ps. 1.399 per kWh in 2016 to Ps. 1.665 per kWh for the same period in 2017. During 2017, we sold 215,310 GWh of electricity locally, which represented a 1.3% decrease in total sales volume as compared to 2016 (218,072 GWh). Additionally, we exported 780 GWh, mainly to Central America.

Total revenues attributable to direct sales of electricity to each of our customer types during 2017, as compared to 2016, is set forth in the following table:

### Revenues from Electricity Sales

	Year Ended December 31,		% Change
	2017	2016	
	(in billions of Mexican pesos)		
<b>Customer Type:</b>			
Residential .....	63.0	63.3	(0.5)
Commercial .....	50.6	41.7	21.3
Agricultural .....	6.9	6.1	13.1
Industrial .....	205.8	161.9	27.1
Services .....	22.4	22.2	0.9
<b>Total (1)</b> .....	<b>348.7</b>	<b>295.2</b>	<b>18.1</b>

Source: CFE.

(1) Totals do not reflect electricity that has been (i) exported or (ii) sold domestically but for which the billing process has not been completed; however, such amounts are reflected in revenues from electricity sales set forth in our financial statements.

### Total Operating Costs and Expenses

Our operating costs increased by 34.3% in 2017 as compared to 2016, mainly due to an increase in the average cost of fuel, oil and natural gas. Our total operating costs and expenses, which include operating costs, depreciation, other expenses and long-term employee benefit costs increased by Ps. 252.9 billion (U.S.\$ 13.1 billion) in 2017 as compared to 2016. This increase was mainly due to the recognition of employee benefit costs in 2017.

The table below presents our costs and expenses for 2017 as compared to 2016:

### Total Operating Costs and Expenses

	Year Ended December 31,		% Change
	2017	2016	
	(in billions of Mexican pesos)		
Labor costs .....	57.9	55.3	4.7
Fuel .....	251.9	158.3	59.1
Maintenance and services & materials .....	19.6	29.5	(33.6)
Taxes and duties .....	2.6	2.6	0.0
Wholesale Electricity Market .....	2.7	3.5	(22.9)
<b>Operating costs</b> .....	<b>334.7</b>	<b>249.2</b>	<b>34.3</b>
Depreciation and impairment .....	59.4	53.4	11.2
Long-term employee benefit costs .....	47.9	(111.8)	142.8
Other .....	(0.2)	(1.9)	89.5
<b>Total operating costs and expenses</b> .....	<b>441.8</b>	<b>188.9</b>	<b>133.9</b>

Source: CFE.

### Operating (Loss) Income

Our operating income decreased from an operating income of Ps. 160.0 billion (U.S.\$ 8.3 million) in 2016 to an operating income of Ps. 47.8 billion (U.S.\$ 2.5 billion) in 2017, mainly due to the recognition in 2016 of the assumption by the Mexican government of a portion of our liabilities under employee benefit plans as a result of the renegotiation of our collective bargaining agreement in 2016.

The following table sets forth our non-operating revenues, costs and expenses for 2017 as compared to 2016:

### Non-Operating Revenues, Costs and Expenses

	Year Ended December 31,		% Change
	2017	2016	
	(in billions of Mexican pesos)		
<b>Financing Cost:</b>			
Interest income (expense), net .....	(23.5)	(33.1)	29.0
Foreign exchange gain (loss), net .....	10.6	(32.7)	132.4
<b>Financing Cost, net .....</b>	<b>(13.0)</b>	<b>(65.8)</b>	<b>80.4</b>

Source: CFE.

#### Financing Cost

Financing cost reflects interest income or expense (including gains and losses on certain derivative instruments) and foreign exchange gain or loss. Our financing cost decreased from a cost of Ps. 65.8 billion (U.S.\$ 3.4 billion) in 2016 to a cost of Ps. 12.9 billion (U.S.\$ 0.7 billion) in 2017. This decrease in financing cost was mainly due to an increase in foreign exchange gain due a decrease in the exchange rates during 2017 when compared to foreign exchange fluctuations during 2016.

#### Income Tax Regime

We recognized a Ps. 73.3 billion (U.S.\$ 3.8 billion) income tax benefit in 2017 as a result of a recognition of Ps. 76.7 billion (U.S.\$ 4.0 billion) in deferred income taxes, which were particularly offset by current income taxes during the same period. We did not recognize income tax benefits or expenses in 2016.

#### Net Income (Loss)

Net income increased from a net income of Ps. 94.2 billion (U.S.\$ 4.9 billion) in 2016 to a net income of Ps. 108.2 billion (U.S.\$ 5.6 billion) in 2017. This increase in net income was primarily due to the recognition of deferred taxes described above.

#### Liquidity and Capital Resources

We have experienced, and expect to continue to experience, substantial liquidity and capital resource requirements, principally in order to finance the construction and maintenance of our electrical generation facilities, transmission and distribution substations and power-line networks and to service our outstanding debt. In the past, we have generally met our liquidity and capital resource requirements primarily from cash flow generated by our operating activities and borrowings. For the three-month period ended March 31, 2019, our net cash flow used in operating activities was Ps. 2.5 billion (U.S.\$ 0.1 billion). Our net cash flow used in financing activities during the period was Ps. 18.9 billion (U.S.\$ 1.0 billion), which left us, after cash flows from financing activities, with cash flows from investing activities of Ps. 12.0 billion (U.S.\$ 0.6 billion) at March 31, 2019. For the year ended December 31, 2018, our net cash flow provided by operating activities was Ps. 53.7 billion (U.S.\$ 2.8 billion). Our net cash flow provided by financing activities during 2018 was Ps. 3.6 billion (U.S.\$ 0.2 billion), leaving us cash and cash equivalents of Ps 78.5 billion (U.S.\$ 4.1 billion) at December 31, 2018.

As of March 31, 2019, we had working capital of Ps. 16.1 billion (U.S.\$ 0.8 billion) and as of December 31, 2018, we had working capital of Ps. 28.1 billion (U.S.\$ 1.5 billion). The decrease in our working capital was primarily due to the adoption of IFRS 16.

The following table sets forth the maturity composition of our short- and long-term debt as of March 31, 2019, excluding IPPs and interest.

	Payments Due by December 31 of Each Year (as of March 31, 2019)				
	(in billions of Mexican pesos)				
	Total	2019	2020	2021	2022 and beyond
Documented debt.....	212.4	12.0	21.9	24.7	153.8
PIDIREGAS .....	126.8	12.6	13.2	12.2	88.7
<b>Total debt .....</b>	<b>339.1</b>	<b>24.7</b>	<b>35.1</b>	<b>36.9</b>	<b>242.5</b>

Source: CFE.

We have a total amount of Ps. 24.7 billion (U.S.\$ 1.3 billion) in debt that will come due in 2019, some of which may be refinanced with the proceeds of newly issued debt.

The major categories of our indebtedness are as follows:

Total Indebtedness					
	As of March 31,		As of December 31		
	2019		2018		2017
	(in billions of Mexican pesos)				
Domestic debt					
Bank loans .....	Ps.	7.5	Ps.	7.5	Ps. 7.6
Bonds ( <i>certificados bursátiles</i> ) .....		91.1		91.0	90.1
Total domestic debt .....		98.6		98.5	97.7
External debt					
Bank loans .....	Ps.	13.2	Ps.	2.3	Ps. 2.4
Export credit agency loans .....		1.6		1.8	3.6
Bonds.....		98.9		101.7	103.0
Total external debt .....		113.7		105.8	109.0
PIDIREGAS obligations					
Domestic .....	Ps.	55.0	Ps.	55.8	Ps. 65.3
External .....		71.8		73.8	60.4
Total debt (1).....	Ps.	339.1	Ps.	333.9	Ps. 332.4

Source: CFE.

(1) Refers to total registered public debt, which does not include obligations for capital leases associated with IPPs.

For a breakdown of our indebtedness by currency, see Notes 11 and 12 to our financial statements.

After giving effect to our hedging derivatives, as of December 31, 2018, 76.2% of our total indebtedness was denominated in Mexican pesos and 23.8% was denominated in other currencies (primarily U.S. dollars). As of December 31, 2018, 24.2% of our debt obligations bore interest at floating rates, after hedging. We have not pledged any assets as collateral for our debt.

On July 12, 2018, the Board of Directors approved a *Programa Global de Financiamiento* (Global Program for Financing) for the year ended December 31, 2019 that contemplated an increase of our net indebtedness during that year in an amount equal to approximately Ps. 19.8 billion, comprised of the issuance and sale of Mexican peso-denominated notes, including the issuance of Mexican *certificados bursátiles*, and the issuance of U.S. dollar-denominated notes.

As of March 31, 2019, 45.3% of our total indebtedness was denominated in Mexican pesos and 54.7% was denominated in other currencies (primarily U.S. dollars). After giving effect to our hedging derivatives, as of March 31, 2019, 79.2% of our total indebtedness was denominated in Mexican pesos and 20.8% was denominated in other currencies (primarily U.S. dollars).

### Conditioned Investment Liabilities (IPPs)

In addition to our indebtedness discussed above, as of March 31, 2019, we had 26 IPP contracts with lease characteristics of power generating plants in accordance with IFRIC 4 “Determination if an agreement contains a lease” and IFRIC 12 “Service Concession Agreements.” In turn, those leases qualify as financial leases in accordance with IAS 17, “Leases,” which requires that we capitalize all leases for which we are the sole beneficiary of the leased asset. The annual interest rate on those lease agreements is 11.19% on average. We recorded the following as conditioned investment liabilities in respect of these 26 IPP contracts:

<b>Conditioned Investment Liabilities (IPPs)</b>					
	<b>As of March 31,</b>		<b>As of December 31,</b>		
	<b>2019</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	
	<b>(in millions of U.S. dollars)</b>		<b>(in millions of Mexican pesos)</b>		
Short-term.....	U.S.\$ 452	Ps. 8,740	Ps. 8,577	Ps. 8,122	
Long-term.....	5,385	104,035	107,430	114,104	
<b>Total.....</b>	<b>U.S.\$ 5,837</b>	<b>Ps. 112,775</b>	<b>Ps. 116,007</b>	<b>Ps. 122,226</b>	

In addition to the 26 contracts with IPPs, we had five other contracts with wind-driven IPPs in operation. Unlike the other 26 IPP contracts, these are not considered financial leases as CFE pays only for wind power actually generated and delivered. In addition, we have two service contracts with third-party suppliers of natural gas and coal that are not considered financial leases under IFRS.

### Capital Expenditures and Investment

Since 2006, CFE has gradually increased in its installed capacity. We estimate that with our current installed capacity and the new projects that are currently under construction, we can satisfy the demand for electricity in Mexico for the next four years. As of March 31, 2019, our installed capacity was 56,175 MW, an increase of 910 MW from the installed capacity as of December 31, 2018, due to the addition of the Escobedo power plant, a new IPP.



The following table illustrates the growth in our installed capacity since 2006 as well as the change in our generation of electricity:

	Installed Capacity As of December 31,	Generation As of December 31,
	(MW)	(TWh)
2006	47,857	221.9
2007	49,854	228.5
2008	49,931	231.4
2009	50,384	230.6
2010	51,611	241.5
2011	51,177	254.7
2012	51,780	257.5
2013	52,906	254.6
2014	54,577	250.0
2015	54,952	253.1
2016	55,564	254.4
2017	55,891	249.6
2018	55,265	249.0
2019*	56,175	55.0

\* As of March 31, 2019 and for the three-month period then ended, respectively.

Source: CFE.

Our total capital expenditures for 2019, approved in the Federal Budget for 2019 amount to up to Ps. 61.0 billion (U.S.\$ 3.2 billion) in investments and include allocations for the following items: up to Ps. 20.9 billion (U.S.\$ 1.1 billion) for the improvement and expansion of our electricity generation capacity; up to Ps. 7.2 billion (U.S.\$ 0.4 billion) for the improvement and expansion of our transmission network, and a up to Ps. 2.9 billion (U.S.\$ 0.1 billion) for the improvement and expansion of our distribution network and commercialization.

### ***Long-Term Productive Infrastructure Projects (PIDIREGAS)***

An important component of our capital expenditures are PIDIREGAS. Because of federal budgetary constraints, in 1996, the Mexican government sought private sector participation in the building and financing of PIDIREGAS in the electricity sector. The Mexican government approved the designation of certain infrastructure projects as PIDIREGAS. This designation means that these projects are treated as off-balance sheet items for annual Mexican government budgetary purposes, until delivery of the completed project to us or until our payment obligations begin under the contract, and are excluded from across-the-board Mexican government budget reductions.

The Mexican *Ley Federal de Deuda Pública* (Federal Law of Public Debt) and the *Ley Federal de Presupuesto y Responsabilidad Hacendaria* (Federal Law of Budget and Fiscal Accountability) define the PIDIREGAS legal framework. Article 18 of the Federal Law of Public Debt outlines the treatment of financial obligations under PIDIREGAS, defining as a direct liability the amounts payable under a financing during the current and immediately following fiscal years, and the remaining amounts as a contingent liability until its full payment. Article 32 of the Federal Law of Budget and Fiscal Accountability grants PIDIREGAS preferential and priority treatment for inclusion in the Mexican government's budget in future years, until the full payment of a project's costs. The distinction between PIDIREGAS and non-PIDIREGAS expenditures on the budget of the Mexican government (which includes the expenditures of the various decentralized public entities) is important in that, due to the private financing of PIDIREGAS projects during the planning and construction stages, they are immune from across-the-board budget cuts by the Mexican Congress, while non-PIDIREGAS investments are not.

PIDIREGAS has three stages:

- The Mexican government identifies a project as a PIDIREGAS and authorizes expenditures related to their development by the private sector;

- Private sector companies, in cooperation with us, build and deliver the project to us; and
- We, with the Mexican government's authorization, pay all amounts owing to contractors and make final payments to receive delivery of the completed project, and then record as a liability the full principal amount of all indebtedness incurred to finance the project.

Compliance with the Mexican government's financial reporting standards and the Guidelines for the Accounting Treatment of Investments in Long-Term Productive Infrastructure Projects (Technical Release NIF-09-B, the "Technical Release"), which outlines the accounting and budgetary treatment applicable to PIDIREGAS, is mandatory during the construction period and after delivery of the PIDIREGAS. In accordance with IFRS, all of the accounts, expenditures and liabilities related to PIDIREGAS are incorporated into our financial statements.

There are currently two types of PIDIREGAS projects: conditioned investment (IPPs) and direct investment (OPFs). These two primary private investment programs address the two central needs of CFE: generation and transmission.

*Productores Externos de Energía (Independent Power Producer Program).* The IPP program allows private companies to bid to operate a generation plant in Mexico and sell the generated power to CFE. Under the program, CFE enters into a long-term agreement (25 years) under which the private producer is responsible for the construction, operation and maintenance of the generation facility during the life of the contract and CFE is obligated to purchase the electricity produced by that facility. The IPP program helps CFE meet generation demands without the costs of construction and maintenance. The IPP program also allows CFE to obtain competitive prices for the purchased energy through an international bidding process. Pursuant to IFRS, 26 of our contracts with IPPs are reported as financial leases in our financial statements.

*Obra Pública Financiada (Financed Public Works Program).* The OPF program addresses our infrastructure needs with respect to the transmission and distribution of electrical energy and for generation projects that cannot be structured as IPPs. CFE enters into relatively short-term agreements (1-2 years) under which a private company is responsible for the construction of a project, but not for its ongoing operation and maintenance. International bidders place their bids to receive a total payment upon the completion of the project involved. The main advantage of this program is that we avoid risks related to the development of the project that may arise during the construction stage, such as risks relating to cost escalation and failure of the completed project to meet the technical specifications. As with IPPs, we are able to secure competitive prices for the OPFs as a result of an international bidding process.

The table below sets forth a comparison between IPPs and OPFs.

<b>IPP Program</b>	<b>OPF Program</b>
<ul style="list-style-type: none"> <li>• Used for generation projects, excluding hydroelectric plants.</li> <li>• Projects are awarded through international bidding process to bidder who offers lowest kWh price for the sale of electricity to CFE.</li> <li>• Winning bidder becomes fully responsible for the financing and construction of the plant.</li> <li>• CFE and the bidder sign an agreement for commitment of electrical power generation and purchase of associated electrical power by CFE for a 25-year term commencing upon commercial operation of the plant.</li> <li>• Bidder remains the sole owner of the project assets and plant operator.</li> </ul>	<ul style="list-style-type: none"> <li>• Generally used for transmission lines and substations.</li> <li>• Projects are awarded through international public bidding process to bidder that offers the lowest project development price.</li> <li>• Winning bidder becomes fully responsible for the construction of the project under a “turnkey” contract and the financing of the project during the construction stage.</li> <li>• At the end of construction and upon acceptance of the work by CFE, the ownership of the project is transferred to CFE and CFE pays the bidder the full contract price.</li> </ul>

Seven generation projects are currently under construction, and two generation plants are being converted and modernized. Together, they represent an expected additional capacity of 4,879 MW.

#### ***Recent developments with respect to PIDIREGAS***

We estimate that by the third quarter of 2019, we will complete the construction of “CC Noroeste,” a combined cycle power generation plant located in the State of Sinaloa that is expected to have an installed capacity of 887 MW. Additionally, we estimate that, by the fourth quarter of 2019, we will complete the construction of “CC Norte III,” a combined-cycle power generation plant located in the State of Chihuahua that is expected to have an installed capacity of 907 MW. Furthermore, we estimate that by the first quarter of 2020, we will complete the construction of “Topolobampo III,” a combined-cycle power generation plant located in the State of Sinaloa that is expected to have an installed capacity of 766 MW. CC Noroeste, CC Norte III and Topolobampo III are being built under PIDIREGAS as IPPs and, therefore, we are not incurring capital expenditures in respect of their construction.

#### **Derivatives and Hedging**

##### ***Foreign Exchange Rate Risk***

A substantial part of our indebtedness (20.8% (after hedging) as of March 31, 2019) is denominated in foreign currencies, mostly U.S. dollars, and we have very limited assets and revenues denominated in U.S. dollars. As a result, we are exposed to the risk of depreciation of the Mexican peso. As of December 31, 2018, our U.S. dollar-denominated indebtedness, including our U.S. dollar-denominated obligations in respect of our PIDIREGAS debt, amounted to Ps.305.9 billion (U.S.\$ 15.8 billion).

To offset the foreign exchange rate risk, we enter into derivative financial instruments with large financial institutions to minimize the impact of fluctuations in exchange rates on our indebtedness. These derivative instruments typically consist of cross-currency swaps in which we pay Mexican peso amounts based on Mexican peso interest rates and receive U.S. dollar amounts based on U.S. dollar interest rates. As of March 31, 2019, we had outstanding cross-currency swaps covering foreign currency liabilities of Ps. 115 billion (U.S.\$ 6.0 billion), including our U.S. dollar-denominated PIDIREGAS debt.

Our Japanese yen-denominated debt, as of December 31, 2018, amounted to Ps. 388.0 million (U.S.\$ 20.1 million) or 0.08% of our total indebtedness. In 2012, we also entered into derivative financial instruments to offset

the foreign exchange rate risk of our ¥ 32 billion private placement. This derivative financial instrument consists of a foreign exchange forward string purchase contract under which we have agreed to purchase Japanese yen at a fixed U.S. dollar exchange rate during the established transaction term. We have also purchased a call option for the purchase of Japanese yen at the end of this transaction term. The mark-to-market value of this transaction is an asset of Ps. 0.02 million (U.S.\$ 0.001 million) as of December 31, 2018. For further discussion relating to our derivative and hedging transactions, see Note 10 to our financial statements.

### ***Interest Rate Risk***

A substantial part of our indebtedness bears interest at variable rates (24.3% as of March 31, 2019, after hedging). As a result, we are exposed to risks from changing interest rates.

We enter into derivative financial instruments with large financial institutions to minimize the impact of fluctuations in variable interest rates on our indebtedness. The types of derivative instruments we have typically entered into in recent periods include interest-rate swaps (in which we generally pay amounts based on fixed interest rates and receive amounts based on variable interest rates). The general effect of these swaps is to replace an obligation to pay variable-rate interest on our debt with an obligation to pay fixed-rate interest.

As of March 31, 2019, the aggregate notional amount of our Mexican peso-denominated variable rate to fixed rate interest-rate swaps was Ps. 3.8 billion (U.S.\$ 0.2 billion).

The fair value of our derivative instruments for hedging purposes was an asset of Ps. 13.0 billion (U.S.\$ 0.7 billion) as of March 31, 2019.

Our use of derivatives varies from time to time, depending on our judgment about our level of exposure to exchange rate and interest rate risks, and the costs of derivative instruments. The aggregate notional amount of our interest-rate swaps may be greater or less than the principal amount of our debt, and we may discontinue hedging at any time. We review and change our derivatives positions regularly, and our derivatives policies change from time to time. Under IFRS, we account for our interest rate swaps on a fair value basis. See Note 10 to our financial statements.

### **Off-Balance Sheet Arrangements**

We do not have any off-balance sheet arrangements that are reasonably likely to have a material effect on our financial condition, operating results, liquidity or capital resources.

## COMISIÓN FEDERAL DE ELECTRICIDAD

### Overview

We are the national electric power company of Mexico and, following the energy reform described below, we remain 100% owned by the Mexican government. We generate approximately 79.4% of the electricity consumed in Mexico, which includes electricity generated by IPPs (27.5%), and we are the only company responsible for the transmission and distribution of electricity for public service purposes throughout Mexico. The remaining 20.6% is generated by PEMEX, the Mexican state-owned oil and gas company, and by private producers. As of March 31, 2019, we provided electricity to 43.7 million customer accounts, which we estimate represented 98.7% of the Mexican population.

We were created in 1937 by presidential decree, and then converted by the Mexican Congress in 1949 into a decentralized public entity of the Mexican government. Pursuant to the CFE Law, in accordance with the Energy Reform Decree and Secondary Legislation (each as defined below), we were converted into a productive state enterprise in October 2014, subject to a new legal regime and with a corporate purpose of creating economic value. In addition, pursuant to the CFE Law, we have undertaken a vertical and horizontal separation of each of our key electric sector activities — electricity generation, transmission, distribution and commercialization— by the creation of nine subsidiary productive enterprises and four affiliates. See “Comisión Federal de Electricidad—General Regulatory Framework—Organizational Structure of CFE.”

On December 20, 2013, amendments to Articles 25, 27 and 28 of the Mexican Constitution were published as the Energy Reform Decree, in the Official Gazette of the Federation, which took effect on December 21, 2013. The Energy Reform Decree outlines the general framework for the Secondary Legislation. On August 11, 2014, the Secondary Legislation was published in the Official Gazette of the Federation. The Secondary Legislation includes nine laws including, among others, the new CFE Law and the Electric Industry Law. On October 31, 2014, the President of Mexico published in the Official Gazette of the Federation 26 regulations and amendments in respect of the Secondary Legislation including, among others, the Regulations to the CFE Law and the Regulations to the Electric Industry Law. See “Comisión Federal de Electricidad—General Regulatory Framework” for more details regarding the laws and regulations applicable to us.

We have undertaken several steps aimed at consolidating our new organizational and operational structure, including the following measures:

- we entered into a new collective bargaining agreement in May 2016, which was then amended in May 2018, and has led to a reduction in our long-term employee benefit obligations and related costs;
- we are in the process of examining new financing mechanisms including public-private partnerships;
- we created a Fibra E through our affiliate CFECapital, S. de R.L. de C.V. Fibra E aims to attract new private investors to finance infrastructure investments in energy generation, transmission and distribution projects and has the benefit of (i) increasing our equity, (ii) not being considered as part of our public indebtedness and (iii) allowing us to retain ownership and control over strategic assets. In February 2018, our Fibra E conducted an offering of CBFES to finance transmission projects. In the future, our Fibra E may offer to sell additional CBFES to finance generation, transmission and distribution projects;
- we reduced our generation costs by converting certain plants that use fuel oil to natural gas; and
- we reduced our technical and non-technical losses in the transmission and distribution process from 11.6% in 2017 to 11.2% in 2018.

See “Comisión Federal de Electricidad—General Regulatory Framework—Mexican Energy Reform.”

During 2018, we reported net income of Ps.47.9 billion (U.S.\$ 2.5 billion), as compared to a net income of Ps. 108.2 billion (U.S.\$ 5.6 billion) in 2017, due to an increase in the cost of fuel. In 2018, we received a Ps. 81.4 billion (U.S.\$4.2 billion) subsidy from the Mexican government related to the subvention of electricity rates that we charge certain customers. The Federal Budget for 2019 contemplates a subsidy transfer from the Mexican

government to us of approximately Ps. 52.1 billion (U.S.\$ 2.7 billion) during 2019. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations.” As of March 31, 2019, we had received a subsidy transfer of Ps. 10.4 billion (U.S.\$ 0.5 billion) from the Mexican government.

In January 2016, the Wholesale Electricity Market began operations and the rates set by the CRE for our transmission and distribution activities became effective. In addition, in December 2017, the CRE published for the first time a schedule of consumer rates as well as the methodology used for their determination. In December 2018, the CRE extended indefinitely the methodology used for the determination of such rates, which are reviewed on a yearly basis. Generally, consumer rates are calculated based on the regulated rates applicable to transmission and distribution activities, certain electricity costs and the subsidy from the Mexican government. The energy and capacity costs in consumer final rates are calculated month by month according to market signals.

Beginning in 2016, the CRE has received various registration applications from private companies that seek to convert into qualified suppliers. Qualified suppliers duly registered with the CRE are permitted to compete with us by supplying electricity to qualified users at unregulated rates and to represent private electricity producers in the Wholesale Electricity Market. As of March 31, 2019, there were 28 registered qualified suppliers.

### ***Our Business***

Our business is divided into four main areas: generation, transmission, distribution and commercialization. Pursuant to the 2019-2033 PRODESEN prepared by the *Secretaría de Energía* (Ministry of Energy) of the Mexican government, our generation market share as of the date of this offering memorandum is estimated at 79.4%, including IPPs. We have a 100% market share of the transmission and distribution markets.

We continually invest in electricity generation, transmission and distribution infrastructure in order to address Mexico’s growing electricity demand. In 2018, the last year of former president Peña Nieto’s administration, we paid a net amount of Ps. 46.1 billion (U.S.\$ 2.4 billion) for the acquisition of plants, facilities and equipment; being its last year in office, the Mexican government instructed us to reduce expenses. The Board of Directors defines our five-year business plan, determines our annual budget and approves investment priorities and projects. Our financial condition target, expenditure ceiling and net debt ceiling are updated annually and require the approval of the Mexican Congress. Our expected investment for 2019, approved in the Mexican Federal Budget for 2019 is approximately Ps. 31.0 billion (U.S.\$ 1.6 billion), of which we had paid a net amount of Ps. 12.0 billion (U.S.\$ 0.6 billion) for the acquisition of plants, facilities and equipment as of March 31, 2019.

Our service area is divided into 16 regions and extends to some of the most remote regions of Mexico.



Source: CFE.

The majority of our electricity generation activities (including nuclear, coal-fired and geothermal) are undertaken through thermal and hydroelectric power plants. A small percentage of our electricity generation comes from other sources, including wind-driven and photovoltaic power plants. Since 1992, IPPs have been permitted under Mexican law to build and operate electricity generation plants in Mexico and sell the generated power exclusively to us.

As of March 31, 2019, our total debt, including obligations in respect of our PIDIREGAS and lease liabilities, was Ps. 802.7 billion (U.S.\$ 41.5 billion) and our total equity was Ps. 661.8 billion (U.S.\$ 34.3 billion). Our total assets were Ps.1.9 trillion (U.S.\$ 99.6 billion) as of March 31, 2019.

Our total revenues and net loss for the three-month period ended March 31, 2019 were Ps. 119.5 billion (U.S.\$ 6.2 billion) and Ps. 13.9 billion (U.S.\$ 0.7 billion), respectively, as compared to Ps. 93.1 billion of total revenues and Ps. 11.4 billion of net loss in the comparable period of 2018.

Our total revenues and net income for 2018 were Ps. 547.3 billion (U.S.\$ 28.3 billion) and Ps. 47.9 billion (U.S.\$ 2.5 billion), respectively. Our total revenues and net income for 2017 were Ps. 489.6 billion (U.S.\$ 25.3 billion) and Ps. 108.2 billion (U.S.\$ 5.6 billion), respectively. Our total revenues and net income for 2016 were Ps. 349.0 billion (U.S.\$ 18.1 billion) and Ps. 94.2 billion (U.S.\$ 4.9 billion), respectively.

## **Business Strategy**

As a result of Mr. Andrés Manuel López Obrador's presidential win and Mr. Manuel Bartlett's designation as new General Director of CFE, we are in the process of designing and implementing a new strategy that better reflects the current administration's principles, values and objectives. In order to implement this strategy, we are finalizing our strategic program, which we expect to present to the Board of Directors by the end of July 2019.

The new strategic program defines our new mission, vision and objectives.

- *Mission:* to provide the energy inputs and goods required for Mexico's productive and social development in an efficient, sustainable, affordable and inclusive manner, through a policy that prioritizes national energy security and sovereignty.
- *Vision:* to strengthen our position as a leading electric power company in Mexico and Latin America under criteria of profitability, competitiveness and sustainability, thanks to skilled and qualified human capital, advanced technology, efficient organization and environmentally responsible practices, always committed to customer satisfaction and to Mexico's economic and social development.

To achieve our new mission and vision, we have defined six primary objectives:

- Satisfy the electricity demand required by Mexico's economic and social development under quality, reliability and efficiency conditions that prioritize national security and sovereignty.
- Contribute to the achievement of the sustainable development goals committed to by the Mexican government in international treaties, agreements and conventions by promoting the use of renewable energy sources and environmentally responsible practices.
- Strengthen our human, technical and financial capabilities to increase its productivity and ensure the company's long-term success and leadership role both nationally and internationally.
- Improve our relationship with stakeholders, including social and indigenous communities, during the development of energy and infrastructure projects, as a way to bolster inclusive development processes.
- Increase the quality of all processes related to the public electricity service in order to improve customer satisfaction and our institutional image on a nationwide basis.
- Promote the development of economic activities linked to electricity infrastructures in order to access new sectors and businesses, with the prospect of increasing and diversifying our revenue sources and optimally diversifying the company's risks.

Our business strategy remains focused on maximizing our overall performance in our four main business lines: generation, transmission, distribution and commercialization, through the following key strategies.

### ***Improve our Electricity Generation Performance***

We intend to maximize our current electricity generation capacity through the optimization and segmentation of our generation plants, the incorporation of new technologies and by replacing currently-underperforming thermal power plants. Currently, we are building seven new power plants and rehabilitating and modernizing two others, which together are expected to represent an additional 4,879 MW of capacity.

Our market share of electricity generation is approximately 79.4%, and, between 2010 and 2018, our generation output, including through IPPs, increased by 7.3% (17.7 TWh). Our goal is to increase our electricity output at a rate that will correspond with the anticipated increase in electricity demand in Mexico, while improving the profitability of our business portfolio. We also intend to increase the competitiveness of our generation plants.

We also plan to expand our generation capacity in clean and renewable energy sources. We rely, and expect to continue to rely, on the use of cleaner burning fuels, such as natural gas, in our generation activities (as compared to fuels that emit higher levels of contaminants into the environment, such as fuel oil). As of March 31, 2019, 72.7% of our electricity generation capacity derived from fossil fuels (natural gas, coal, diesel and fuel oil). The remaining 27.3% of our electricity generation capacity derived from clean sources (including nuclear).

Our goal is to maintain or improve this allocation between fuel types in the future; however, our actual allocation will depend in part on the global supply of such fuels and pricing considerations. In addition, we rely, and expect to continue to rely, on clean generation technology, such as hydroelectric, geothermal and wind-driven power generation, each of which use renewable primary sources of energy.

### ***Modernize our Transmission and Distribution Networks and Reduce Technical and Non-Technical Losses***

Transmission and distribution remain strategic activities for the Mexican government and represent our core business line. Our main objective in the mid- to long-term is to reduce our technical losses and the quantity of electricity that is used in Mexico but not paid for (i.e., “non-technical losses”). Our goal is to reduce non-technical losses through the modernization of our metering systems, strengthening our commercial processes, regularizing our services in areas affected by irregular land-use and strengthening our electric infrastructure.

Modernization of our equipment and technology, including the replacement of aging transmission and distribution substations and power lines, is integral to providing reliable electricity service to our customers. We intend to dedicate a significant portion of our financial and human resources as we seek to ensure that our transmission and distribution networks employ state of the art technology and are in good working condition. In addition, we intend to further develop our “smart-grid” technology, which will include a two-way digital communication system between our customers and us, through which we will be able to monitor the electricity needs of our customers in real time and, accordingly, improve the efficiency with which we provide electricity. We expect that the implementation of smart-grid technology will also help reduce our non-technical losses.

We seek to reduce electricity service interruptions. Much of our equipment is installed outdoors and is subject to the varying weather conditions and natural disasters that affect Mexico from time to time. As a result, this equipment (including, in particular, our transmission towers and utility poles) often incurs weather-related damage, which in certain instances causes electricity service interruptions for our customers. We maintain a well-trained staff of technicians that repair damaged equipment upon our receipt of notice of any such damage. Between 2011 and 2018, the duration of service interruptions resulting from failures in our distribution network decreased by 49.0%, and the duration of service interruptions per user as of December 2018 has been reduced to 26.7 minutes per year. We continually assess the quality and speed of these repairs, and we expect that our dedication to delivering fast and effective repair services will continue into the future.

### ***Supply and Commercialization***

A key aspect of our growth strategy is increasing the profitability of our commercialization activities in the medium to long-term. We intend to continue servicing our approximately 43.7 million customers and future qualified users by developing client-focused strategies that focus on differentiating our clients by segment. We also plan to take advantage of our client base to develop new lines of business and increase our overall commercialization capacity.



In parallel, we plan to continue to develop our transportation and commercialization of natural gas business. Under our new structure, CF Energía, S.A. de C.V. and CFE International LLC, two entities wholly owned by us, participate in the business of buying, selling, transporting and storing gas, fuel oil, coal and other fuels.

We currently are the most important purchaser of the natural gas that is consumed in Mexico, and within five years we expect to become the main consumer of natural gas in North America. Considering our unique position in the industry and the opportunities available in Mexico's undeveloped sector, we seek to gradually increase our presence in the market as we continue to commercialize, import, export, transport and store natural gas in Mexico and the United States.

Our transformation strategy is based on strategic pillars that will support each of our business lines:

*Organizational and Operational Structure and Strong Performance Culture*

We are in the process of consolidating our organizational and operational structure that we expect will allow us and our affiliates to operate in a competitive and efficient manner, attract high-skilled employees, improve our strong performance culture and enhance result-oriented strategies. For further information, see "Comisión Federal de Electricidad—General Regulatory Framework—Organizational Structure of CFE."

Our organizational transformation requires us to reduce our financing costs and improve our financial risk management controls, for which we will centralize our budgetary, human resources, accounting and financing activities, as well as public relations through our corporate center.

*Services and Support*

We are in the process of implementing an operational model in which the Issuer will provide administrative support and other services to its subsidiary productive enterprises and affiliates to create synergies. This model will include financial and operational metrics to continually evaluate each subsidiary productive enterprise and affiliate. We may also transfer certain of our servicing areas to subsidiary productive enterprises or affiliates, including those areas that currently provide administrative support. These subsidiaries are expected to service third parties as well as to continue servicing our businesses and affiliates, thus optimizing the value of our assets through more efficient processes.

*Investments and Financing Capabilities*

Our program of contracting with IPPs has allowed private companies to bid and operate electricity generation plants in Mexico and sell the generated power to us. Under the program, we have entered into long-term agreements (25 years), under which IPPs are responsible for the construction, operation and maintenance of the electricity generation facility during the life of the agreement, and we are obligated to purchase the electricity produced by that facility. The use of IPPs has historically helped us meet electricity generation demands without the cost of construction.

The IPP program has also allowed us to obtain competitive prices for the purchased electricity via an international bidding process, in which we award projects to bidders that offer the lowest price per kWh for the sale of electricity to us. As of March 31, 2019, CFE had a total of 31 IPP contracts signed relating to generation facilities that were operational (500 units, which include combined and wind-driven).

The OPF program addresses our infrastructure needs with respect to the transmission and distribution of electricity and for generation projects that cannot be structured using IPPs. We enter into relatively short-term agreements (1-2 years), under which a private company, which we select in an international public bidding process, is responsible for the construction of a project, but not for its ongoing operation and maintenance. Bidders that are selected for OPF agreements receive a total payment upon the completion of the project. The main advantage of this program is that we avoid risks relating to the development of the project that may arise during the construction stage, such as cost escalation and failure of the completed project to meet technical specifications. As with IPPs, we are able to secure competitive prices for the OPFs as a result of an international bidding process. For Mr. Obrador's presidential term, a total of five new generation projects have been authorized for construction. As of the date of this offering memorandum, we are assessing alternative investments schemes, such as joint ventures and public private partnerships, under which we may raise private capital in order to meet our investment needs.

We also intend to increase competition during the bidding processes for procurement contracts, reduce our financing costs and improve our risk-management policies.

In the past, our financings have been mostly limited to public and private financing transactions in the Mexican loan and bond markets, and certain private financings in the United States, Europe and Japan. In May 2011, February 2012, October 2013, June 2015, September 2016, October 2016, July 2017, October 2017 and March 2018, we sought financing in the international bond markets. We believe that the further development of this financing option, together with our objective to diversify our financing sources, will improve our liquidity and debt maturity profile and help fund our investment activities.

#### *Long-Term Employee Benefit Obligation Costs Optimization and Productivity*

As of December 31, 2018, our long-term employee benefit liabilities represented 35% of our total liabilities. As a result of the new collective bargaining agreement, signed on May 19, 2016, between SUTERM and us, our long-term employee benefit obligations were reduced by Ps. 167.5 billion (U.S.\$ 8.7 billion) and were further reduced by another Ps. 161.0 billion (U.S.\$ 8.3 billion) by the end of 2016 as a result of the Mexican government's agreement to match the savings as set forth in the Agreement setting forth the general provisions related to the assumption by the Mexican government of our labor liabilities, published in the Official Gazette of the Federation on November 14, 2016.

#### *Strategic Regulatory Action*

As a productive state enterprise, we intend to have an active role in the implementation of the new policies and regulations to develop the National Power System. We will continue to develop our relationship with our regulators. In particular, regarding our rate-regulated business, we will coordinate and maintain a channel of communication aimed to align the rates that we charge our customers with our costs and operating expenses.

Additionally, the energy reform established the creation of the CENACE, the independent energy system operator of the National Power System and the entity in charge of overseeing all the activities (generation, transmission and distribution) of the Wholesale Electricity Market and its participants as well as managing the electricity spot market.

#### *Social Responsibility*

We will continue to operate as a last resort provider of electric power and we intend to continue to proactively face any electric emergencies. As a productive state enterprise, we expect to continue to monitor and assist the regulatory authorities in establishing reasonable and fair rates.

### **History**

We were created in 1937 by presidential decree, and then converted by the Mexican Congress in 1949 into a decentralized public entity of the Mexican government. Since the enactment of the LSPEE, we have generally been responsible for the generation, transmission and distribution of electric power in Mexico. In connection with the Energy Reform Decree, which, among others, repealed the LSPEE, we were converted from a decentralized public entity of the Mexican government to a productive state enterprise effective upon the effectiveness of the CFE Law in October 2014. Such transformation required, and still requires, changes in management, organization and operation standards. Our activities are supervised by the Ministry of Energy, and the Minister of Energy serves as the chairman of the Board of Directors.

#### ***Luz y Fuerza del Centro***

Luz y Fuerza del Centro ("LFC"), which was the utility previously responsible for the transmission and distribution of electricity in Mexico City and the surrounding areas, was dissolved by presidential decree in October 2009. LFC was also involved in small-scale electric power generation, amounting to 1,174 MW as of October 2009. Pursuant to the terms of LFC's dissolution, the assets of LFC were transferred to the *Servicio de Administración y Enajenación de Bienes* (Asset Management and Divestiture Service, or "SAE"), a decentralized entity of the Mexican government that is operated by the Ministry of Finance. As of the date of the dissolution, LFC's legal, commercial and financial obligations were assumed by SAE and the distribution of electricity within Mexico City and the surrounding areas was assumed by us. In order to carry out these new responsibilities, we have entered into a

lease arrangement with SAE, which provides us with access to certain of LFC's former assets and enables us to service LFC's former customers.

As a result of LFC's dissolution, we obtained approximately six million additional customer accounts. However, the increase in our customer base had little effect on our overall sales volume both because the volume of our sales to these new customers is substantially similar to the volume of our previous sales to LFC and because of the additional non-technical losses we incur by servicing the metropolitan area directly.

## Our Operations

### Generation

As of March 31, 2019, our installed capacity was 56,175 MW, which includes the installed capacity of IPPs. Of our total installed capacity, 75% corresponds to our own generation units, while the remaining 25% corresponds to 31 generation plants operated by IPPs.

The following table sets forth the change in our installed capacity for the periods listed:

Installed Capacity							
Installed Capacity	As of						As of
	December 31,						March 31,
	2013	2014	2015	2016	2017	2018	2019
<b>Installed Capacity (MW)</b>							
CFE .....	40,055	41,516	41,899	42,611	42,644	42,018	42,071
IPPs .....	12,851	12,851	12,953	12,953	13,247	13,247	14,104
<b>Total.....</b>	<b>52,906</b>	<b>54,367</b>	<b>54,852</b>	<b>55,564</b>	<b>55,891</b>	<b>55,265</b>	<b>56,175</b>
<b>Generation (TWh)</b>							
CFE .....	167.5	164.3	164.3	166.0	163.6	162.7	33.6
IPPs .....	87.1	85.7	88.8	88.4	86.0	86.3	21.3
<b>Total.....</b>	<b>254.6</b>	<b>250.0</b>	<b>253.1</b>	<b>254.4</b>	<b>249.6</b>	<b>249.0</b>	<b>54.9</b>

Source: CFE.

During the first quarter of 2019, we generated nearly 84% of our electricity at fossil fuel-based power plants, 8.5% at hydroelectric power plants, and the remainder of our electricity came from other sources, such as nuclear, geothermal, coal-fired, wind-driven and photovoltaic plants. As of March 31, 2019, our installed capacity was 56,175 MW, including 14,104 MW from IPPs. Since most of our power generation relies on fossil fuels (mainly fuel oil and natural gas), our generation cost is highly sensitive to international fuel prices.

During 2018, we generated 249.0 TWh of electricity, representing a 0.4% decrease over the 249.6 TWh we generated in 2017. Of this total, 35% was generated by IPPs and the remainder was generated from facilities owned by us.

The table below sets forth the installed capacity as of March 31, 2019 of the various sources of energy on which we rely.

**Installed Capacity by Source as of March 31, 2019**

<b>Type of Plant</b>	<b>Capacity (MW)</b>	<b>% of Total</b>
Fuel oil and diesel.....	21,941	39
Coal-fired .....	5,431	10
Nuclear power .....	1,608	3
Geothermal .....	874	2
<b>Total thermal (excluding IPPs) .....</b>	<b>29,854</b>	<b>53</b>
Hydroelectric .....	12,125	21
Wind-driven and photovoltaic .....	92	0
IPPs (combined-cycle and wind-driven) ...	14,104	25
<b>Total CFE (including IPPs) .....</b>	<b>56,175</b>	<b>100</b>

Source: CFE.

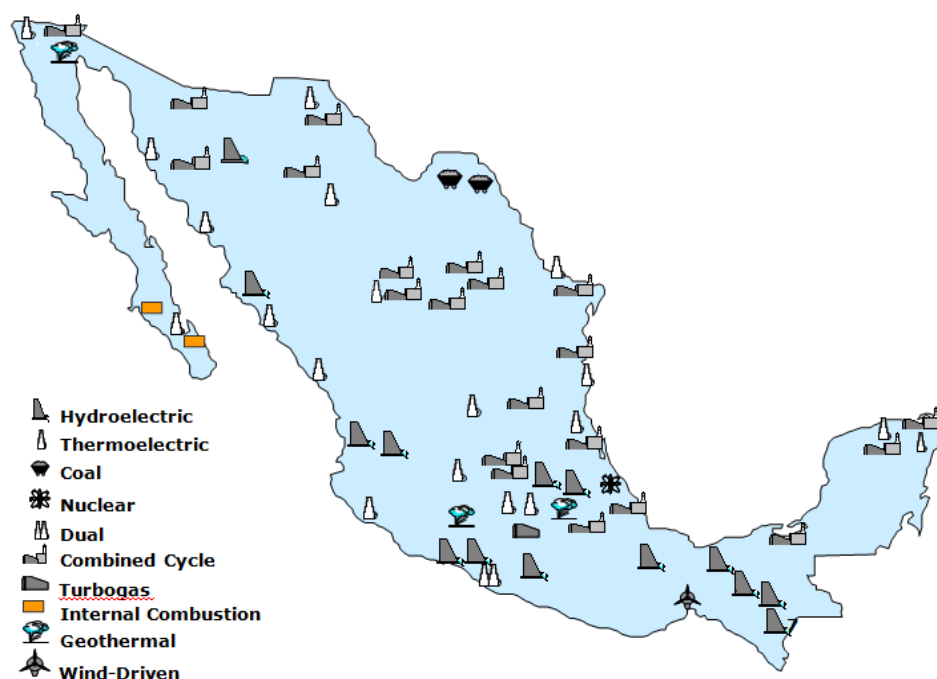
Our electricity generation capacity as of March 31, 2019 consists of 186 plants with 954 active units (including IPPs) throughout Mexico as follows in the table below (the distribution by generation type varies by season, rainfall and availability of renewable resources):

**Generation Plants and Units by Type as of March 31, 2019**

<b>Type</b>	<b>Plants</b>	<b>Active Units</b>
IPPs (combined-cycle and wind-driven).....	31	500
Hydroelectric.....	60	166
Turbo gas .....	40	87
Steam .....	21	55
Internal combustion (diesel).....	5	27
Combined-cycle .....	17	68
Geothermal.....	4	25
Coal-fired .....	3	15
Wind-driven and photovoltaic.....	4	9
Nuclear power .....	1	2
<b>TOTAL .....</b>	<b>186</b>	<b>954</b>

Source: CFE.

As of March 31, 2019, our generation plants and generation units were located throughout Mexico, as illustrated in the map below.



Source: CFE.

### *Thermal Power Generation*

Thermal power generation that uses fossil fuels as the primary source of energy can be classified according to the type of technology used to power the rotation of an electrical generator's turbines, as follows:

- Steam (fuel oil);
- Gas turbine (natural gas);
- Combined-cycle;
- Internal combustion (diesel); and
- Coal-fired.

As of December 31, 2018, 72.3% of our electricity generation capacity was based on fossil fuels (natural gas, coal, diesel and fuel oil). Therefore, our generation cost is highly sensitive to international fuel prices.

We purchase our fuel oil from PEMEX and other suppliers through our commercialization affiliates. We currently purchase natural gas from PEMEX and other suppliers in Mexico (Gas de Litoral, S. de R.L. de C.V., IEnova LNG, S. de R.L. de C.V. and Grupo Iberdrola and its affiliates, CIC Corporativo Industrial Coahuila, S.A. de C.V., Fuerza y Energía de Tuxpan, S.A. de C.V.) at indexed prices pursuant to long-term contracts awarded pursuant to an international bidding process. For the year ended December 31, 2018, fuel oil and natural gas, together, represented 57.6%, and for the three-month period ended March 31, 2019, fuel oil and natural gas represented 62% of the aggregate amounts that we spent on the fuels for the generation of electricity. Approximately 14% of our installed capacity relied on the use of coal as of March 31, 2019. A small percentage of our generating plants use diesel fuel, which we purchase from PEMEX at prices regulated by the Mexican government.

### *Nuclear Power Generation*

We operate Mexico's only nuclear power plant, Laguna Verde. The Laguna Verde plant is located on the coast of the Gulf of Mexico in the municipality of Alto Lucero in the state of Veracruz. The plant is a strategic facility due to its high power generation capacity, low operating cost and frequency and voltage regulation capacity. Laguna Verde is comprised of two power generating units. The nuclear reactor contained in each power generating unit is a "Boiling Water" (BWR-5) reactor equipped with direct cycle Mark II containment. Since operations at Laguna Verde began in 1990, Unit 1 has generated more than 105.1 million MWh, while Unit 2 has generated more than 89.3 million MWh. In 2011, we completed a substantial renovation of both generating units as a result of an investment of approximately Ps. 7,300 million (U.S.\$ 378 million), which was financed as an OPF under PIDIREGAS. As a result of the renovations, the installed capacity of Laguna Verde increased by a total of 208 MW to 1,608 MW as of March 31, 2019.

The two units of the Laguna Verde plant together account for 3% of our total installed capacity (including IPPs) as of March 31, 2019, with a total capacity of 1,608 MW. Laguna Verde's operations are subject to regulation and oversight by both national and international nuclear regulatory bodies. Laguna Verde has operated in compliance with ISO-14000 international standards for environmental management since 1999 based on its quality and safety standards. See "Risk Factors—Risks Factors Related to the Issuer and the Guarantors—We are subject to environmental risks and possible claims and lawsuits inherent to the generation, transmission, and distribution of electricity."

### *Hydroelectric Power Generation*

Our largest hydroelectric generating plant is Manuel Moreno Torres, which has 2,400 MW of installed capacity and is located in Chicoasén, Chiapas. The plant utilizes the water flow from the Grijalva River to power its turbines. The second and third largest plants are C.H. Infiernillo, which has 1,200 MW of installed capacity and is located in La Unión, Guerrero, and C.H. Malpaso, which has 1,080 MW of installed capacity and is located in Tecpatán, Chiapas. As of March 31, 2019, our hydroelectric power plants had a total capacity of 12,125 MW, or 22% of our total installed capacity (including IPPs).

### *Coal-Fired Power Generation*

We have three coal-fired power generation plants: two located just south of the U.S.-Mexico border in the State of Coahuila, with installed capacities of 1,200 MW and 1,400 MW, and a third one in the State of Guerrero, known as the Petacalco plant (the most powerful plant CFE has), with an installed capacity of 2,778 MW. These three plants comprise a total of 15 generation units, which have a combined installed capacity of 5,431 MW and were responsible for 10% of our total installed capacity as of March 31, 2019.

### *Geothermal Power Generation*

Our geothermal energy is generated by four plants with a total installed capacity of 874 MW as of March 31, 2019, which represent 2% of our total installed capacity (including IPPs). Our largest geothermal power station is *Cerro Prieto*, followed by *Los Azufres* in Michoacán. Geothermal energy is the only renewable source other than hydroelectric power that currently contributes significantly to the total mix of the electricity we generate.

### *Wind-Driven and Photovoltaic Power Generation*

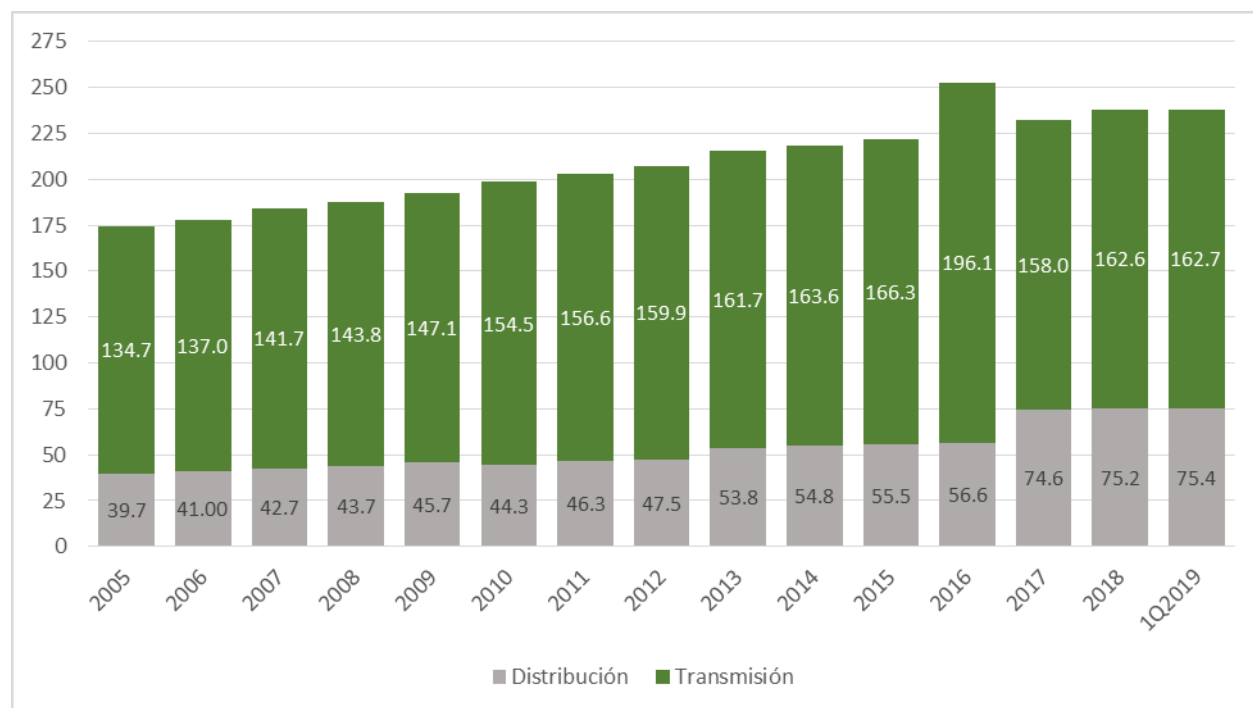
We own and operate three wind-driven power plants, the largest of which is the *La Venta* power plant located 30 km northeast of the city of Juchitán, Oaxaca. *La Venta* was the first wind-driven power plant developed in Mexico and in Latin America. A small portion of our installed capacity (6 MW) is derived from two one-unit photovoltaic plants located in the states of Baja California and Baja California Sur, the most important of which is the Cerro Prieto plant located in the state of Baja California, south of the U.S.-Mexico border and near the city of Mexicali, with an installed capacity of 5 MW. The four wind-driven and photovoltaic power plants have a combined installed capacity of 92 MW. The six wind-driven power plants operated by IPPs have a combined installed capacity of 612.9 MW, all of them located in the State of Oaxaca. As of March 31, 2019, our wind-driven power plants (excluding IPPs) contributed to 0.16% of our installed capacity.

### *Transformation, Transmission and Distribution*

Electric power generated in our facilities, as well as by IPPs, is made available to consumers after being transformed, transmitted and distributed. Transformation is the process by which the current and voltage of electricity is converted to a form suitable for its transmission or distribution. This process is carried out by our network of electrical transmission and distribution substations, which has grown in size and capacity in parallel with the growth of our transmission and distribution networks.

As of December 31, 2018, our transformation capacity was 237.8 GVA, of which 68% related to transmission substations and 32% to distribution substations.

**Capacity of Transmission and Distribution Substations (GVA)**



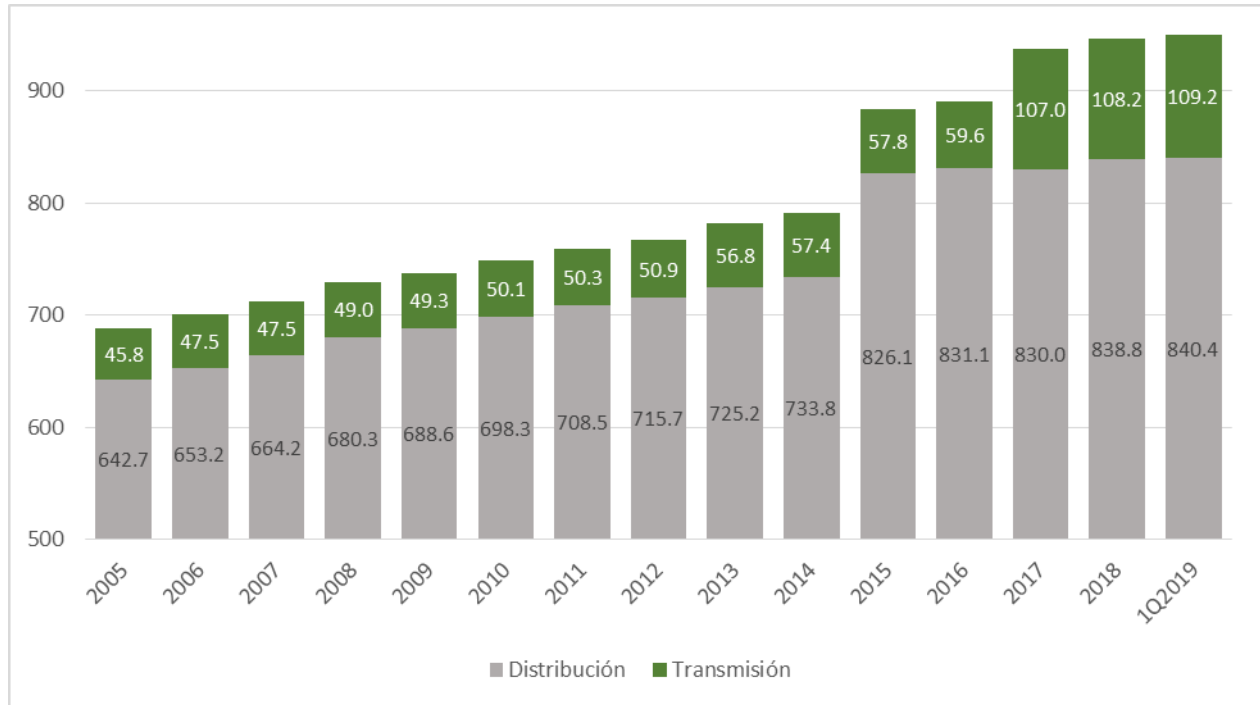
Source: CFE.

Transmission is the process by which electrical power is carried from electrical generators to distribution substations. Our transmission network consists of a network of power lines with capacities ranging from 69 to 400 kilovolts. Between 2015 and 2016, the length of our transmission network increased significantly due to a reclassification of voltage limits between distribution and transmission, resulting in an asset transfer from CFE Distribución to CFE Transmisión. As of March 31, 2019, the transmission network was 109,202 kilometers (67,855 miles) long.

Our distribution network, which is responsible for delivering electricity to our customers throughout Mexico, comprises distribution power lines with voltage levels of 34.5, 23, 13.8, 6.6, 4.16 and 2.4 kilovolts, and 220 and 110 volts.

As of March 31, 2019, we had a total of 840,372 kilometers (522,183 miles) of distribution lines. Including transmission and distribution power lines, our transmission and distribution network is over 949,000 kilometers (589,600 miles) long.

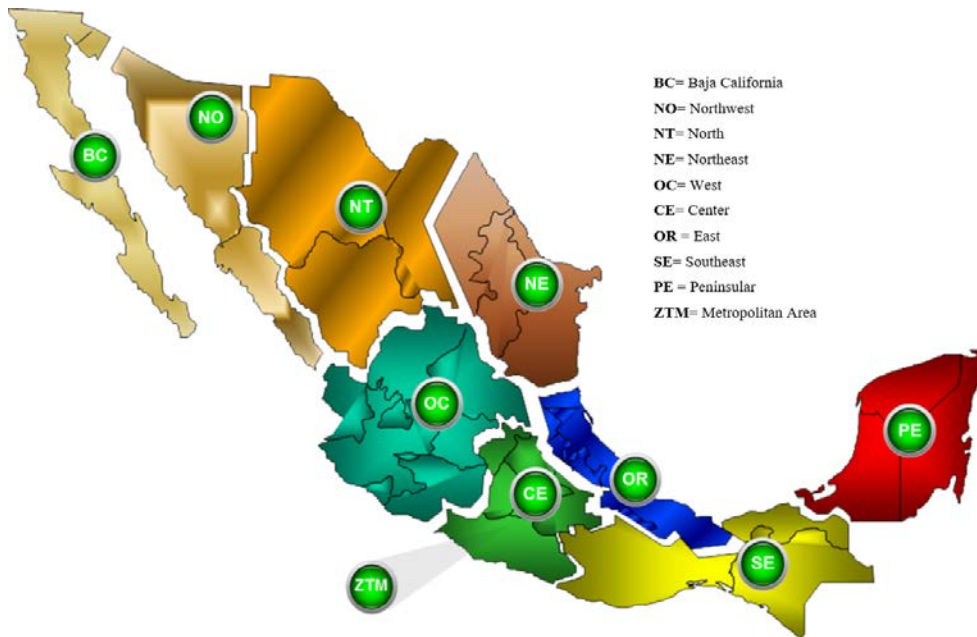
### Length of Transmission and Distribution Lines (thousands of kilometers)



2015 and subsequent years data incorporate Mexico City and its metropolitan area distribution lines (86,809 kms not reported in preceding years).

Source: CFE.

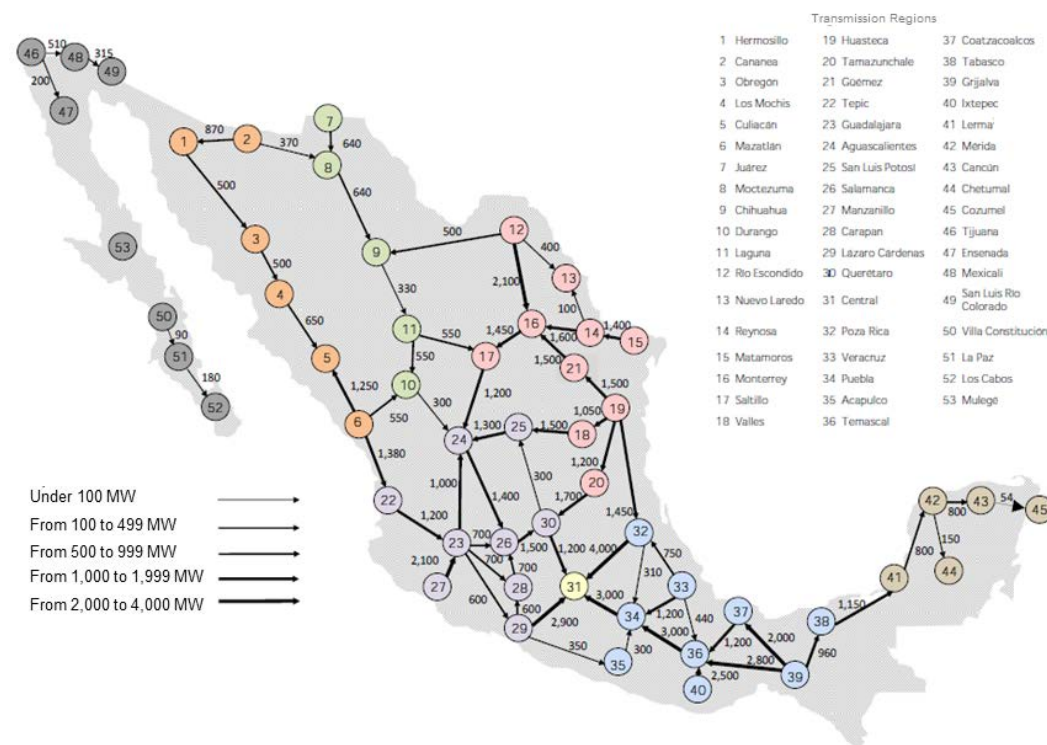
CFE Transmisión is organized into nine regional offices, as shown in the following map:



Source: CFE.



The map below shows the geographic distribution of our transmission network.



Source: CFE.

## CENACE

Pursuant to the Electric Industry Law, we were required to transfer to the CENACE the necessary human, material and financial resources for the operation of the National Power System and the Wholesale Electricity Market. Accordingly, on November 28, 2014, we transferred to the CENACE the following assets:

- the *Centro Nacional* (National Center) located in Mexico City;
- the *Centro Nacional Alterno* (Alternate National Center) located in Puebla;
- eight control areas located in Mexicali, Hermosillo, Gómez Palacio, Monterrey, Guadalajara, Mexico City, Puebla and Mérida;
- the control centers in La Paz and Santa Rosalía;
- the *Coordinación de Planificación* (Office of Planning) of the *Subdirección de Programación* (Budget Department) located in Mexico City; and
- employees and assets associated with the operation of the above.

For more information regarding the CENACE, see “—General Regulatory Framework” below.

The CENACE is also responsible for auctioning long-term (15-year) *contratos de cobertura* (power purchase agreements) in which we commit to purchase clean and renewable energy at specified prices from private participants. The purpose of these auctions is to allow us to purchase electricity at competitive prices from qualified bidders and to promote the purchase and sale of clean energy certificates.

The CENACE conducted two auctions in 2016. The first auction received 227 offers from 69 prequalified bidders. As a result, in March 2016, 18 offers were granted to 11 companies for wind and solar projects totaling 1,720MW. The average price offered by the winning companies was around 38% lower than the maximum purchase price offered by us. The projects selected in the auction have a total generating capacity of 2,085 MW. In the second auction, 23 companies were selected out of 57 that participated. The winning bids were selected in September 2016 and covered 83.8% of the energy requested by us. The projects selected have a total generating capacity of 3,776 MW. During 2017, the CENACE carried out two auctions allocating a total of 17 winning bids. On March 28, 2018, the CENACE announced a fourth auction, in which participants would be able to make one or more bids to sell any combination of the following products: capacity, electricity and clean energy certificates. However, on December 3, 2018, the auction was suspended due to senior management changes in different government entities following the commencement of the term of the new federal administration.

### ***Fiber Optic Network***

As of December 2018, we had over 43,300 kilometers (26,800 miles) of a national fiber optic network, with an average of 36 fiber strands, composed of long distance (94%) and access (6%) networks, developed to increase the safety and reliability of the *Sistema Eléctrico Nacional* (National Electric System). Our fiber optic network has available capacity for commercialization and is attractive for the telecommunications sector. It covers more than 280 localities and 55 million people and facilitates the deployment of solutions for technical and administrative networks, including voice, data, video and smart power grid.

Between 2008 and 2015, we operated a concession that allowed us to provide telecommunications services for external customers, generating revenues of Ps. 5.4 billion (U.S.\$ 0.3 billion) and increasing competition in Mexico. In January 2016, in accordance with the Constitutional Reform in Telecommunications, we transferred the concession and assigned contracts with our customers to Telecomunicaciones de México, a decentralized public body that is part of the *Secretaría de Comunicaciones y Transportes* (Ministry of Communications and Transportation, or the “SCT”).

After the transfer of our concession, we created the CFE Telecom business unit to market and sell the telecommunications services that we had previously provided under our concession until January 2016. This business unit has maintained a constant flow of revenue from external customers close to Ps. 1.0 billion (U.S.\$ 0.1 billion) per year.

### **Service Quality**

During the past several years, the Mexican government has implemented various programs in an effort to modernize our operational units. All of our operational units are under constant evaluation. This practice allows us to identify our strengths and weaknesses, and to set benchmarks for productivity, competitiveness and technology programs, including the reduction of energy losses, the establishment of quality indicators and the implementation of pricing and maintenance programs. Our energy savings programs consist of efforts to promote replacement of high-consumption appliances and air conditioning units as well as internal programs for energy savings in generation plants and the creation of incentives for customers to use energy-friendly equipment.

Our quality indicators show a steady improvement over the past years. Increases in service quality are due to our commitment and effective measures undertaken by management to transform CFE into a world class company. As of 2004, all of our processes and work centers were certified under the ISO 9000 rules. We have been awarded the *Premio Nacional de Calidad* (National Quality Award) eight times, an award that is given by the Mexican government for continued improvement in quality indicators. We have also been awarded the *Premio Iberoamericano de la Calidad* (Iberoamerican Quality Award) on four occasions, the *Reconocimiento Innova* (Innova Award) and the *Premio Intragob* (Intragob Award).

The following table sets forth the primary indicators on which we rely to evaluate the quality of the services we provide.

Service Indicators	2013	2014	2015	2016	2017	2018
<b>Service Quality</b>						
Fulfillment of service commitments (%).....	98.5	98.1	97.4	97.6	93.8	91.8
Receipt of non-conforming electricity (for every 1,000 users per month) .....	4.05	3.75	3.69	3.27	3.53	5.50
<b>Quality of Electric Power Supply</b>						
Outage time per user (minutes per year).....	42.1	37.5	36.8	31.8	30.8	28.6
Population with access to electric power (%)	98.23	98.43	98.53	98.58	98.64	98.75

Source: CFE.

## Client Base and Demand

Since our inception in 1937, Mexico's population has quintupled in size, growing to approximately 124.7 million inhabitants as of December 31, 2018. This population growth has been accompanied by a significant increase in the demand for electric energy. The following table sets forth our response to population growth in Mexico during the last 48 years:

	As of December 31,						As of March 31,
	1970	1980	1990	2000	2010	2018	2019
Population of Mexico* (in millions)	48.2	66.8	81.2	97.5	112.3	124.7	N/A
Number of CFE customer accounts (in millions) .....	4.9	6.8	12.0	18.7	34.2	43.4	43.7
Total installed capacity of CFE (in MW) .....	5,401	13,692	24,442	35,869	51,611	55,265	56,175

Source: CFE.

\*Source: INEGI.

N/A: Data not yet available.

We provide electricity to approximately 98.7% of Mexico's population, and as of March 31, 2019, we had 43.7 million customer accounts. We classify our customers into five categories: residential, commercial, agricultural, services and large industry. As of December 31, 2018, our customer base consisted of 88.7% residential accounts and 9.7% commercial accounts, with the remainder of our accounts attributed to agricultural, industrial and services customers.

The following table sets forth a customer breakdown per sector for the years ended December 31, 2013 through 2018 and for the three-month period ended March 31, 2019:

Sector	Year Ended December 31,						Three-Month Period Ended March 31,
	2013	2014	2015	2016	2017	2018	2019
Percentage of Customers							
Residential .....	88.5%	88.6%	88.6%	88.6%	88.6%	88.7%	88.7%
Commercial .....	9.9%	9.8%	9.8%	9.8%	9.8%	9.7%	9.7%
Agricultural .....	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
Industrial.....	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
Services .....	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%

Source: CFE.

Although the residential sector represented 88.7% of our customer base as of December 31, 2018, it constituted only 28.8% of our sales during 2018. Inversely, the industrial sector represented approximately 0.8% of our customer base, but as of December 31, 2018, it accounted for 56.6% of our sales volume.

The following table sets forth the percentage of our sales volume attributable to each sector that we service for the years ended December 31, 2013 through 2018 and for the three-month period ended March 31, 2019.

Sector	Year Ended December 31,						Three-Month Period Ended March 31,
	2013	2014	2015	2016	2017	2018	2019
	Percentage of Volume Sold*						
Residential .....	25.4%	25.9%	26.4%	26.8%	25.0%	28.8%	27.0%
Commercial .....	6.7%	6.7%	7.0%	7.0%	7.0%	7.3%	7.2%
Agricultural .....	5.0%	4.8%	4.7%	5.2%	5.0%	5.2%	5.1%
Industrial.....	58.4%	58.3%	57.7%	57.0%	59.0%	56.6%	58.3%
Services .....	4.5%	4.3%	4.2%	4.0%	4.0%	2.1%	2.4%

Source: CFE.

\* 100% is total retail volume before non-technical losses, billing errors, billing in process and other exploitation products.

## Electricity Rates

The Electric Industry Law establishes that the rates that we charge for regulated services are to be determined by the CRE. These rates are determined based on our anticipated generation capabilities and long-term marginal costs, as well as other variables including the category and location of our customers and the time of day that the electricity is expected to be consumed, and the expected inflation rates for the next year. Regulated services include the transmission and the distribution of electricity, as well as the operation of a basic services provider. The final rates for basic services supply are also rate-regulated, in addition to other having regulated costs.

In 2015, the CRE published the rates that our transmission and distribution subsidiaries were to charge during an initial period from 2016 to 2018, as well as the criteria and methodology to apply adjustments to those rates during that initial period. In December 2018, CRE extended the application of those transmission and distribution rates indefinitely. The methodology for future rate adjustments is currently under discussion between the CRE and CFE.

In November 2017, the CRE published the methodology to determine and adjust the rates for the operation of a basic services provider, for the final rates for basic services supply, and for provision of related services not otherwise included. According to the Electric Industry Law, the required income for basic services providers must include the costs of the other regulated rates, as well as the energy generation costs and any associated products or services purchased by the supplier for this service.

The new rate system was implemented in December 2017. Rates have been grouped in 17 divisions and 12 categories, and include charges for the following concepts: generation, transmission, distribution, CENACE operations, operation of the basic services provider (*Suministrador de Servicios Básicos*), energy and capacity, among others. The rates for the initial phase were valid through December 31, 2018. During December 2018, CFE established the methodology to calculate charges for both energy and capacity for 2019. The methodology to determine future rate adjustments is currently under discussion with the CRE.

The Electric Industry Law also establishes that the executive branch may determine a rate mechanism different from the final rates determined by the CRE for specific groups of users. The Mexican government has set some of our electricity rates at levels below our operating costs in order to maintain the affordability of electricity, in particular, for most of our residential and agricultural customers. As a result, we have historically relied on compensation from the Mexican government to address any rate insufficiencies. During the summer months, the Mexican government increases the portion of the rate insufficiencies that relate to our residential customers located in regions of Mexico that experience extreme heat. This seasonal adjustment is designed to mitigate the financial burden arising from higher demand for electricity, in particular because of the increased use of air conditioners in these regions. We are working with the Ministry of Finance with the goal of creating a framework whereby the subsidies are granted to consumers only based on income and location, with the prospect that we do not absorb the impact of such subsidies in the future, but we can provide no assurances that we will not have to absorb such impact, or whether the new framework will adversely affect our results of operations and financial position.

Additionally, our affiliate CFE Calificados, S.A. de C.V. may charge different prices for the electricity it provides to its customers, as it operates as a qualified supplier facing market prices.

The rates that we can charge our customers can be modified significantly, particularly with respect to certain of our industrial and commercial customers. The rates that we charge our residential and agricultural customers will continue to be determined and regulated by the Mexican government. The rates that we charge our large industrial and commercial customers are no longer regulated, which grants us greater flexibility in determining our pricing strategy for these consumers and enable us to compete on equal terms with private electricity producers. We also expect to generate additional revenue from the rates applicable to our transmission and distribution activities, which are designed to allow us to obtain a profit that the CRE determines to be reasonable from services that we provide to third parties. We believe that the new rate regime will also provide greater transparency regarding our results of operations. The public use tax was repealed by the Electric Industry Law.

The rate-setting mechanisms in general consider operation, maintenance and administration costs, as well as new investments and a reasonable return on equity. The rates for operation of the basic services provider are based on the (a) a required income (*ingreso requerido*) methodology, which takes into account the following: operational costs, maintenance costs, administration costs, commercial costs, corporate costs, labor related liabilities, depreciation, taxes, financial costs and others; and (b) a final user methodology, based on final user characteristics.

The following table sets forth, for the periods indicated, (i) the average price of electricity that we charge our final users (measured in Mexican pesos per kWh) and (ii) the percentage change in the average price of electricity that we charge our customers.

Historic Price Trends		
Year	Period Average Price of Electricity Ps/kWh	Percentage Change in Period Average Price (as compared to the immediately preceding period)
2007 .....	1.13	2.7%
2008 .....	1.31	15.9%
2009 .....	1.14	(13.0)%
2010 .....	1.32	15.8%
2011 .....	1.47	11.4%
2012 .....	1.41	(4.1)%
2013 .....	1.50	6.4%
2014 .....	1.55	3.3%
2015 .....	1.35	(13.0)%
2016 .....	1.37	1.2%
2017 .....	1.72	25.5%
2018 .....	1.79	4.1%
1Q 2019 .....	1.95	9.06%

Source: CFE.

## Billing and Collection

Our billing and collection practices are governed by the *Disposiciones Administrativas de Carácter General que establecen las condiciones generales para la prestación del suministro eléctrico* (General Regulations for the Distribution and Sale of Electricity to the Public, the “Billing Rules”).

The bills are sent monthly to industrial, commercial and service customers and every two months to residential customers according to our workforce. Under the Billing Rules, customers have ten calendar days, plus three additional calendar days when the collection is made by “centralized collection,” to pay for electricity bills after receipt of the corresponding invoice. However, if we deliver an invoice late, the applicable payment period is extended accordingly.

In order to satisfy our customers and improve their experience using our services, we offer several payment platforms, of which the most important are: (i) customer service, (ii) web page, (iii) ATMs, (iv) phone application, (v) banks and (vi) self-service stores.

We may suspend the supply of electricity to a customer if any of the following occurs: (i) late payment; (ii) tampering with metering or control installations; (iii) non-compliance of our installations with technical regulations; (iv) violations of electricity supply contracts with respect to the use of electricity; (v) consumption of electricity without a contract; and (vi) connection to our service without our previous authorization. Upon the occurrence of any of the above, we may proceed to cancel service without judicial intervention. However, in the case of any of the events described under (i), (iii) or (iv) above occur, we are required to notify customers before suspending their service.

We may terminate the supply of electricity if any of the following occurs: (i) upon request by a customer; (ii) upon a change in a customer's business that result in rate adjustments; (iii) upon the change in the owner or lessee of a property or business, and (iv) upon the failure to cure any payment default during the 15 days after service is suspended.

We may agree to modify the terms of payment when customers are unable to pay amounts owed to us but have agreed to such amounts. Among the modifications that we may agree to are: (i) the payment of 25% of the aggregate amount owed to us upon execution of an agreement modifying the terms of payment; (ii) the establishment of a monthly payment plan; (iii) the charging of interest on amounts owed (at a rate of the *Tasa de Interés Interbancaria de Equilibrio* (TIIE) plus a margin approved by us); and (iv) the acceleration of the aggregate amount owed to us upon the failure to make a monthly payment.

## Labor

As of March 31, 2019, we had 92,581 employees (including temporary employees). As of March 31, 2019, approximately 79% of our employees were unionized under the SUTERM labor union and the remainder were not unionized. We have never experienced a labor-related work stoppage or strike, and we consider our overall relationship with our unionized employees to be stable. The average tenure of our full-time employees (union and non-union) is 13 years and 5 months.

The following table sets forth the breakdown of our labor force between unionized and non-unionized employees as of December 31, 2013 through 2018, and as of March 31, 2019:

	As of December 31,						As of March 31,
Employees*	2013	2014	2015	2016	2017	2018	2019
Non-unionized Employees.....	19,648	19,277	18,970	19,219	19,048	18,690	18,995
Unionized Employees .....	75,946	74,665	74,229	73,693	70,952	72,679	73,586
<b>Total Active Employees .....</b>	<b>95,594</b>	<b>93,942</b>	<b>93,199</b>	<b>92,912</b>	<b>90,000</b>	<b>91,369</b>	<b>92,581</b>

\* Includes temporary employees.  
Source: CFE.

In 2008, as a result of our collective bargaining negotiations with SUTERM, we entered into a new “defined contribution” employee benefits program, wherein we have agreed to establish individual retirement accounts for each employee that we hire after August 18, 2008. As currently set forth in the collective bargaining agreement with SUTERM, employees subject to the defined contribution plan are required to contribute 5% of their monthly salary into their individual retirement account, and we provide a corresponding contribution in the amount of 7.5% of each employee’s monthly salary (although these percentages are subject to change in accordance with terms of the collective bargaining agreement). This new program replaces our previous defined benefits plan, which entitled our employees to certain retirement benefits, including a pension and health insurance, which were allocated to our retired employees in amounts that corresponded, in large part, to their years of service and seniority level at CFE. The new defined contribution plan does not apply retroactively to our employees that were employed as of or prior to August 18, 2008, nor does it apply to temporary employees. As of March 31, 2019, we reported a liability of Ps. 329.7 billion (U.S.\$ 17.1 billion) on our statement of financial position in respect of our labor obligation costs, which represents 26% of our total liabilities. See “Risk Factors—Risk Factors Related to the Issuer and the Guarantors—Labor unrest, employee benefits obligations and labor-related lawsuits may adversely affect our business, financial condition and results of operations.”

## Environmental and Sustainability Matters

We are subject to a broad range of environmental laws and regulations, including the Mexican *Ley General del Equilibrio Ecológico y la Protección al Ambiente* (General Law of Ecological Balance and Environmental Protection), which is the principal environmental law in Mexico. These laws and regulations impose stringent environmental protection standards regarding, among other things, water usage, air and noise emissions, contamination control, wastewater discharges, the use and handling of hazardous waste or materials and waste disposal practices. These standards expose us to the risk of environmental costs and liabilities; however, we believe that we are in substantial compliance with all environmental laws applicable to us. In addition to environmental laws and regulations applicable to our operations, we are required to utilize the electricity production technologies that result in the lowest cost to us, on both a short-term and a long-term basis, after considering the environmental effect of each technology. We are also required to use the electricity production technologies that offer optimum stability, quality and safety for the public service we provide. This mandate is consistent with our longer-term strategy to focus on clean energy as we expand our generation capacity.

To maintain compliance with and mitigate our risk under the Mexican environmental legal and regulatory framework, we maintain an environmental policy program known as the *Programa Institucional para la Competitividad y la Sustentabilidad de la Comisión Federal de Electricidad* (Program for the Competitiveness and Sustainability of the Comisión Federal de Electricidad, or the “PICS”), designed primarily to reduce the environmental impact and increase the efficiency of our operations, increase the use of alternative fuels and promote energy savings programs. To satisfy these objectives, PICS focuses on plant modernizations, emissions controls, the construction of water treatment plants and programs to promote the use of clean energy and increase the efficiency of hydrocarbon-based plants, each of which is consistent with the *Programa Especial de Cambio Climático 2009-2012* (Mexican government’s Special Climate Change Program for 2009-2012) which establishes the objective of reduction of 50% of greenhouse gases emissions by 2050. Furthermore, PICS requires each participant in the bidding processes relating to the construction, maintenance and operation of power plants to prove their ability to perform these activities in compliance with all existing environmental rules and regulations and with our standards, which in some cases are more stringent than those in applicable environmental laws. Additionally, it requires winning bidders to perform an environmental impact study sanctioned by the *Procuraduría Federal de Protección al Ambiente* (Federal Environmental Protection Agency), which is part of the *Secretaría del Medio Ambiente y Recursos Naturales* (Ministry of Environment and Natural Resources).

Pursuant to the Electric Industry Law, the Ministry of Energy will implement policies and procedures to promote the diversification of energy sources, energy security and clean energy through the use of clean energy certificates.

A substantial majority of our plants were awarded a *Certificado de Industria Limpia* (Clean Industry Certificate), certifying that their operations are in full compliance with applicable environmental laws. We expect that all of our plants currently under construction will be awarded with a Clean Industry Certificate. Additionally, certain of our operations and processes in our different power plants have obtained ISO-9001, ISO 14000 and ISO 18000 certifications for environmental management systems.

We also maintain a general liability insurance policy which includes specific environmental liabilities insurance coverage arising from nuclear accidents in compliance with Mexican rules and regulations and international conventions to which Mexico is a party.

## Intellectual Property

We currently hold 20 patents: five to protect inventions, three to protect our utility models and 12 for the protection of our designs. We have also obtained 266 trademark registrations.

## General Regulatory Framework

### *Mexican Energy Reform*

We describe below the key features of our legal framework as it relates to our operations:

- **Legal Form:** We are a productive state enterprise, and our framework gives us a degree of managerial and budgetary autonomy, as described below.

- Scope of Mandate: Our corporate purpose is to create economic value and increase the income of the Mexican nation and we are solely responsible for the transmission and distribution of electricity for public service purposes.
- Corporate Governance: The CFE Law requires that our Board of Directors consists of 10 board members. The President of Mexico appoints five members, including the Minister of Finance and the Minister of Energy, who serves as the Chairman of the Board of Directors. Four part-time independent board members are appointed by the President and ratified by the *Cámara de Senadores* (Senate), and the remaining board member is appointed by SUTERM, our labor union. In addition, our internal auditing, control and accountability responsibilities are undertaken by three separate and independent bodies.
- Budgetary Autonomy: Although the Mexican Congress approves our financial condition target, expenditure and net debt ceiling, and notwithstanding we are subject to certain budgetary controls by the Mexican government and the Mexican Chamber of Deputies, our Board of Directors is able to define our five-year business plan, determine our annual budget and freely approve investment priorities and projects. We also have autonomy and flexibility with respect to our procurement, contracting and compensation policies, which we believe enable us to reduce contracting costs by adopting terms that are market standard in our service contracts and enhance our ability to attract and retain highly-skilled employees.
- Dividends: The Ministry of Finance may determine, based upon the information provided by the Board of Directors, the amount of any dividend we will pay to the Mexican government each year after taking into account our business plan and capital investment needs for the upcoming fiscal year. The Federal Revenue Law for 2019 does not contemplate a dividend payment to the Mexican government. Upon congressional approval, the Ministry of Finance will determine the terms on which we are to pay such dividend.
- Rates: The rates that we charge our residential and agricultural customers are determined and regulated by the Mexican government. The rates that we charge our large industrial and commercial customers that qualify as “qualified users” by registration with the CRE (provided existing demand exceeds certain thresholds) are not regulated, which grants us greater flexibility in determining our pricing strategy for “qualified users” and enables us to compete on equal terms with private electricity producers. We also expect to generate additional revenue from the rates applicable to our transmission and distribution activities, which are designed to allow us to obtain a profit that the CRE determines to be reasonable from services that we provide to third parties.
- Continued government participation: The Mexican government is exclusively responsible for the planning and administration of Mexico’s National Power System and the transmission and distribution of electric energy, which remains a public service.
- Private-sector participation: The Mexican government may permit private-sector companies to enter into contracts with us related to the financing, installation, maintenance, management, operation and expansion of electricity transmission and distribution infrastructure, although concessions continue to be prohibited with respect to these activities. In addition, private-sector companies are now able to invest and participate in all aspects of electricity generation and commercialization activities.
- Vertical and Horizontal Division of CFE: The CFE Law and the transitional articles of the Electric Industry Law mandate that we maintain vertical and horizontal separation of each of our core activities of generation, transmission, distribution and commercialization of electric power. See “—Organizational Structure of CFE.”
- Regulatory oversight and authority: The Ministry of Energy and the CRE have technical and administrative authority over certain of our operations and the electric energy sector generally. The Ministry of Energy is in charge of designing, implementing and coordinating Mexico’s energy policy, implementing the infrastructure programs, monitoring the profitability and return on equity of productive state enterprises and its subsidiaries and establishing mechanisms to promote clean energy



generation through tradable energy certificates. The CRE was vested with its own legal status and technical and administrative autonomy and was entrusted with regulating and issuing permits for power generation and implementing regulations to encourage the sustainability and efficiency of the National Power System. In addition, the CENACE, a decentralized public entity of the Mexican government, was created to manage the National Power System, operate the Wholesale Electricity Market and ensure an open and non-discriminatory access to the electric transmission grid and the distribution systems.

- Electric Industry Law: The Electric Industry Law enables private-sector companies to obtain permits for generation and commercialization of electric power. Participants in Mexico's electric sector, including us, are able to sell electricity to large industrial and commercial customers at rates set by the market in a new Wholesale Electricity Market. Pursuant to the Electric Industry Law, we are subject to a permits regime in order to continue to generate electricity, are authorized to sell electricity to residential consumers and small and medium industrial and commercial consumers subject to regulated rates, and have authority to enter into contracts with private-sector companies, including contracts for the financing, installation, maintenance, procurement, operation and expansion of the electric network infrastructure.

On October 31, 2014, the initial regulations relating to the Secondary Legislation, including the Regulations to the CFE Law and the Regulations to the Electric Industry Law, were published in the Official Gazette of the Federation.

### ***Organizational Structure of CFE***

The CFE Law mandates that we create subsidiaries and undertake a vertical and horizontal separation of each of its key electric sector activities—electricity generation, transmission, distribution and commercialization. In addition, the Board of Directors is authorized to create additional subsidiaries and affiliates to engage in any new lines of business that we pursue without the need to obtain approval from the Mexican Congress.

#### *Guarantors*

On January 11, 2016, the Ministry of Energy published in the Official Gazette of the Federation the general terms for the reorganization of CFE. These terms set forth the terms and conditions for the creation of these new subsidiaries. Accordingly, on March 29, 2016, CFE created the following new subsidiaries pursuant to the *Acuerdos de Creación de las Subsidiarias* (the Creation Resolutions of the Subsidiaries) published by CFE in the Official Gazette of the Federation: (i) CFE Distribución; (ii) CFE Suministrador de Servicios Básicos; (iii) CFE Transmisión; (iv) CFE Generación I; (v) CFE Generación II; (vi) CFE Generación III; (vii) CFE Generación IV; (viii) CFE Generación V; and (ix) CFE Generación VI. Each of these subsidiaries, which is a guarantor under the notes, is wholly owned by CFE.

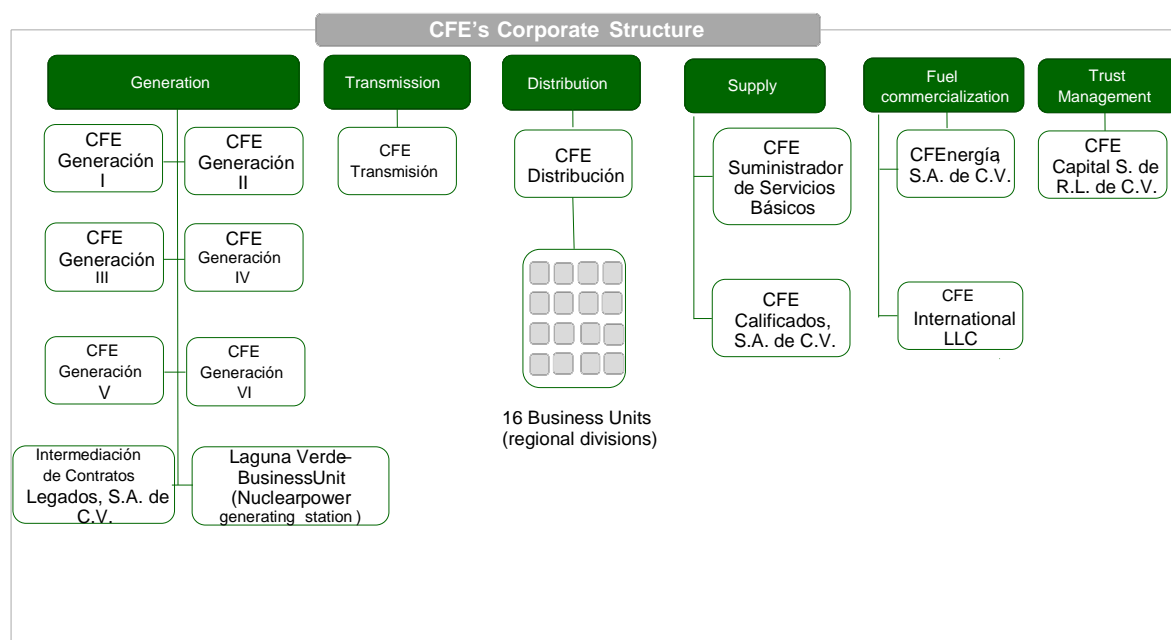
Our split and allocation of assets and systems to each of the guarantors became effective between January and February 2017.

#### *Affiliates*

On January 20, 2015, we created CFE International LLC, a Delaware limited liability company, as an affiliate established with the purpose of increasing our presence in the international fuel market. Also, on August 11, 2015, we created CF Energía, S.A. de C.V., a Mexican corporation, as an affiliate with the purpose of increasing our participation in the import, export, transportation, storage and marketing of natural gas and other fuels, both in Mexico and abroad. In March 2016, we created Intermediación de Contratos Legados, S.A. de C.V., a Mexican corporation, as an affiliate with the purpose of administering the interconnection contracts. In May 2016, we created CFE Calificados, S.A. de C.V., a Mexican corporation, as an affiliate with the purpose of increasing our participation in the Wholesale Electricity Market in a cost-effective manner.

In December 2017, we created CFECapital, S. de R.L. de C.V., a Mexican limited liability company with variable capital, as an affiliate established with the purpose of managing trusts, including Fibra E.

The following chart sets forth our consolidated corporate structure:



The following table sets forth our subsidiary productive enterprises and affiliates as of March 31, 2019:

Name of Company	Jurisdiction of Organization	Percentage Owned	Business
CFE Distribución .....	Mexico	100%	Distribution
CFE Suministrador de Servicios Básicos .....	Mexico	100%	Supply
CFE Transmisión .....	Mexico	100%	Transmission
CFE Generación I .....	Mexico	100%	Generation
CFE Generación II .....	Mexico	100%	Generation
CFE Generación III .....	Mexico	100%	Generation
CFE Generación IV .....	Mexico	100%	Generation
CFE Generación V .....	Mexico	100%	Generation
CFE Generación VI .....	Mexico	100%	Generation
CFEnergía, S.A. de C.V. ....	Mexico	100%	Fuel commercialization
Intermediación de Contratos Legados, S.A. de C.V. ....	Mexico	99%	Administration of interconnection contracts
CFE Calificados, S.A. de C.V. ....	Mexico	99%	Fuel commercialization
CFE International LLC .....	United States	99%	Fuel commercialization
CFE Capital S. de R.L. de C.V. ....	Mexico	100%	Trust and trust asset management

We believe that this new organizational structure will make our operations more efficient and transparent, and allow our new subsidiary productive enterprises and affiliates to focus on maximizing our profitability along the entire energy sector value chain.

Because we continue to be a public-sector entity, the Mexican government's ownership interests in CFE is not represented by any shares of capital stock, but rather is memorialized by the CFE Law. Therefore, we have no authorized or outstanding shares of capital stock.

The establishment of our Board of Directors and the powers, attributions and responsibilities of this body and those of our *Director General* (General Director), the *Comité de Auditoría* (Audit Committee), the *Comité de Recursos Humanos y Remuneraciones* (Human Resources and Compensation Committee), the *Comité de Estrategia e Inversiones* (Strategy and Investment Committee) and the *Comité de Adquisiciones, Arrendamientos, Obras y Servicios* (Acquisitions, Leasing, Public Works and Services Committee) are contained in the CFE Law and the Regulations to the CFE Law. Several *Secretarios de Estado* (cabinet ministers) are members of the Board of

Directors and its committees. For further information on the Board of Directors and committees of the Issuer, see “Management.”

Our access to financing is regulated by the CFE Law, pursuant to which new external and internal indebtedness must be authorized by the Board of Directors. The timing of our financing operations is agreed yearly with the Ministry of Finance (the “Financing Schedule”). We are authorized to carry out financing transactions additional to those included in the Financing Schedule or modify the timing thereunder, after notice in writing to the Ministry of Finance, to which the Ministry of Finance does not timely object. The Mexican Congress is still in charge of approving our net debt ceiling on an annual basis, and we must coordinate with the Ministry of Finance to establish an annual calendar to incur such indebtedness. Any indebtedness (internal or external) we incur must be registered with the *Registro de las Obligaciones Financieras* (Financial Obligations Registry) maintained by the Ministry of Finance. PIDIREGAS financings are also regulated by the CFE Law and the Federal Law of Public Debt, and as such are subject to the approval of the Ministry of Finance.

Under applicable laws and regulations, our five-year business plan and annual budget must be authorized by the Board of Directors. Our annual budget must also be submitted to the Ministry of Finance together with an estimation of our financial condition target and expenditure ceiling for the relevant fiscal year. Our financial condition target and expenditure ceiling are reviewed by the Ministry of Finance and included in the Federal Budget, which is approved by the Mexican Chamber of Deputies on an annual basis.

As of January 1, 2016, we are subject to a new dividend policy that may require us to pay a dividend to the Mexican government on an annual basis, which will be approved and determined by the Ministry of Finance and approved by the Mexican Congress. In connection with this dividend, we will be required to submit a report to the Ministry of Finance each year disclosing our financial results for the previous fiscal year, investment and financing plans for the following five years and an analysis of the profitability of these plans and projections.

Our activities are also subject to Mexico’s environmental laws and regulations. See “—Environmental and Sustainability Matters” for a discussion of the environmental legal framework and our compliance efforts relating thereto.

We are not subject to the Commercial Bankruptcy Act or any Mexican reorganization or bankruptcy law, and thus cannot be declared in reorganization or bankrupt. Our liquidation and dissolution would be carried out pursuant to law, which would address the applicable rules and the manner in which our outstanding obligations would be met. See “Risk Factors—Risk Factors Related to the Notes—We are not subject to the bankruptcy laws of Mexico and certain of our assets cannot be attached by creditors.”

### ***Private Participation in the Electricity Sector***

Prior to the enactment of the Energy Reform Decree and the Electric Industry Law, the generation of electricity was the only sector of the Mexican electricity industry in which the private sector was permitted to participate. Private companies were permitted to make the following investments in the electricity generation sector:

- *Self-supply* – The generation of electrical energy by a private company in quantities limited to its own consumption requirements.
- *Co-generation* – The simultaneous production of electrical energy and heat, where the resulting heat is captured and used for heating purposes.
- *Independent production for export* – The generation of electrical energy by a private producer that has obtained a permit from the CRE, which energy must be used exclusively for export.
- *Minor production* – The self-supply of small rural communities or remote areas lacking in sufficient electrical energy services from us, with a maximum total capacity of 1 MW.
- *Importation* – Obtain permits to acquire electrical energy from foreign generation plants pursuant to agreements entered into directly between the foreign supplier and such private companies.

Pursuant to the Electric Industry Law, private companies are now permitted to make the following investments in the electricity sector:

- *Generation* – Obtain permits to construct, own and operate generation plants with a generation capacity greater than or equal to 0.5 MW for purposes of selling electrical energy to authorized suppliers or to qualified users in the Wholesale Electricity Market. The acquisition of electrical energy from foreign generation plants only requires an authorization from the CRE, and the generation of electrical energy by a private company in quantities limited to its own consumption does not require a permit.
- *Transmission and Distribution* – Enter into partnerships or agreements with us or the Ministry of Energy for the financing, installation, maintenance, management, operation and expansion of transmission and distribution infrastructure. We continue to provide the public service of transmission and distribution of electricity and to be responsible for the *Red Nacional de Transmisión* (National Transmission Network) and the *Redes Generales de Distribución* (General Distribution Networks).
- *Commercialization* – Obtain permits to supply electrical energy to end users under a regulated rate regime as well as to sell electrical energy in the Wholesale Electricity Market. Private companies may also sell electrical energy to qualified users under freely negotiated power purchase agreements, provided that they inform the CENACE accordingly pursuant to the *Reglas del Mercado* (Market Regulations) issued by the Ministry of Energy.

As of the date of this offering memorandum, most of the private sector participation in the generation of electricity continues to occur through IPPs. IPPs are permitted to build, finance, operate and maintain electricity generation plants, provided that these plants meet certain quality and technical standards promulgated by the Ministry of Energy in Mexico. The electricity generated by IPPs must be sold to CFE under long-term generation agreements at fixed prices. As of March 31, 2019, we were under contract to purchase electricity from 31 IPPs.

#### ***National Center for Energy Control (CENACE)***

On August 28, 2014, the CENACE, a decentralized public entity of the Mexican government, was created to act as the independent operator of the National Power System and the Wholesale Electricity Market, and ensure open and non-discriminatory access to the electric transmission grid and distribution systems. The CENACE is also responsible for submitting proposals to the Ministry of Energy to promote the expansion and modernization of the General Distribution Networks. The Wholesale Electricity Market is expected to allow generators, suppliers and qualified users to purchase and sell electricity through competitive processes managed by the CENACE, and the CENACE is also permitted to enter into contracts or partnerships with private companies for the provision of ancillary services related to the operation of the Wholesale Electricity Market.

#### **Litigation**

In the ordinary course of our business, we are party to various labor-related lawsuits filed against us by current and past employees. As of March 31, 2019, we had established a provision for employee benefits of Ps. 5.9 billion for our estimated liability in respect of these lawsuits, which provision is based on the trend of labor-related lawsuits resolved in the last five years. We do not believe that the resolution of these lawsuits will have a material adverse effect on our financial condition or results of operations.

Furthermore, in the ordinary course of our business, we are party to various criminal, tax, civil, commercial, administrative and agricultural lawsuits and arbitration proceedings. We believe that some of these proceedings may be relevant; however, given the different stages of such proceedings, we are not yet able to assess whether they would have a material adverse effect on our financial condition or results of operations. In particular, as of the date of this offering memorandum, we are in arbitration proceedings with four companies (IMG, TransCanada, Carso and IEnova), regarding the costs that CFE has incurred due to delays in the entry into operation of seven pipelines. We do not intend to breach any provision under our current contracts and have ongoing negotiations with all companies involved in the arbitration proceedings.

For more information on our legal and administrative proceedings, see Note 20 to our annual financial statements and Note 19 to our interim financial statements.

## MANAGEMENT

The Board of Directors consists of 10 members. The President of Mexico appoints five members, including the Minister of Finance and the Minister of Energy, who serves as the Chairman of the Board of Directors. Four part-time independent board members are appointed by the President and ratified by the *Cámara de Senadores* (Senate), and the remaining board member is appointed by SUTERM, our labor union. The President of Mexico also appoints the Chief Executive Officer of CFE. Except for the five independent members, who are appointed for a five-year term, the members of the Board of Directors are not appointed for a specific term. Board members, except for the independent members and those appointed by SUTERM, serve at the discretion of the President of Mexico. The following charts set forth the current membership of the Board of Directors and top management structure.

### Board of Directors of CFE

<b>Name</b>	<b>Position</b>	<b>Year of Appointment</b>
Ing. Norma Rocío Nahle García	Minister of Energy	2018
Dr. Arturo Herrera Gutiérrez	Minister of Finance (pending ratification)	Pending
Dra. Irma Eréndira Sandoval Ballesteros	Minister of Public Administration	2018
Dra. Graciela Márquez Colín	Minister of Economy	2018
Ing. Octavio Romero Oropeza	Chief Executive Officer of PEMEX	2018
Ing. Héctor Sánchez López	Independent Board Member	2019
Ing. Rubén Filemón Flores García	Independent Board Member	2014
Dr. Luis Fernando Gerardo de la Calle Pardo	Independent Board Member	2014
Ing. Enrique de Jesús Zambrano Benítez	Independent Board Member	2014
Sr. Víctor Fuentes del Villar	General Secretary of SUTERM	2005

### Biographical Information of the Board of Directors

#### *Ing. Norma Rocío Nahle García – Minister of Energy*

Norma Rocío Nahle García holds a Chemical Engineering degree, with a specialization in Petrochemicals, from the Universidad Autónoma de Zacatecas (UAZ). She further studied Chemical Process Engineering at the Universidad Nacional Autónoma de México (UNAM) and Economic Viability in Industrial Processes at the Universidad Veracruzana. She began her career in the petrochemicals complex of Pajaritos, Cangrejera and Morelos of PEMEX, where she worked in the administrative, financial, processing, planning and quality control areas. In addition, in the private sector, she worked in Industrias Resistol.

#### *Dr. Arturo Herrera Gutiérrez – Minister of Finance*

Arturo Herrera Gutierrez holds a Ph.D. in Economics from New York University. He also has a bachelor's degree in Economics from UAM and a master's degree in Economics from the Colegio de México. He began his career at the Ministry of Finance, later becoming the General Director for Financial Management and then Secretary of Finance for the Government of Mexico. He was also a Senior Public Sector Management Specialist, later becoming a Practice Manager, in the Public Sector Unit at the World Bank.

#### *Dra. Irma Eréndira Sandoval Ballesteros – Minister of Public Administration*

Irma Eréndira Sandoval Ballesteros holds a Ph.D. in Political Science from the University of California at Santa Cruz. She has two bachelor's degrees: one in Economics from UNAM and one in Sociology from the Universidad Autónoma Metropolitana (UAM). She also has a master's degree in Latin American Studies from the Political and Social Sciences Department at UNAM and in Political Science from the University of California. She served as a researcher at the Institute of Social Research of the UNAM.

#### *Dra. Graciela Márquez Colín – Minister of Economy*

Graciela Márquez Colín holds a Ph.D. in Economic History from Harvard University. In 2002, her thesis received the Gerschenkron Prize awarded by the Economic History Association. She is a member of the National System of Researchers of the Consejo Nacional de Ciencia y Tecnología (CONACYT) in Mexico. She has taught at

several universities, including El Colegio de México, UNAM, ITESM, UAM, Universidad de Guanajuato and the Universidad Autónoma de Baja California. Dra. Márquez taught seminars at Stanford University, Harvard University and at the University of California, San Diego.

***Ing. Octavio Romero Oropeza – Chief Executive Officer of PEMEX***

Octavio Romero Oropeza is the current CEO of Petróleos Mexicanos (PEMEX) and Chairman of the Board of Pemex Exploración y Producción, Pemex Transformación Industrial, Pemex Perforación y Servicios, Pemex Logística, Pemex Fertilizantes and Pemex Etileno, each, a subsidiary productive enterprise of PEMEX. He was President of the Morena Political State Council of Tabasco from January 2013 to March 2015. Mr. Oropeza was born in Jalapa, Tabasco on January 20, 1959. He graduated as an agronomist from the Colegio Superior de Agricultura Tropical of Cárdenas, Tabasco. He began his career as an academic at the College of Sciences and Humanities and at the Juárez Autonomous University of Tabasco. In addition, he had commercial and livestock activities in his home state.

***Ing. Héctor Sánchez López – Independent Board Member***

Héctor Sánchez López is a founding member of the Oaxaca social and political organization *Coalición de Obreros, Campesinos y Estudiantes del Istmo* (Coalition of Workers, Peasants and Students of the Isthmus, COCEI). From 1989 to 1992, he was Municipal President of Juchitán. He represented the state of Oaxaca as a Senator from 1994 to 2000, during which he was Coordinator of the PRD caucus in the Senate. Afterwards, from 2000 to 2003, he served as a Federal Deputy in the LVIII Legislature. He has been a candidate for the Governor of Oaxaca twice. Currently, he is a member of the *Partido Alternativa Socialdemócrata y Campesina* (Alternative Social-Democratic and Peasant Party), as well as a member of its Federated Executive Committee, forming part of the peasant area.

***Ing. Rubén Filemón Flores García – Independent Board Member***

Rubén Filemón Flores García received his degree in mechanic electrical engineering from the ITESM, holds a master's in business administration from the Universidad Autónoma de Guadalajara (UAG) and has further studied power systems control chambers at the University of Sweden. For 18 years, he was a professor at the Instituto Tecnológico y de Estudios Superiores de Occidente, teaching mechanical electrical engineering, and he worked at CFE for 25 years, where his last position was director of Mexico's National Center for Energy Control (currently the CENACE). For several years, he served as General Director of Supply and Distribution of Electric Energy and Nuclear Resources and Vice-minister of Electricity at the Ministry of Energy.

***Lic. Luis Fernando Gerardo de la Calle Pardo – Independent Board Member***

Luis Fernando Gerardo de la Calle Pardo has a degree in economics from the Instituto Tecnológico Autónomo de México (ITAM), as well as master's and doctorate degree in economics from the University of Virginia. His professional trajectory includes participating in the design and implementation of NAFTA and serving as Vice-minister of International Commercial Negotiations in the Ministry of Economy. Currently he is Vice-president of International Trade and Investment Policy at the International Chamber of Commerce, CEO and founding partner of the consulting firm De La Calle, Madrazo, Mancera, S.C., President of Hill & Knowlton Latino America and professor at the ITAM.

***Ing. Enrique de Jesús Zambrano Benítez – Independent Board Member***

Enrique de Jesús Zambrano Benítez has an engineering degree from the Massachusetts Institute of Technology (MIT) and holds a master's degree from Stanford University. He is a businessman with ample international experience and founder of Grupo Proeza, a firm that provides support and guidance to companies conforming Grupo Metalsa and Citrofrut. In 1999, he created ProzaGrede, a company dedicated to the manufacturing of nodular iron parts. In 2007, Ing. Enrique de Jesús Zambrano acquired full participation in Metalsa and ProezaGrede's capital, and, in 2010, he strengthened its presence in both North and South American markets, inaugurated a plant in India and ventured in the health sector with Zánitas, its first hospital.

## ***Víctor Fuentes del Villar – General Secretary of SUTERM***

Víctor Fuentes del Villar has worked with CFE for more than 59 years, as he started working for the company from a very young age. After serving in many different positions within the company, including as Labor Secretary of SUTERM, he was appointed as General Secretary of SUTERM in 2005 and reappointed in 2007.

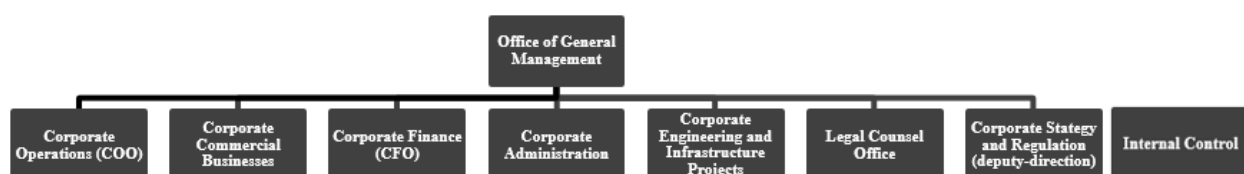
### **Compensation of Directors and Officers**

For the year ended December 31, 2018, the total amount paid in staff salaries and benefits was Ps. 63.2 billion. The total amount paid to our independent board members and their staff was Ps. 9.6 million.

The following chart sets forth our current management structure.

### **CFE's Management Structure**

According to the *Estatuto Orgánico de la CFE* (Organizational Chart of the CFE) published in the Official Gazette of the Federation on April 12, 2017, CFE's management structure is:



Source: CFE.

### **CFE Board Committees**

On February 21, 2019, the Board of Directors appointed members to and convened the four committees established by the CFE Law to support its work. Unless otherwise specified in the CFE Law, the memberships of these committees must consist of at least three, but no more than five, members of the Board of Directors, two of whom must be independent members of the Board of Directors. Each of the Secretary of Energy, the Secretary of Finance and Public Credit and any ministry-level secretary serving as a member of the Board of Directors may designate one or more alternates to take his or her place at committee meetings, provided that these alternates are public officials whose positions are not more than two levels below such secretary's position in the Mexican government.

The committees may authorize a representative of the Chief Executive Officer to attend their meetings as a guest with the right to participate, but not vote, when deemed advisable for the performance of their duties.

### **Audit Committee**

The Audit Committee of the Board of Directors is required to, among other duties set forth in the CFE Law or determined from time to time by the Board of Directors, oversee our management, evaluate our financial and operational performance, monitor the status of our internal control systems, as well as nominate our external auditors, whose appointments are approved by the Board of Directors.

The Audit Committee is chaired by each of its members on a rotating, annual basis, as determined by the Board of Directors.

The Audit Committee consists of the following members:

- Ing. Rubén Flores García, independent member of the Board of Directors and President of the Audit Committee;
- Dr. Luis Fernando Gerardo de la Calle Pardo, independent member of the Board of Directors; and

- Ing. Enrique de Jesús Zambrano Benítez, independent member of the Board of Directors.

A representative of the Chief Executive Officer, the Comptroller, the General Counsel or any other person may attend the Audit Committee's meetings as a guest with the right to participate, but not vote, when deemed advisable and appropriate given the subject matter to be discussed.

### **Human Resources and Compensation Committee**

The Human Resources and Compensation Committee is chaired by an independent member of the Board of Directors and includes the Secretary of Finance and Public Credit as a permanent member. The duties of the Human Resources and Compensation Committee include, among others set forth in the CFE Law or determined from time to time by the Board of Directors, proposing the compensation mechanism of the Chief Executive Officer and other members of our senior management within three levels of the Chief Executive Officer, as well as proposing hiring policies, performance management guidelines and the compensation of all of our other employees.

The Human Resources and Compensation Committee consists of the following members:

- Dr. Luis Fernando Gerardo de la Calle Pardo, independent member of the Board of Directors and President of the Human Resources and Compensation Committee;
- Ing. Enrique Zambrano Benítez, independent member of the Board of Directors;
- Dr. Arturo Herrera Gutiérrez, member of the Board of Directors (pending ratification);
- Dra. Graciela Márquez Colín, member of the Board of Directors;
- Ing. Octavio Romero Oropeza, member of the Board of Directors; and
- Sr. Víctor Fuentes del Villar, member of the Board of Directors.

### **Strategy and Investment Committee**

The Strategy and Investment Committee is chaired by an independent member of the Board of Directors on a rotating annual basis and is required to, among other duties set forth in the CFE Law or determined from time to time by the Board of Directors, analyze our business plan and assist the Board of Directors in the approval of guidelines, priorities and general policies related to investments made by us.

The Strategy and Investment Committee consists of the following members:

- Ing. Enrique de Jesús Zambrano Benítez, independent member of the Board of Directors and President of the Strategy and Investment Committee;
- Ing. Rubén Flores García, independent member of the Board of Directors;
- Ing. Rocío Nahle García, member of the Board of Directors;
- Dr. Arturo Herrera Gutiérrez, member of the Board of Directors (pending ratification);
- Dra. Graciela Márquez Colín, member of the Board of Directors; and
- Sr. Víctor Fuentes del Villar, member of the Board of Directors.



## Acquisitions, Leasing, Public Works and Services Committee

The Acquisitions, Leasing, Public Works and Services Committee is chaired by an independent member of the Board of Directors on a rotating annual basis and is required to, among other duties set forth in the CFE Law or determined from time to time by the Board of Directors, review, evaluate, monitor and develop recommendations regarding our annual programs for acquisition, construction and services contracts, and determines whether an exception to the public bidding process is applicable in specific cases.

The Acquisitions, Leasing, Public Works and Services Committee consists of the following members:

- Dr. Luis Fernando Gerardo de la Calle Pardo, independent member of the Board of Directors and President of the Acquisitions, Leasing, Public Works and Services Committee;
- Ing. Rubén Flores García, independent member of the Board of Directors;
- Dra. Irma Eréndira Sandoval Ballesteros, member of the Board of Directors;
- Dra. Graciela Márquez Colín, member of the Board of Directors; and
- Sr. Víctor Fuentes del Villar, member of the Board of Directors.

### Senior Management of CFE as of March 31, 2019

Name	Position	Year of Appointment to Current Position
Lic. Manuel Bartlett Díaz	Chief Executive Officer	2018
Ing. Carlos Andrés Morales Mar	Director of Operations	2018
Lic. Martha Laura Bolívar Mez	Director of Administration	2018
Dr. José Antonio Rojas Nieto	Director of Finance	2018
Lic. César Alejandro Hernández Mendoza	Director of Commercial Business	2018
Luis Bravo Navarro	Manager of Corporate Communications	2018
Dr. Raúl Armando Jiménez Vázquez	General Counsel	2018

### Biographical Information of our Senior Management

#### *Manuel Bartlett Díaz – Chief Executive Officer*

Manuel Bartlett Díaz graduated as a lawyer from the UNAM and holds postgraduate degrees in Public Law from the University of Paris (France) and in Public Administration from the University of Victoria (England). He also holds a Ph.D. from the Sciences Department at UNAM. He served as Managing Director of Governance in the Ministry of the Interior (1970-1976), Secretary of the Federal Electoral Commission (1970-1976), Minister of Foreign Affairs (1976-1979), Secretary General of the National Executive Committee of the Institutional Revolutionary Party (1981-1982), Minister of the Interior (1982-1988), President of the Federal Electoral Commission (1982-1988) and Minister of Education (1988-1992).

#### *Carlos Andrés Morales Mar – Director of Operations*

Carlos Andrés Morales Mar is a Mechanical Electric Engineer from the IPN. During his long career at CFE, he served as Superintendent of Operations in the CT Manzanillo, Deputy Manager of Thermoelectric Generation and Regional Manager of Production of the Southeast region. In 1995, he retired from CFE and pursued an academic career teaching several seminars and courses on energy, economics, administration and finance in different countries. He has a Diploma in Electric Power Cogeneration by the Postgraduate Studies Division of the UNAM. As a speaker, he has participated in several events, including the World Energy Conference in Cannes, France.

***Martha Laura Bolívar Mez – Director of Administration***

Martha Laura Bolívar Mez holds a bachelor of science degree (B.S.) in Political Science and Public Administration from UNAM, a master's degree in Political Science also from UNAM and a master's degree in Public Administration from the National Institute of Public Administration, A.C. She served as a parliamentary advisor in the Senate of the Republic, during the 62nd and 63rd Legislatures. She has served as Administrative Coordinator of the General Direction of Programming, Organization and Budget of the Ministry of Commerce and Industrial Development. She was Head of the Procurement Department of the Federal Tax Court, Head of the Department of Rights Policy and Studies of Preferential Treatments of the General Direction for Revenue Policy and International Fiscal Affairs in the Ministry of Finance and Public Credit. She also served as Junior Consultant for the Institute for Housing and Urban Development Studies (HIS) in Rotterdam, Netherlands, for the Municipal Strengthening Program of the IDB-Solidarity-Banobras and has worked as a researcher for the National Center for Municipal Development of the Ministry of the Interior.

***José Antonio Rojas Nieto – Director of Finance***

José Antonio Rojas Nieto holds a B.S. in Mathematics, a master's degree in Mathematics and a master's degree in Economics from the Graduate School of Economics, UNAM (he graduated in 1986 with a thesis entitled "Political economics of energy supplies and nuclear development in Mexico"). He holds a Ph.D. in Economics from the Economics Department at UNAM. He served as a technician in the Economic Studies Department of the Managing Direction of Programming of CFE (1990-2016). He also served as an advisor to the Department of Strategy and Regulation of CFE (2016-2018). He was a professor of Mathematics at ITESO, Universidad Jesuita de Guadalajara (1973-1974) and a professor at the Economics and Energy Department of the Graduate School of Political Economy, UNAM (1979-2018). He is coauthor of the book *A Crisis of Financialization*, C. Lapavistas (ed.), Brill, 2009, with Carlos Morera Camacho. He received the Jesus Silva Herzog Economic Research Award from the Institute of Economic Research, UNAM in 1986. He served as Researcher of International Nuclear Development for the National Institute of Nuclear Research from 1980 to 1985. He was a member of the Observatorio Ciudadano de Energía AC from 1999 to 2018.

***César Alejandro Hernández Mendoza – Director of Commercial Business***

César Alejandro Hernández Mendoza holds a B.S. in Political Science and Public Administration, a master's degree in Political Science and a Ph.D. in Social Sciences. He served as coordinator of advisors of the PT-Morena Parliamentary Group in the Senate. In the National Institute of Public Administration (INAP), he conducted the investigation "The National Governors' Conference: Origins, Development and Perspectives." He serves as Secretary and teaches at the Political and Social Sciences Department at UNAM, where he has taught since 1994.

***Luis Bravo Navarro – Manager of Corporate Communications***

Luis Bravo Navarro holds a B.S. in Communication Sciences from Universidad Iberoamericana, Puebla. He started his career in Televisa, Puebla, as a sports broadcaster and Head of news information where he acted as anchorman and conducted several TV programs. In 1992 he moved to Mexico City where he joined Televisa Networks ECO information system led by Jacobo Zabludovsky, and where he also acted as anchorman and reporter. In 1993, he moved to New York City where he produced and directed the newscast "El mundo al Instante," intended for both the Mexican and Hispanic-American communities living in the NYC area. He also collaborated with Telemundo Networks as a reporter and editor. Back in Mexico in 1997, he ventured in the financial sector as a consultant on Forex and Derivatives strategies in various brokerage firms and financial institutions. In 2012, he became a candidate for State Congress for the 11th District of the City of Puebla representing the coalition called Movimiento Progresista formed by the Partido del Trabajo, Partido de la Revolución Democrática and Movimiento Ciudadano. In 2015, he ran again for State Congress for the 6th district of the City of Puebla representing the newly created Morena party. From 2012 to 2018, he served as Social Communications Coordinator of the PT-Morena Parliamentary Group in the Senate.

***Raúl Armando Jiménez Vázquez – General Counsel***

Raúl Armando Jiménez Vázquez holds a B.S. of Laws from the Law School of the UNAM where he also obtained a Master's degree and a Ph.D., all with honors. He is a Professor at the UNAM Law School, where he

teaches Human Rights and International Criminal Law to bachelor's degree students and Legal Epistemology to Postgraduate Students. He is a Member of the National System of Researchers (SNI) of CONACYT. He is author of numerous books and essays on the topics of his academic specialty and a permanent juridical jurist for the magazine "Siempre." For more than 20 years, he served in the Federal Public Administration occupying, among others, the following positions: Head of the Litigation Department of Income Tax of the Federal Prosecutor's Office (SHCP), Legal Director of Federal Tax Audit (SHCP), Director of "Amparos" (SHCP), General Coordinator of Regulations (SECOGEF), Boat Leasing Manager (PEMEX) and Executive Secretary of the Construction, Acquisition, Leasing and Chartering of Vessels (PEMEX).

## DESCRIPTION OF THE NOTES

This section of this offering memorandum summarizes the material terms of the indenture (as defined under “—General—Indenture”), the notes and the guarantees. It does not, however, describe every aspect of the indenture, the notes or the guarantees. Upon request, the Issuer will provide you with a copy of the indenture.

See “—Certain Definitions” for certain defined terms used in this “Description of the Notes” section. References to “holders” mean those who have notes registered in their names on the books that the trustee maintains for this purpose, and not those who own beneficial interests in notes issued in book-entry form through Euroclear, Clearstream or other applicable clearing system or in notes registered in street name. Owners of beneficial interests in the notes should refer to “Form of Notes, Clearing and Settlement.”

### **General**

#### ***Indenture***

The notes will be issued under the indenture dated as of June 16, 2015 between the Issuer and Deutsche Bank Trust Company Americas, as trustee (the “base indenture”), as amended and supplemented by the first supplemental indenture dated as of January 30, 2017 among the Issuer, CFE Distribución, CFE Suministrador de Servicios Básicos, CFE Transmisión, CFE Generación I, CFE Generación II, CFE Generación III, CFE Generación IV, CFE Generación V, CFE Generación VI (collectively, the “guarantors”) and the trustee (the “first supplemental indenture”), and the second supplemental indenture dated as of July 13, 2017, among the Issuer and the trustee (together with the base indenture and the first supplemental indenture, the “indenture”). The trustee can enforce your rights against the Issuer and the guarantors if the Issuer or the guarantors default in respect of the notes. There are some limitations on the extent to which the trustee acts on your behalf, which is described under “—Default and Acceleration of Maturity.”

#### ***Principal and Interest***

The aggregate principal amount of the notes will initially be U.S.\$ 615,000,000. The aggregate principal amount of the notes will amortize on an annual basis according to the schedule set forth below under “—Redemption and Purchase—Redemption by Amortization.” The notes will mature on July 30, 2049 and the final Amortization Amount (as defined below) will be due and payable on such date.

The notes will bear interest at a rate of 5.00% per year from July 30, 2019. Interest on the notes will be payable semi-annually on January 30 and July 30 of each year, beginning on January 30, 2020, to the holders in whose names the notes are registered at the close of business on the January 29 or July 29 immediately preceding the related interest payment date.

The Issuer will pay interest on the notes on the interest payment dates set forth above and at maturity. Each payment of interest due on an interest payment date or at maturity will include interest accrued from and including the last date to which interest has been paid or made available for payment, or from the issue date, if none has been paid or made available for payment, to but excluding the relevant payment date. The Issuer will compute interest on the notes on the basis of a 360-day year of twelve 30-day months.

#### ***Guarantors***

On January 30, 2017, the Issuer entered into a guaranty agreement with the guarantors (the “guaranty agreement”), pursuant to which each of the guarantors unconditionally and irrevocably agreed to guarantee and become jointly and severally liable with the Issuer and each of the other guarantors for the payment in full of all obligations incurred by the Issuer under any international financial agreement, such as the indenture and the notes, designated in a certificate of designation executed by the Issuer.

The Issuer will execute a certificate of designation as required under the guaranty agreement that designates the notes as benefitting from the guarantees set forth in the guaranty agreement. Pursuant to the guaranty agreement and that certificate of designation, the guarantors will, unconditionally and irrevocably, jointly and severally, guarantee (the “guarantees”) the full and punctual payment of principal, premium, if any, interest, Additional Amounts (as defined under “—Additional Amounts”) and any other amounts due in respect of the notes (whether at stated maturity, upon redemption, purchase pursuant to an offer to purchase or acceleration or otherwise). If any

such payments are subject to withholding for or on account of any taxes, duties, assessments or other governmental charges imposed with respect to that payment by a Mexican taxing authority, the applicable guarantor will pay such Additional Amounts to the holders of the notes as are necessary so that the net amount received equals the amount that would have been received absent such withholding as described under, and subject to the limitations set forth under, “—Additional Amounts.”

If the Issuer or the guarantors create additional Subsidiaries in the future, any Subsidiary or Subsidiaries (1) to which the Issuer or a guarantor transfers all or substantially all of the Issuer and the guarantors’ assets, taken as a whole or (2) which incurs any Public External Indebtedness or provides a guarantee of any Public External Indebtedness of the Issuer or any guarantor must also become a guarantor (an “additional guarantor”) of the notes as set forth under “—Affirmative Covenants—Future Guarantors.” Any additional guarantor will be required to execute and deliver a joinder in accordance with the guaranty agreement.

Each guarantor will be released and relieved of its obligations under its guarantee if it ceases to be a Subsidiary of the Issuer.

### ***Status***

The notes will constitute the Issuer’s direct, general, unconditional, unsecured and unsubordinated Public External Indebtedness. The notes rank and will rank without any preference among themselves and equally with all of the Issuer’s other unsubordinated Public External Indebtedness. It is understood that this provision shall not be construed so as to require the Issuer to make payments under the notes ratably with payments being made under any of the Issuer’s other Public External Indebtedness.

The guarantees will constitute direct, general, unconditional, unsecured and unsubordinated Public External Indebtedness of the guarantors. The payment obligations of each guarantor under the guarantees rank and will rank without any preference among themselves and equally with all of such guarantor’s other unsubordinated Public External Indebtedness. It is understood that this provision shall not be construed so as to require any guarantor to make payments under the notes ratably with payments being made under any of its other Public External Indebtedness.

The Mexican government does not guarantee or secure the Issuer’s obligations or those of the guarantors and has no obligation to pay the principal, interest or any other amounts payable on the notes in the event that the Issuer’s cash flows and/or assets or those of the guarantors are not sufficient to make any such payments. The notes do not grant in any way recourse against the Mexican government or rights over the ownership, control or assets of the Issuer or of the guarantors. The notes will not be secured by any of the assets or properties of the Issuer or the guarantors.

### ***Form and Denominations***

The notes will be issued only in fully registered book-entry form without coupons and in denominations of U.S.\$ 200,000 and integral multiples of U.S.\$ 1,000 in excess thereof.

The notes will be issued in the form of global notes. Except in limited circumstances, the notes will not be issued in physical, certificated form. See “Form of Notes, Clearing and Settlement.”

### ***Further Issues***

To the extent permitted by relevant ROC authorities and subject to the receipt of all necessary regulatory and listing approvals from such authorities, including but not limited to the TPEX and the Taiwan Securities Association, the Issuer reserves the right, from time to time without the consent of holders of the notes, to issue additional notes having the same terms and conditions as the notes in all respects, except for the issue date, issue price and, if applicable, the date of first payment of interest, the date from which interest will accrue, ISIN and/or other securities numbers and, to the extent necessary, certain temporary securities law transfer restrictions; *provided, however*, that any such additional notes issued with the same ISIN as the notes issued pursuant to this offering memorandum shall be issued either in a qualified reopening for U.S. federal income tax purposes or with no more than *de minimis* original issue discount for U.S. federal income tax purposes. Additional notes issued in this manner, to the extent permitted by relevant ROC authorities and subject to the receipt of all necessary regulatory and listing approvals from such authorities, including but not limited to the TPEX and the Taiwan Securities Association, will

increase the aggregate principal amount of, and be consolidated with and form a single series with, the previously outstanding notes.

### ***Payment of Principal and Interest***

Principal of, and interest on, the notes will be payable at the offices or agencies maintained by the Issuer for such purpose (which will initially be the office of the Deutsche Bank AG, London Branch).

The Issuer will arrange for payments to be made on global notes on the specified payment dates by wire transfer to the common depository, as the registered owner of the notes, which will receive the funds for distribution to the holders. An indirect holder's or beneficial owner's right to receive any such payments will be governed by the rules and practices of Euroclear, Clearstream or other applicable clearing system. See "Form of Notes; Clearing and Settlement."

The Issuer will arrange for payments to be made on registered certificated notes on the specified payment dates to the registered holders of the notes. The Issuer will arrange for such payments by wire transfer or by check mailed to the holders at their registered addresses.

If any payment date on the notes is not a business day, the Issuer will make the payment on the next business day. Payments postponed to the next business day in this situation will be treated under the indenture as if they were made on the original due date and no interest on the notes will accrue as a result of any such delay in payment.

For purposes of all payments of interest, principal or other amounts contemplated herein, "business day" means any day that is not a Saturday or Sunday, and that is not a day on which banking institutions in New York City, Mexico City or Taipei (or in the city where the relevant paying or transfer agent is located) are required or authorized by law, regulation or executive order to close.

Notwithstanding the foregoing, all payment dates with respect to the notes, whether at maturity, upon earlier redemption or on any interest payment date, will be determined in accordance with the time zone applicable to New York City. Because of time zone differences, the payment dates on which the Issuer makes payment on the notes may not be the same business day in the applicable jurisdiction of the relevant holder of notes. In addition, deliveries, payments and other communications relating to the notes are likely to be carried out through Euroclear and Clearstream, which means that such delivery, payment or other communication can only be carried out on days when those systems are open for business. Those systems may not be open for business on days when banks, brokers and other institutions are open for business in the United States or Taiwan. See "Form of Notes, Clearing and Settlement."

### ***Unclaimed Payments; Prescription***

If any money that the Issuer or any guarantor pays to the trustee or any paying agent to make payments on any notes is unclaimed at the end of two years after the applicable payment was due and payable, then such money will be repaid to the Issuer or such guarantor upon request. The Issuer or such guarantor will hold such unclaimed money in trust for the relevant holders of those notes. After such repayment, neither the trustee nor any paying agent will be liable for the payment. However, the obligations of the Issuer and the guarantors, as applicable, to make payments on the notes as they become due will not be affected until the expiration of the prescription period, if any, specified in the notes.

To the extent permitted by law, claims against the Issuer or the guarantors for the payment of principal of, or interest or other amounts due on, the notes (including Additional Amounts) will become void unless made within five years of the date on which such payment first became due.

### ***Redemption and Purchase***

Neither the Issuer nor the guarantors will be permitted to redeem the notes, and you will not be entitled to require the Issuer to purchase your notes from you, before their stated maturity date, except as set forth below.

### ***Redemption by Amortization***

Unless previously redeemed, or purchased and cancelled, the notes will be redeemed in 30 installments on each amortization date specified in the column captioned “Amortization Date” (each, an “Amortization Date”) at the related amortization amount specified in the column captioned “Amortization Amount” (each an “Amortization Amount”) payable as provided under “—General—Payment of Principal and Interest.” The outstanding principal amount of the notes shall be reduced by the applicable Amortization Amount for all purposes with effect from the relevant Amortization Date such that the outstanding aggregate principal amount of the notes following such reduction shall be as specified in the column captioned “Outstanding Aggregate Principal Amount” below, unless the payment of the relevant Amortization Amount is improperly withheld or refused. If the payment of the relevant Amortization Amount is improperly withheld or refused, the relevant principal amount will remain outstanding until whichever is the earlier of (a) the day on which all sums due in respect of such notes up to that day are received by or on behalf of the relevant holders and (b) the business day after the trustee has given notice to the holders of receipt of all sums due in respect of all notes up to that business day. The notes shall be finally redeemed on July 30, 2049 at their final Amortization Amount payable as provided below.

<b><u>Year</u></b>	<b><u>Amortization Date</u></b>	<b><u>Amortization Amount</u></b>	<b><u>Outstanding Aggregate Principal Amount</u></b>
1	July 30, 2020	U.S.\$20,500,000	U.S.\$594,500,000
2	July 30, 2021	U.S.\$20,500,000	U.S.\$574,000,000
3	July 30, 2022	U.S.\$20,500,000	U.S.\$553,500,000
4	July 30, 2023	U.S.\$20,500,000	U.S.\$533,000,000
5	July 30, 2024	U.S.\$20,500,000	U.S.\$512,500,000
6	July 30, 2025	U.S.\$20,500,000	U.S.\$492,000,000
7	July 30, 2026	U.S.\$20,500,000	U.S.\$471,500,000
8	July 30, 2027	U.S.\$20,500,000	U.S.\$451,000,000
9	July 30, 2028	U.S.\$20,500,000	U.S.\$430,500,000
10	July 30, 2029	U.S.\$20,500,000	U.S.\$410,000,000
11	July 30, 2030	U.S.\$20,500,000	U.S.\$389,500,000
12	July 30, 2031	U.S.\$20,500,000	U.S.\$369,000,000
13	July 30, 2032	U.S.\$20,500,000	U.S.\$348,500,000
14	July 30, 2033	U.S.\$20,500,000	U.S.\$328,000,000
15	July 30, 2034	U.S.\$20,500,000	U.S.\$307,500,000
16	July 30, 2035	U.S.\$20,500,000	U.S.\$287,000,000
17	July 30, 2036	U.S.\$20,500,000	U.S.\$266,500,000
18	July 30, 2037	U.S.\$20,500,000	U.S.\$246,000,000
19	July 30, 2038	U.S.\$20,500,000	U.S.\$225,500,000
20	July 30, 2039	U.S.\$20,500,000	U.S.\$205,000,000
21	July 30, 2040	U.S.\$20,500,000	U.S.\$184,500,000
22	July 30, 2041	U.S.\$20,500,000	U.S.\$164,000,000
23	July 30, 2042	U.S.\$20,500,000	U.S.\$143,500,000
24	July 30, 2043	U.S.\$20,500,000	U.S.\$123,000,000
25	July 30, 2044	U.S.\$20,500,000	U.S.\$102,500,000
26	July 30, 2045	U.S.\$20,500,000	U.S.\$82,000,000
27	July 30, 2046	U.S.\$20,500,000	U.S.\$61,500,000
28	July 30, 2047	U.S.\$20,500,000	U.S.\$41,000,000
29	July 30, 2048	U.S.\$20,500,000	U.S.\$20,500,000
30	July 30, 2049	U.S.\$20,500,000	

References to “principal” shall, unless the context requires otherwise, be deemed to include any Amortization Amount and references to the “due date” for payment shall, unless the context requires otherwise, be deemed to include any Amortization Date.

### ***Redemption for Taxation Reasons***

The notes may be redeemed at the Issuer's or any guarantor's option in whole, but not in part, at any time, at a price equal to 100% of the outstanding principal amount thereof (the "Tax Redemption Price"), plus accrued and unpaid interest thereon (and Additional Amounts, if any), to the date fixed for redemption (the "Tax Redemption Date"), on giving not less than 30 nor more than 60 days' notice to the holders (which notice shall be irrevocable), if:

- (a) The Issuer or such guarantor certifies to the trustee immediately prior to the giving of such notice that the Issuer or such guarantor has or will become obligated on the next succeeding interest payment date to pay Additional Amounts in excess of the Additional Amounts that the Issuer or such guarantor would be obligated to pay if payments (including payments of interest) on the notes were subject to a tax at a rate of 4.9%, as a result of any change in, or amendment to, or lapse of, the laws, rules or regulations of Mexico or any political subdivision or any taxing authority thereof or therein affecting taxation, or any change in, or amendment to, an official interpretation or application of such laws, rules or regulations, which change, amendment or lapse becomes effective on or after the date of issuance of the notes; and
- (b) prior to the publication of any notice of redemption, the Issuer or such guarantor delivers to the trustee (i) a certificate signed by an authorized officer of the Issuer or such guarantor stating that the obligation referred to in (a) cannot be avoided by the Issuer or such guarantor, taking reasonable measures available to the Issuer or such guarantor and (ii) an opinion of independent Mexican legal counsel of recognized standing to the effect that the Issuer or such guarantor has or will become obligated to pay such Additional Amounts as a result of such change, amendment or lapse, and the trustee shall be entitled to accept such certificate and opinion as sufficient evidence of the satisfaction of the condition precedent described in (a) in which event they shall be conclusive and binding on the holders of the notes; *provided* that no such notice of redemption shall be given earlier than 90 days prior to the earliest date on which the Issuer or such guarantor would be obligated but for such redemption to pay such Additional Amounts if a payment in respect of such notes were then due and, at the time such notice is given, such obligation to pay such Additional Amounts remains in effect.

Notice to the paying agent shall be given at least five London business days prior to the latest date on which the Issuer or a guarantor is to give notice to the holders or as otherwise may be agreed between the Issuer or the guarantor and the paying agent.

On the Tax Redemption Date fixed by the Issuer or the relevant guarantor, the Tax Redemption Price will become due and payable and the Issuer or such guarantor will be obligated to pay the Tax Redemption Price, together with accrued interest, and Additional Amounts due, on the notes to the Tax Redemption Date. If the notes are to be redeemed pursuant to the provisions described under this caption, then the notes will cease to bear interest on and after the Tax Redemption Date; *provided* that the Tax Redemption Price and such accrued interest (and Additional Amounts, if any), are duly paid or made available to a paying agent for payment to the holders. All notes redeemed by the Issuer or any guarantor under this provision will be cancelled.

### ***Purchase at the Option of Holders***

If at any time prior to maturity, the Issuer (and in the case of clause (d), the Issuer and the guarantors collectively) ceases to:

- (a) be a public-sector entity of the Mexican government;
- (b) be majority-owned by the Mexican government;
- (c) be a public entity created and appointed pursuant to the Mexican Constitution or Mexican federal laws with the right to generate, transmit, distribute and supply electricity in Mexico; or
- (d) at any time, generate, transmit and distribute at least 75% of the electricity generated, transmitted and distributed by public-sector entities, in each case within Mexico (unless, in



the case of this clause (d), if permitted by Mexican law, the Mexican government shall have assumed or guaranteed the Issuer's obligations under the notes and the indenture)

(in each case, an "Optional Purchase Event"), then the Issuer will give the holders and the trustee written notice thereof not less than 60 days prior to the occurrence of such Optional Purchase Event or, if it is not possible to give 60 days' notice, then the Issuer will give the holders notice in a lesser number of days, but in no event less than 30 days, as shall be practicable given the circumstances. Such notice will contain a written, irrevocable offer (an "Optional Purchase Offer") by the Issuer to purchase, on the date specified in such Optional Purchase Offer (the "Optional Purchase Date"), the notes held by each holder in full, and not in part, at a price equal to the 100% of the outstanding principal amount thereof (the "Optional Purchase Price") plus accrued interest thereon to the Optional Purchase Date. The Optional Purchase Date will be (i) not less than 30 days and not more than 60 days after the date of such notice and (ii) not later than the date of such Optional Purchase Event. The Optional Purchase Price with respect to the notes of holders accepting such Optional Purchase Offer will become due and payable on the Optional Purchase Date, upon presentation and surrender of such notes.

On the Optional Purchase Date, there will become due and payable and the Issuer will be obligated to purchase and pay the Optional Purchase Price, plus accrued and unpaid interest to the Optional Purchase Date, with respect to each note for which the holder has validly and timely elected to have the Issuer purchase that holder's notes. Any note to be purchased as provided under this provision will cease to bear interest on and after the Optional Purchase Date; *provided* that the Optional Purchase Price and such accrued interest is duly paid or made available to a paying agent for payment to the holders entitled thereto. All notes purchased by the Issuer under this provision will be cancelled.

#### ***Purchases of Notes***

The Issuer or any guarantor may at any time purchase notes at any price in the open market, in privately negotiated transactions or otherwise. The Issuer or any guarantor may not resell any notes that it purchases, unless the Issuer or such guarantor registers the resale under the Securities Act.

#### **Affirmative Covenants**

The following affirmative covenants will apply to the Issuer and the guarantors for so long as any notes remain outstanding. These covenants do not limit the ability of the Issuer or any guarantor to incur debt nor do they require the Issuer or any guarantor to comply with financial ratios or to maintain specified levels of net worth or liquidity.

#### ***Delivery of Financial Statements***

The Issuer will deliver to the trustee, and the trustee will make available to the holders, as soon as available, but not later than 180 days after the end of each of the Issuer's fiscal years, a copy in the English language of the Issuer's and its Subsidiaries' audited consolidated balance sheet as at the end of such year and the related consolidated statements of results of operations, changes in equity and changes in cash flows and notes thereto for such year, setting forth in each case in comparative form the figures for the previous fiscal year, and accompanied by the opinion of an independent public accounting firm of recognized standing in Mexico, which opinion (a) will state that such consolidated financial statements present fairly the Issuer's and its Subsidiaries' consolidated financial position as at such dates and the consolidated results of the Issuer's and its Subsidiaries' operations, changes in equity and changes in cash flows for the respective periods then ended in accordance with IFRS, and (b) will not be qualified or limited because of a restricted or limited examination by such accounting firm of any material portion of the Issuer's and its Subsidiaries' records.

The Issuer will deliver to the trustee, and the trustee will make available to the holders, as soon as available, but not later than 90 days after the end of each of the Issuer's fiscal quarters, a copy in the English language of the Issuer's and its Subsidiaries' unaudited condensed consolidated statement of financial position and unaudited condensed consolidated statement of comprehensive income as at the end of such quarter. The trustee shall have no responsibility whatsoever for the accuracy and contents of the financial statements delivered by the Issuer or any guarantor.

If neither the Issuer nor the guarantors are subject to the reporting requirements of Section 13 or 15(d) of the U.S. Securities Exchange Act of 1934, as amended, at any time when the notes are "restricted securities" within

the meaning of Rule 144(a)(3) under the Securities Act, the Issuer and the guarantors (without duplication) will furnish to any holder of notes, or to any prospective purchaser designated by such holder, financial and other information described in Rule 144A(d)(4) with respect to the Issuer and the guarantors to the extent required to permit such holder to comply with Rule 144A in connection with any resale of notes held by such holder.

The Issuer acting through any of its officers will give the Trustee notice of any Event of Default relating to the Issuer or any guarantor, or of any condition or event that with notice or the lapse of time would be an Event of Default relating to the Issuer or any guarantor, within 15 days after the occurrence of such Event of Default or such other event or condition becomes known to the Issuer, and of the measures that the Issuer or such guarantor, as applicable, is taking with respect thereto.

#### ***Maintenance of Government Approvals***

Each of the Issuer and each guarantor will obtain and maintain in full force and effect any actions, orders, authorizations, consents, approvals, licenses, rulings, permits, certifications, exemptions, filings or registrations by or with any governmental authority that may be necessary under the laws of Mexico (each, a “Governmental Approval”) for the performance by the Issuer and each guarantor of its respective obligations under the indenture, the notes or the guarantees, as applicable, or for the validity or enforceability thereof and duly take all necessary and appropriate governmental and administrative action in Mexico in order to make all payments to be made thereunder as required by the indenture, the notes and the guarantees, as applicable.

#### ***Compliance with Applicable Laws and Governmental Approvals***

Each of the Issuer and each guarantor will comply in all material respects with all applicable laws and all applicable Governmental Approvals, except where any failure (individually or in the aggregate) to comply could not reasonably be expected to have a material adverse effect on the ability of the Issuer or the guarantors to perform their respective obligations under the indenture, the notes or the guarantees, as applicable, or where the necessity of compliance with which is contested in good faith.

#### ***Performance of Obligations***

Each of the Issuer and each guarantor will (a) perform all of its respective covenants and comply with all of its respective obligations contained in the indenture, the notes or the guarantees, as applicable, and (b) pay, discharge or otherwise satisfy on or before maturity all of its other material payment obligations except where (i) the amount or validity thereof is being contested in good faith and by appropriate proceedings and adequate reserves are or will be maintained with respect thereto in conformity with IFRS or (ii) the failure to pay, discharge or otherwise satisfy such obligation would not have a material adverse effect on the ability of the Issuer or such guarantor to perform its respective obligations under the indenture, the notes or the guarantees, as applicable.

#### ***Future Guarantors***

Each of the Issuer and each guarantor will cause any Subsidiary or Subsidiaries:

- (1) to which the Issuer or any guarantor transfers all or substantially all of the assets of the Issuer and the guarantors, taken as a whole; or
- (2) which incurs any Public External Indebtedness or provides a guarantee of any Public External Indebtedness of the Issuer or any guarantor

to promptly become a guarantor and provide for a full and unconditional guarantee of the notes as described under “—General—Guarantors.”

## Negative Covenants

The following negative covenants will apply to the Issuer and the guarantors for so long as any notes remain outstanding. These covenants do not limit the ability of the Issuer or any guarantor to incur debt nor do they require the Issuer or any guarantor to comply with financial ratios or to maintain specified levels of net worth or liquidity.

### *Negative Pledge*

Neither the Issuer nor any guarantor will create or permit to subsist any mortgage, pledge, hypothecation or other charge or encumbrance, including without limitation any equivalent thereof created or arising under the laws of Mexico (a “Lien”), upon the whole or any part of its or their present or future revenues or assets to secure any of its or their Public External Indebtedness, unless the notes are secured equally and ratably with such Public External Indebtedness; *provided* that the Issuer and the guarantors may create or permit to subsist, if permitted under Mexican law:

- (a) any Lien on the property of the Issuer or any guarantor securing or providing for the payment of Public External Indebtedness incurred in connection with any Project Financing; *provided* that the properties to which any such Lien shall apply are (i) properties which are the subject of such Project Financing or (ii) revenues or claims which arise from the operation, failure to meet specifications, failure to complete, exploitation, sale or loss of or damage to such properties; and *provided, further*, that any such Liens shall be created within 365 days of the commencement of such Project Financing;
- (b) any Lien on the Accounts Receivable of the Issuer or any guarantor; *provided* that (i) the aggregate principal amount of the Public External Indebtedness secured by Liens referred to in this clause (b) will not exceed U.S.\$ 3,000.0 million (or its equivalent in other currencies) and (ii) the short-term portion of such indebtedness will not exceed U.S.\$ 1,000.0 million (or its equivalent in other currencies); and
- (c) any Lien on the Available Assets of the Issuer or any guarantor not permitted by any other paragraph of this “Negative Pledge” covenant; *provided* that, after giving effect to any such Lien, the aggregate amount of Public External Indebtedness secured by Liens referred to in this clause (c) will not exceed U.S.\$ 500.0 million (or its equivalent in other currencies).

### *Merger, Consolidation or Sale of Assets*

Neither the Issuer nor any guarantor will:

- (a) consolidate or merge with or into any other Person; or
- (b) in a single transaction or a series of related transactions, sell, lease or otherwise transfer, directly or indirectly, all or substantially all of the assets of the Issuer and the guarantors, taken as a whole, to any other Person;

*provided, however*, that, without limitation of the rights of the holders described under “—Redemption and Purchase—Purchase at the Option of the Holders,” the Issuer and any guarantor may, if permitted under Mexican law:

- (i) merge with another Person if (x) the Issuer or such guarantor is the Person surviving such merger and (y) after giving effect to such merger, no Default or Event of Default shall have occurred and be continuing;
- (ii) consolidate with or merge into another Person or sell, lease or otherwise transfer all or substantially all of the assets of the Issuer and the guarantors, taken as a whole, to another Person if (x) the Person formed by such consolidation or into which the Issuer or such guarantor is merged or the Person which acquires by sale, lease or transfer all or substantially all of the assets of the Issuer and the guarantors, taken as a whole, is a public entity of the Mexican government or a corporation, partnership or trust, organized and validly existing under the laws of Mexico, (y) such Person expressly assumes the

obligations of the Issuer and the guarantors under the indenture, the notes and the guaranty agreement (in respect of the indenture and the notes), as applicable, and (z) immediately after giving effect to such transaction, no Default or Event of Default shall have occurred and be continuing;

- (iii) terminate the corporate existence of any Subsidiary of the Issuer or any guarantor if (x) such Subsidiary transfers all of the material assets of the Issuer or such guarantor, as applicable, to the Issuer, a guarantor or to another Subsidiary and (y) immediately after giving effect to such termination, no Default or Event of Default shall have occurred and be continuing; and
- (iv) sell, lease or otherwise transfer all or substantially all of the assets of the Issuer and the guarantors, taken as a whole, to one or more of the Subsidiaries of the Issuer or any guarantor if (x) each such Subsidiary becomes a guarantor in accordance with the provisions set forth under “—Affirmative Covenants—Future Guarantors” and (y) immediately after giving effect to any such transaction, no Event of Default shall have occurred and be continuing.

Upon the occurrence of any event described in clause (ii) or (iv), the Issuer or such guarantor will execute and deliver, or cause any Person referred to in clause (ii) or (iv) above, as applicable, to execute and deliver, an opinion of counsel and officer’s certificate to the trustee stating that such event complies with the requirements described in this paragraph and the indenture.

### **Default and Acceleration of Maturity**

Each of the following events is an “Event of Default” with respect to the notes:

- (a) any payment of principal of the notes is not made when due or any payment of interest on the notes is not made within 30 days of the date it was due;
- (b) the Issuer or any guarantor fails to perform any material obligation contained in the notes or the guarantees or, insofar as it concerns the notes or the guarantees, the indenture (other than any obligation specified in any other Event of Default) and such failure continues for 60 days after written notice thereof has been given to the Issuer or such guarantor, as applicable, by the trustee or the holders of not less than a majority in aggregate principal amount of the notes then Outstanding;
- (c) the Issuer or any guarantor fails to make a payment of principal of or interest on any Public External Indebtedness of, or guaranteed by, the Issuer or such guarantor in an aggregate principal amount exceeding U.S.\$ 75.0 million or its equivalent when due and such failure continues for more than the period of grace, if any, originally applicable thereto;
- (d) one or more final judgments, order or decrees is rendered against the Issuer or any guarantor involving in the aggregate a liability in excess of U.S.\$ 75.0 million and such judgments, orders or decrees continues unsatisfied, unvacated, unstayed or not bonded for a period of 60 days;
- (e) an involuntary case or other proceeding is commenced against the Issuer or any guarantor seeking liquidation, reorganization or other relief with respect to the Issuer or such guarantor or any of its respective debts under any *concurso mercantil*, bankruptcy, insolvency or other similar law now or hereafter in effect or seeking the appointment of a trustee, receiver, liquidator, *interventor*, *síndico*, custodian or other similar official of the Issuer, a guarantor or any substantial part of the property of the Issuer and the guarantors, taken as a whole, and such involuntary case or other proceeding remains undismissed and unstayed for a period of 60 days;
- (f) the Issuer or any guarantor commences a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to the Issuer or such guarantor or any of its respective debts under any *concurso mercantil*, bankruptcy, insolvency or other similar law now or hereafter in effect or seeking the appointment of a trustee, receiver, liquidator, *interventor*, *síndico*, custodian or other similar official of the Issuer or such guarantor or any substantial part of the property of the Issuer and the guarantors, taken as a whole, or the Issuer

consents or any guarantor consents to any such relief or to the appointment of or taking possession by any such official in any involuntary case or other proceeding commenced against the Issuer or such guarantor, or the Issuer or any guarantor makes a general assignment for the benefit of creditors, or the Issuer or any guarantor fails generally to pay its respective debts as they become due, or the Issuer or any guarantor takes any corporate action to authorize any of the foregoing;

- (g) a decree is issued or other proceedings are commenced by a governmental authority or agency of Mexico seeking dissolution, liquidation, reorganization or other relief with respect to the Issuer or its debts or any guarantor or such guarantor's debts under applicable law now or hereafter in effect or seeking the appointment of a trustee, receiver, liquidator, interventor, *síndico*, custodian or other similar official of the Issuer, a guarantor or any substantial part of the property of the Issuer and the guarantors, taken as a whole;
- (h) a general moratorium is agreed or declared in respect of any Public External Indebtedness of the Issuer or any Public External Indebtedness of a guarantor, which moratorium does not expressly exclude the notes or the guarantees;
- (i) any action, condition or situation (including the obtaining or effecting of any necessary consent, approval, authorization, exemption, filing, license, order, recording or registration) at any time required to be taken, fulfilled or done in order (i) to enable the Issuer or any guarantor to lawfully perform its respective obligations under the indenture, the notes, the guarantees and the guaranty agreement (as applicable) and (ii) to ensure that those obligations are legally binding and enforceable, is not taken, fulfilled or done within 30 days of its being so required;
- (j) it is or it becomes unlawful for the Issuer or a guarantor to perform or comply with one or more of its respective obligations under the indenture, the notes, the guarantees and the guaranty agreement (as applicable);
- (k) the payment obligations of the Issuer and any guarantor under the indenture, the notes, the guarantees and the guaranty agreement (as applicable) fail to constitute the unconditional general obligations of the Issuer or such guarantor that ranks without any preference among themselves and equally with all of the other unsecured and unsubordinated Public External Indebtedness of the Issuer or such guarantor, respectively; or
- (l) any event occurs which under the laws of Mexico has an analogous effect to any of the events referred to in paragraphs (e) to (g) above.

If any of the Events of Default described above occurs and is continuing, holders of at least 25% of the aggregate principal amount of the notes then Outstanding may declare all the notes to be due and payable immediately by giving written notice to the Issuer and the guarantors, with a copy to the trustee.

Holders holding notes representing in the aggregate more than 50% of the principal amount of the then-Outstanding notes may waive any existing Events of Default and their consequences on behalf of the holders of all of the notes if:

- following the declaration that the principal of the notes has become due and payable immediately, the Issuer or any of the guarantors deposits with the trustee a sum sufficient to pay all outstanding amounts then due on the notes (other than principal due by virtue of the acceleration upon the Event of Default) together with interest on such amounts through the date of the deposit as well as the reasonable fees and compensation of the holders that declared the notes due and payable, the trustee and their respective agents, attorneys and counsel; and
- all Events of Default (other than non-payment of principal that became due by virtue of the acceleration upon the Event of Default) have been remedied.

### ***Suits for Enforcement and Limitations on Suits by Holders***

If an Event of Default has occurred and is continuing, the trustee may, in its discretion, institute judicial action to enforce the rights of the holders of the notes. With the exception of a suit brought by a holder of the notes on or after the stated maturity date to enforce its absolute right to receive payment of the principal of and interest on the notes on the stated maturity date therefor (as such date may be amended or modified pursuant to the terms of the indenture and the notes, but without giving effect to any acceleration), a holder of the notes has no right to bring a suit, action or proceeding with respect to the notes unless: (1) such holder has given written notice to the trustee that an Event of Default with respect to the notes has occurred and is continuing; (2) holders of at least 25% of the aggregate principal amount of the Outstanding notes have instructed the trustee by specific written request to institute an action or proceeding and provided an indemnity satisfactory to the trustee; and (3) 60 days have passed since the trustee received the instruction, the trustee has failed to institute an action or proceeding as directed, and no direction inconsistent with such written request shall have been given to the trustee by a majority of holders of the notes. Moreover, any such action commenced by a holder of the notes must be for the equal, ratable and common benefit of all holders of the notes.

### **Additional Amounts**

The Issuer or any guarantor (as applicable) will make payments of principal and interest on the notes without withholding or deduction for or on account of any present or future taxes, duties, assessments or governmental charges of whatever nature imposed or levied by or on behalf of Mexico, any political subdivision thereof or any taxing authority in Mexico (“Mexican Withholding Taxes”), unless such withholding or deduction is required by law or by the interpretation or administration thereof. If the Issuer or any guarantor is required to make any such withholding or deduction, the Issuer or such guarantor will pay such additional amounts (“Additional Amounts”) as may be necessary to ensure that the net payment made in respect of the notes after such withholding or deduction for or on account of Mexican Withholding Taxes will not be less than the amount that would have been receivable in respect of the notes in the absence of such withholding or deduction; *provided* that the foregoing obligation to pay Additional Amounts will not apply to:

- (a) any Mexican Withholding Taxes that would not have been imposed or levied on a holder or beneficial owner of notes but for the existence of any present or former connection between the holder or beneficial owner of such notes and Mexico or any political subdivision or territory or possession thereof or area subject to its jurisdiction, including, without limitation, such holder or beneficial owner (i) being or having been a citizen or resident thereof, (ii) maintaining or having maintained an office, permanent establishment or branch therein, or (iii) being or having been present or engaged in trade or business therein, except for a connection solely arising from the mere ownership of, or receipt of payment under, such notes;
- (b) any estate, inheritance, gift, sales, transfer, or personal property or similar tax, assessment or other governmental charge;
- (c) any Mexican Withholding Taxes that are imposed or levied by reason of the failure by the holder or beneficial owner of such notes to comply with any certification, identification, information, documentation, declaration or other reporting requirement that is required or imposed by a statute, treaty, regulation, general rule or published administrative practice, as a precondition to exemption from, or reduction in the rate of, the imposition, withholding or deduction of any Mexican Withholding Taxes; *provided* that at least 60 days prior to (i) the first payment date with respect to which the Issuer or such guarantor applies this clause (c) and (ii) in the event of a change in such certification, identification, information, documentation, declaration or other reporting requirement, the first payment date subsequent to such change, the Issuer or such guarantor has notified the trustee and the holders in writing that the holders or beneficial owners of notes will be required to comply with such certification, identification, information or documentation, declaration or other reporting requirement;
- (d) any Mexican Withholding Taxes that would not have been so imposed but for the presentation by the holder of such note for payment on a date more than 20 days after the date on which such payment became due and payable or the date on which payment thereof is duly provided

for, whichever occurs later, except to the extent that the holder of such note would have been entitled to the Additional Amounts on presenting such note on any date during such 20-day period;

- (e) any payment on such note to any holder who is a fiduciary or partnership or other than the sole beneficial owner of any such payment, to the extent that a beneficiary or settlor with respect to such fiduciary, a member of such a partnership or the beneficial owner of such payment would not have been entitled to the Additional Amounts had such beneficiary, settlor, member or beneficial owner been the holder of such note; or
- (f) any tax, duty, assessment or other governmental charge payable otherwise than by deduction or withholding from payments on a note.

All references in this “Description of the Notes” section to principal and interest in respect of notes will, unless the context otherwise requires, be deemed to mean and include all Additional Amounts, if any, payable in respect thereof as set forth in the first paragraph of this “Additional Amounts” section and in paragraphs (a) through (f) above.

The Issuer or any guarantor (as applicable) will also pay any present or future stamp, court or documentary taxes or any other excise or property taxes, charges or similar levies which arise in any jurisdiction from the execution, delivery, registration or the making of payments in respect of the notes or the guarantees, excluding any such taxes, charges or similar levies imposed by any jurisdiction outside of Mexico other than those resulting from, or required to be paid in connection with, the enforcement of the notes following the occurrence of any Event of Default.

Notwithstanding the foregoing, the limitations on obligations of the Issuer and the guarantors to pay Additional Amounts set forth in clause (c) above will not apply if the compliance with the certification, identification, information, documentation, declaration or other reporting requirement described in such clause (c) would be materially more onerous, in form, in procedure or in the substance of information disclosed, to a holder or beneficial owner of a note (taking into account any relevant differences between United States and Mexican law, regulation or administrative practice) than comparable information or other applicable reporting requirements imposed or provided for under U.S. federal income tax law (including the Convention for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income, and a Protocol thereto, both signed on September 18, 1992, as amended by Additional Protocols signed on September 8, 1994 and November 26, 2002), regulations (including proposed regulations) and published administrative practice. In addition, the limitations on the obligations of the Issuer or the guarantors to pay Additional Amounts set forth in clause (c) above will not apply if Article 166, Section II, paragraph a) of the Mexican Income Tax Law (or a substantially similar provision successor to such provision) is in effect, unless (i) the compliance with the certification, identification, information, documentation, declaration or other reporting requirement described in clause (c) above is expressly required by statute, regulation, general rules or published administrative practice in order to apply Article 166, Section II, paragraph a) (or a substantially similar successor provision to such provision), the Issuer or such guarantor cannot obtain such certification, identification, information, documentation, declaration or other evidence, or satisfy any other reporting requirements, on its own through reasonable diligence and the Issuer or such guarantor otherwise would meet the requirements for application of Article 166, Section II, paragraph a) (or such provision successor to such provision) or (ii) in the case of a holder or beneficial owner of a note that is a pension fund or other tax-exempt organization, such holder or beneficial owner would be subject to Mexican Withholding Taxes at a rate that is below the rate that is provided by Article 166, Section II, paragraph a) if the information, documentation or other evidence required under clause (c) above were provided. Clause (c) above will not be construed to require that a non-Mexican pension or retirement fund, a non-Mexican tax-exempt organization or a non-Mexican financial institution or any other holder or beneficial owner of a note register with the Mexican Ministry of Finance and Public Credit (*Secretaría de Hacienda y Crédito Público*) or the Mexican Tax Revenue Service (*Servicio de Administración Tributaria*) for the purpose of establishing eligibility for an exemption from or reduction of Mexican Withholding Taxes.

The Issuer or the respective guarantor will provide the trustee with a duly certified or authenticated copy of an original receipt evidencing the payment of Mexican Withholding Taxes that the Issuer or such guarantor has withheld or deducted in respect of any payments made under or with respect to the notes. The Issuer or such guarantor will make copies of such documentation, and cause the trustee to make copies of such documentation, available to the holders of the notes upon request.

In the event that Additional Amounts actually paid with respect to any notes pursuant to the preceding paragraphs are based on rates of deduction or withholding of Mexican Withholding Taxes in excess of the appropriate rate applicable to the holder of such notes, and, as a result thereof, such holder is entitled to make a claim for a refund or credit of such excess, then such holder will, by accepting such notes, be deemed to have assigned and transferred all right, title and interest to any such claim for a refund or credit of such excess to the Issuer or the relevant guarantor. However, by making such assignment, the holder makes no representation or warranty that the Issuer or the relevant guarantor will be entitled to receive such claim for a refund or credit and incurs no other obligation with respect thereto.

### **Meetings, Amendments and Waivers — *Collective Action***

The Issuer may call a meeting of the holders of the notes at any time regarding the indenture or the notes. The Issuer will determine the time and place of the meeting and will notify the holders of the time, place and purpose of the meeting not less than 30 and not more than 60 days before the meeting.

In addition, the Issuer or the trustee will call a meeting of holders of the notes if the holders of at least 10% in principal amount of all the notes then Outstanding have delivered a written request to the Issuer or the trustee (with a copy to the Issuer) setting out the purpose of the meeting. Within 10 days of receipt of such written request or copy thereof, the Issuer will notify the trustee and the trustee will notify the holders of the time, place and purpose of the meeting called by the holders, to take place not less than 30 and not more than 60 days after the date on which such notification is given.

Only holders of notes and their proxies are entitled to vote at a meeting of holders. The Issuer will set the procedures governing the conduct of the meeting and if additional procedures are required, the Issuer will consult with the trustee to establish such procedures as are customary in the market.

Modifications may also be approved by holders of the notes pursuant to written action with the consent of the requisite percentage of holders of the notes. The Issuer will solicit the consent of the relevant holders to the modification not less than 10 and not more than 30 days before the expiration date for the receipt of such consents as specified by the Issuer.

The holders of the notes may generally approve any proposal by the Issuer to modify the indenture or the terms of the notes with the affirmative vote (if approved at a meeting of the holders) or consent (if approved by written action) of holders of more than 50% of the Outstanding principal amount of the notes.

However, holders of any series of debt securities (including the notes) issued under the indenture may approve, by vote or consent through one of three modification methods, any modification, amendment, supplement or waiver proposed by the Issuer that would do any of the following (such subjects are referred to as “reserved matters”):

- change the date on which any amount is payable on the debt securities;
- reduce the principal amount of the debt securities (other than in accordance with the express terms of the debt securities and the indenture);
- reduce the interest rate on the debt securities;
- change the method used to calculate any amount payable on the debt securities (other than in accordance with the express terms of the debt securities and the indenture);
- change the currency or place of payment of any amount payable on the debt securities;
- modify the obligation of the Issuer to make any payments on the debt securities (including any redemption price therefor);
- modify any guarantor’s obligation to make any payments on the debt securities (including any redemption price therefor) under its guarantee;
- change the identity of the obligor under the debt securities;



- change the definition of “Outstanding” debt securities or the percentage of affirmative votes or written consents, as the case may be, required to make a “reserved matter modification” (as defined in the indenture);
- change the definition of “uniformly applicable” or “reserved matter modification”;
- authorize the trustee, on behalf of all holders of the debt securities, to exchange or substitute all the debt securities for, or convert all the debt securities into, other obligations or securities of the Issuer or any other Person; or
- change the legal ranking, governing law, submission to jurisdiction or waiver of immunities provisions of the terms of the debt securities.

A change to a reserved matter, including the payment terms of any series of debt securities (including the notes), can be made without your consent, as long as the change is approved, pursuant to one of the three following modification methods, by vote or consent by:

- the holders of more than 75% of the aggregate principal amount of the Outstanding notes insofar as the change affects the notes (but does not modify the terms of any other series of debt securities issued under the indenture);
- where such proposed modification would affect the Outstanding notes and at least one other series of debt securities issued under the indenture, the holders of more than 75% of the aggregate principal amount of the then Outstanding debt securities of all of the series affected by the proposed modification, taken in the aggregate, if certain “uniformly applicable” requirements are met (defined in the indenture as “cross-series modification with single aggregated voting”); or
- where such proposed modification would affect the Outstanding notes and at least one other series of debt securities issued under the indenture, whether or not the “uniformly applicable” requirements are met, the holders of more than  $66\frac{2}{3}\%$  of the aggregate principal amount of the then Outstanding debt securities of all of the series affected by the proposed modification, taken in the aggregate, *and* the holders of more than 50% of the aggregate principal amount of the then Outstanding debt securities of each series affected by the modification, taken individually.

“Uniformly applicable,” as used herein, means a modification by which holders of debt securities of all series affected by that modification (including the notes, if so affected) are invited to exchange, convert or substitute their debt securities on the same terms for (x) the same new instruments or other consideration or (y) new instruments or other consideration from an identical menu of instruments or other consideration. It is understood that a modification will not be considered to be uniformly applicable if each exchanging, converting or substituting holder of debt securities of any series affected by that modification is not offered the same amount of consideration per amount of principal, the same amount of consideration per amount of interest accrued but unpaid and the same amount of consideration per amount of past due interest, respectively, as that offered to each other exchanging, converting or substituting holder of debt securities of any series affected by that modification (or, where a menu of instruments or other consideration is offered, each exchanging, converting or substituting holder of debt securities of any series affected by that modification is not offered the same amount of consideration per amount of principal, the same amount of consideration per amount of interest accrued but unpaid and the same amount of consideration per amount of past due interest, respectively, as that offered to each other exchanging, converting or substituting holder of debt securities of any series affected by that modification electing the same option under such menu of instruments).

The Issuer may select, in its discretion, any modification method for a reserved matter modification in accordance with the indenture and to designate which series of debt securities will be included for approval in the aggregate of modifications affecting two or more series of debt securities. Any selection of a modification method or designation of series to be included will be final for the purpose of that vote or consent solicitation.

For so long as any series of debt securities (collectively, the “2011 debt securities”) issued under the indenture dated as of May 26, 2011 between the Issuer and the trustee (as supplemented from time to time, the “2011 indenture”) are outstanding, if the Issuer certifies to the trustee under the indenture and to the trustee under

the 2011 indenture that a proposed modification affecting more than one series of debt securities issued under the indenture (a “cross-series modification”) is being sought simultaneously with a “2011 indenture reserved matter modification,” the 2011 debt securities affected by such 2011 indenture reserved matter modification shall be treated as “series affected by that proposed modification” as that phrase is used in the indenture (as described in the preceding paragraphs); *provided* that if the Issuer seeks a cross-series modification with single aggregated voting, in determining whether such modification will be considered uniformly applicable, the holders of any series of 2011 debt securities affected by the 2011 indenture reserved matter modification shall be deemed “holders of debt securities of all series affected by that modification,” for the purpose of the uniformly applicable definition. It is the intention that in such circumstances, the votes of the holders of the affected 2011 debt securities be counted for purposes of the voting thresholds specified in the indenture for the applicable cross-series modification as though those 2011 debt securities had been affected by that cross-series modification although the holders of any notes will be deemed to have acknowledged and agreed that the effectiveness of any modification, as it relates to the 2011 debt securities, shall be governed exclusively by the terms and conditions of those 2011 debt securities and by the 2011 indenture.

“2011 indenture reserved matter modification,” for these purposes, means any modification to a reserved matter affecting the terms and conditions of one or more series of the 2011 debt securities, pursuant to the 2011 indenture.

Before soliciting any consent or vote of any holder of debt securities (including the notes) for any change to a reserved matter, the Issuer will provide the following information to the trustee for distribution to the holders of debt securities of any series that would be affected by the proposed modification:

- a description of the Issuer’s economic and financial circumstances that are in the Issuer’s opinion relevant to the request for the proposed modification and a description of the Issuer’s existing debts;
- if the Issuer shall at the time have entered into an arrangement for financial assistance with major creditors or creditor groups and/or an agreement with any such creditors regarding debt relief, (x) a description of any such arrangement or agreement and (y) where permitted under the information disclosure policies of the creditors, as applicable, a copy of the arrangement or agreement;
- a description of the Issuer’s proposed treatment of external debt instruments that are not affected by the proposed modification and the Issuer’s intentions with respect to any other major creditor groups; and
- if the Issuer is then seeking any reserved matter modification affecting any other series of debt securities, a description of that proposed modification.

The consent of the holders is not necessary under the indenture to approve the particular form of any proposed amendment, modification, supplement or waiver. It is sufficient if the consent approves the substance of the proposed amendment, modification, supplement or waiver. After an amendment, modification, supplement or waiver under the indenture becomes effective, the Issuer will mail to the affected holders a notice briefly describing the amendment, modification, supplement or waiver. However, the failure to give this notice or any defect in the notice, will not impair or affect the validity of the amendment, modification, supplement or waiver.

#### ***Other Amendments***

The Issuer and the trustee may, without the vote or consent of any holder of debt securities of a series issued under the indenture (including the notes), amend the indenture or the debt securities of that series for the purpose of:

- adding to the Issuer’s or the guarantors’ covenants for the benefit of the holders of the debt securities of that series;
- surrendering any of the Issuer’s or the guarantors’ rights or powers with respect to the debt securities of that series;
- securing the debt securities of that series;

- curing any ambiguity or curing, correcting or supplementing any defective provision in the debt securities of that series or the indenture;
- amending the debt securities of that series or the indenture in any manner that the Issuer and the trustee may determine and that does not materially adversely affect the interests of any holders of the debt securities of that series;
- correcting a manifest error of a formal, minor or technical nature;
- reflecting the succession of another Person to the Issuer or any guarantor and the successor entity's assumption of its respective covenants and obligations under the debt securities of that series and the indenture in accordance with the provisions described under “—Negative Covenants—Merger, Consolidate or Sale of Assets”;
- providing, if permitted by Mexican law, for the guarantee of the debt securities of that series by any additional guarantor and related revisions to the indenture to reflect the terms of the covenant described under “—Affirmative Covenants—Future Guarantors”; or
- providing for a successor trustee or co-trustee in accordance with the provisions of the indenture, or adding or changing any of the provisions of the indenture as shall be necessary to provide for or facilitate the administration of the trusts by more than one trustee in accordance with the indenture.

## **Defeasance**

The Issuer may, at its option, elect to terminate (1) all of its and the guarantors' obligations with respect to the notes and the guarantees (“legal defeasance”), except for certain obligations, including those regarding any trust established for defeasance and obligations relating to the transfer and exchange of the notes, the replacement of mutilated, destroyed, lost or stolen notes and the maintenance of agencies with respect to the notes or (2) the Issuer and the guarantors' obligations under the covenants in the indenture, so that any failure to comply with such obligations will not constitute an Event of Default (“covenant defeasance”) in respect of the notes or the guarantees. In order to exercise either legal defeasance or covenant defeasance, the Issuer must irrevocably deposit with the trustee money or U.S. government obligations, or any combination thereof, in such amounts as will be sufficient (in the case of U.S. government obligations as determined by a nationally recognized firm of independent public accountants) to pay the principal, premium, if any, and interest (including Additional Amounts) in respect of the notes then Outstanding on the maturity date of the notes, and comply with certain other conditions, including, without limitation, the delivery of an officer's certificate stating the Issuer's election and an opinion of counsel as to specified tax and other matters.

If the Issuer elects either legal defeasance or covenant defeasance with respect to any notes, the Issuer must so elect it with respect to all of the notes.

## **Listing**

Application will be made to admit the notes for listing on the Official List of the Luxembourg Stock Exchange and for listing on the TPEx. There can be no assurance that the notes will be listed on either the Luxembourg Stock Exchange or the TPEx or, if the notes are listed on either exchange, that such listings will be maintained until the final maturity of the notes.

## **Certain Definitions**

The following are certain defined terms used in the indenture and in the notes.

“Accounts Receivable” means, as to any Person, amounts payable to such Person in respect of the sale, lease or other provision of goods, energy, services or the like, whether or not yet earned by performance.

“Available Assets” means, as to any Person, assets of such Person consisting of cash on hand or on deposit in banks, certificates of deposit and bankers' acceptances, debt securities and intangible assets (other than equity securities and Accounts Receivable).

“Default” means any event or circumstance that, with the giving of notice, the lapse of time, or both, would (if not cured, waived or otherwise remedied during such time) constitute an Event of Default.

“IFRS” means *Normas Internacionales de Información Financiera* (International Financial Reporting Standards) as issued by the International Accounting Standards Board, as in effect from time to time.

“London business day” means a day (other than Saturday or a Sunday) on which banks are generally open for business in London, United Kingdom.

“Outstanding” means, as of any date of determination, in respect of the debt securities of any series issued under the indenture, the debt securities of such series authenticated and delivered pursuant to the indenture *except* for:

- i. debt securities of that series theretofore canceled by the trustee or delivered to the trustee for cancellation or held by the trustee for reissuance but not reissued by the trustee;
- ii. debt securities of that series that have been called for redemption in accordance with their terms or which have become due and payable at maturity or otherwise and with respect to which monies sufficient to pay the principal thereof (and premium, if any) and any interest thereon shall have been made available to the trustee; *provided* that, if such debt securities are to be redeemed, notice of such redemption has been duly given pursuant to the indenture or provision therefor satisfactory to the trustee has been made; or
- iii. debt securities of that series in lieu of or in substitution for which other debt securities shall have been authenticated pursuant to the indenture;

*provided, however*, that, in determining whether the holders of the requisite principal amount of debt securities Outstanding have taken any action or instruction under the indenture or the debt securities, a debt security will be disregarded and deemed not to be outstanding, and may not be counted in a vote or consent solicitation for or against a proposed modification, if on the record date for the proposed modification or other action or instruction hereunder, the debt security is held by Mexico or by a Public Sector Instrumentality, or by a corporation, trust or other legal entity that is controlled by Mexico (including the Issuer or any of its Subsidiaries) or a Public Sector Instrumentality, except that (x) debt securities held by Mexico or any Public Sector Instrumentality or any corporation, trust or other legal entity controlled by Mexico or by a Public Sector Instrumentality that have been pledged in good faith may be regarded as Outstanding if the pledgee establishes to the satisfaction of the trustee the pledgee’s right so to act with respect to such debt securities and that the pledgee is not Mexico or a Public Sector Instrumentality (including the Issuer or any of its Subsidiaries), and in case of a dispute concerning such right, the advice of counsel shall be full protection in respect of any decision made by the trustee in accordance with such advice, and any certificate, statement or opinion of counsel may be based, insofar as it relates to factual matters or information that is in the possession of the trustee, upon the certificate, statement or opinion of or representations by the trustee; and (y) in determining whether the trustee will be protected in relying upon any such action or instructions hereunder, or any notice from holders, only debt securities that a responsible officer of the trustee knows to be so owned or controlled will be so disregarded.

As used in this definition, “Public Sector Instrumentality” means any department, secretary, ministry or agency of the Mexican government, and “control” means the power, directly or indirectly, through the ownership of voting securities or other ownership interests, by contract or otherwise, to direct the management of or to elect or to appoint a majority of the board of directors or other Persons performing similar functions in lieu of, or in addition to, the board of directors of that legal entity.

“Person” means an individual, a corporation, a partnership, a limited liability company, a limited liability partnership, an association, a trust or any other entity or organization, including a government or political subdivision or an agency or instrumentality thereof.

“Project Financing” means any financing of the acquisition, construction or development of any properties in connection with a project if the Person or Persons providing such financing expressly agree to look to the properties financed and the revenues to be generated by the operation of, loss of or damage to, such properties as the principal source of repayment for the moneys advanced (with limited recourse, if any, to the Issuer or the guarantors) and have been provided with a feasibility study prepared by competent independent experts on the basis

of which it was reasonable to conclude that such project would generate sufficient foreign currency income to repay substantially all of the principal of and interest on all Public External Indebtedness incurred in connection therewith.

“Public External Indebtedness” means, with respect to any Person, any Public Indebtedness of such Person that is payable by its terms or at the option of its holder in any currency other than the currency of Mexico (other than any such Public Indebtedness that is originally issued or incurred within Mexico).

“Public Indebtedness” means, with respect to any Person, any payment obligation, including any contingent liability, of such Person arising from bonds, debentures, notes or other securities that (a) are, or were intended at the time of issuance to be, quoted, listed or traded on any securities exchange or other securities market or were issued in a private placement to institutional investors (including, without limitation, securities issued pursuant to Section 4(2) of, or eligible for resale pursuant to Rule 144A under, the Securities Act (or any successor law or regulation of similar effect)) and (b) have an original maturity of more than one year or are combined with a commitment so that the original maturity of one year or less may be extended at such Person’s option to a period in excess of one year.

“Stated maturity date” means, when used with respect to any debt security or any installment of principal thereof or interest thereon, the date expressed in such debt security (as such debt security may be amended or modified pursuant to the indenture) as the fixed date on which the principal of such debt securities or interest thereon is due and payable, without giving effect to any acceleration of any payment dates pursuant to the terms of such debt securities or otherwise.

“Subsidiary” means, in relation to any entity, any other entity (whether or not now existing) which is controlled directly or indirectly, or more than 50% of whose issued equity share capital (or equivalent) is then held or beneficially owned by, the first Person and/or any one or more of the first Person’s Subsidiaries, and “control” means the power, directly or indirectly, through the ownership of voting securities or other ownership interests or otherwise, to direct the management of or elect or appoint a majority of the board of directors or other Persons performing similar functions in lieu of, or in addition to, the board of directors of a corporation, trust, financial institution or other entity.

## **Trustee**

The indenture establishes the obligations and duties of the trustee, the right to indemnification of the trustee and the liability and responsibility, including limitations, for actions that the trustee takes. The trustee is entitled to enter into business transactions with the Issuer or any of its affiliates without accounting for any profit resulting from these transactions.

## **Paying Agent; Transfer Agent; Registrar**

Until the notes are paid, the Issuer will maintain a principal paying agent in London, and a transfer agent and a registrar in Luxembourg. The Issuer has initially appointed Deutsche Bank AG, London Branch as principal paying agent, and Deutsche Bank Luxembourg S.A. to serve as the Issuer’s registrar and transfer agent in Luxembourg. The Issuer will give prompt notice to all holders of notes of any future appointment or any resignation or removal of any paying agent, transfer agent or registrar or of any change by any paying agent, transfer agent or registrar in any of its specified offices.

## **Notices**

So long as the notes are represented by a global security deposited with Deutsche Bank AG, London Branch, or any successor thereto, as the common depositary (the “Common Depositary”) for Clearstream and Euroclear, notices to holders may be given by delivery to Clearstream and Euroclear, and such notices shall be deemed to be given on the date of delivery to Clearstream and Euroclear, except that so long as the notes are listed on the Euro MTF Market of the Luxembourg Stock Exchange and the rules of the Luxembourg Stock Exchange so require, notices will also be published either on the website of the Luxembourg Stock Exchange ([www.bourse.lu](http://www.bourse.lu)) or in a daily newspaper of general circulation in Luxembourg (which is expected to be the *Luxemburger Wort*). Any such notices shall be in English and shall be deemed to have been given on the date of such publication, or if published more than once or on different dates, on the first date on which publication is made. If publication as provided above is not practicable, notices will be given in such other manner, and shall be deemed to have been

given on such date, as the trustee may approve. CFE will consider any published notice to be given on the date of its first publication.

Neither the failure to give any notice to a particular holder, nor any defect in a notice given to a particular holder, will affect the sufficiency of any notice given to another holder.

If the notes are issued in certificated form, the Issuer will mail notices to the holders of the notes at their registered addresses, as reflected in the books and records of the trustee.

### **Governing Law**

The indenture, the notes, the guarantees and the guaranty agreement (in respect of the indenture and the notes) will be governed by, and construed in accordance with, the laws of the State of New York, except that matters relating to the authorization and execution of the indenture, the notes, the guarantees and the guaranty agreement by the Issuer and the guarantors, as applicable, will be governed by, and construed in accordance with, the laws of Mexico.

### **Consent to Service, Jurisdiction and Waiver of Immunity**

In the indenture and the guaranty agreement, respectively, the Issuer and each of the guarantors have irrevocably designated, appointed and empowered the Consul General of Mexico (New York office), currently located at 27 East 39th Street, New York, New York 10016 (the “Authorized Agent”) as the authorized agent of the Issuer and each of the guarantors to accept and acknowledge on behalf of the Issuer and each guarantor service of any and all process which may be served in any suit, action or proceeding arising out of or based upon the notes, the guarantees or the indenture that may be instituted by the trustee or any holder in any U.S. federal or New York state court in the Borough of Manhattan, The City of New York. The Issuer and each of the guarantors have consented to process being served in any such action or proceeding by service of process upon the Authorized Agent. The Issuer, the guarantors and the trustee have each irrevocably submitted to the jurisdiction of any such court in respect of any such action or proceeding and have irrevocably waived any objection which the Issuer, the guarantors or the trustee may now or hereafter have to the laying of venue of any such action or proceeding in any such court and any right to which the Issuer, the guarantors or the trustee may be entitled on account of place of residence or domicile.

To the extent that the Issuer or any of the guarantors have or hereafter may acquire any immunity from jurisdiction of any of the courts referred to above or from any legal process (whether through service or notice, attachment prior to judgment, attachment in aid of execution, execution or otherwise) with respect to the Issuer, any of the guarantors or its or their property, in each case in respect of any action, claim or proceeding brought in respect of the indenture, the notes or the guarantees, the Issuer and each of the guarantors will irrevocably waive such immunity in respect of the Issuer and such guarantor’s obligations under the indenture, the notes and the guarantees to the fullest extent permitted by law, subject to certain restrictions pursuant to applicable Mexican law, including (i) the adoption of the CFE Law, the Electric Industry Law and any other new Mexican law or regulation or (ii) any amendment to, or change in the interpretation or administration of, any existing law or regulation, in each case, pursuant to or in connection with the Energy Reform Decree and the Secondary Legislation, by any governmental authority in Mexico with oversight or authority over the Issuer or the guarantors. Such restrictions include (a) under article 90 of the CFE Law, real property owned by the Issuer and the guarantors shall be deemed to be property of the public domain and, under Article 4 of the General Law of Public Property, neither attachment prior to judgment nor attachment in aid of execution will be ordered by Mexican courts against the Issuer or the guarantors’ real property, and (b) under the Electric Industry Law, the transmission and distribution of electric energy as a public service are reserved to the Mexican government, through the Issuer and the guarantors and, to that extent, the assets related thereto are subject to immunity. Without limiting the generality of the foregoing, the Issuer and each of the guarantors will agree that the waivers set forth in this paragraph will have force and effect to the fullest extent permitted under the U.S. Foreign Sovereign Immunities Act of 1976, as amended, and will be irrevocable for purposes of such Act; *provided, however*, that the Issuer and each guarantor will reserve the right to plead immunity under such Act in actions brought against the Issuer or any guarantor under the U.S. federal securities laws or any state securities laws.

### **Currency Indemnity**

The obligations of the Issuer and the guarantors to any holder of notes that has obtained a court judgment affecting those notes or the related guarantees will be discharged, to the greatest extent permissible under applicable

law, only to the extent that the relevant holder is able to purchase U.S. dollars (referred to as the “agreement currency”) with any other currency paid to that holder in accordance with the judgment currency. If the holder cannot purchase the agreement currency in the amount originally to be paid, the Issuer and the guarantors have agreed to pay the difference. The holder, however, agrees that, if the amount of the agreement currency purchased exceeds the amount originally to be paid to such holder, the holder will reimburse the excess to the Issuer or the respective guarantor. The holder will not be obligated to make this reimbursement if the Issuer or such guarantor is in default in respect of its obligations under the notes or the guarantees.

#### **Our Relationship with the Trustee**

Deutsche Bank Trust Company Americas is initially serving as the trustee for the notes, Deutsche Bank AG, London Branch will serve as the principal paying agent for the notes and Common Depositary for Euroclear and Clearstream, and Deutsche Bank Luxembourg S.A. will serve as registrar and Luxembourg transfer agent. Deutsche Bank Trust Company Americas and its affiliates (including Deutsche Bank AG, London Branch and Deutsche Bank Luxembourg S.A.) may have other business relationships with the Issuer and/or the guarantors from time to time.

## TAXATION

The following summary of certain Mexican federal and ROC income tax considerations is based on the advice of our in-house counsel, with respect to Mexican federal income taxes, and on the advice of Lee and Li, with respect to ROC income taxes. This summary contains a description of certain Mexican federal and ROC income tax consequences of the purchase, holding and disposition of the notes, but does not purport to be a comprehensive description of all the tax considerations that may be relevant to a decision to purchase, hold or dispose of the notes nor constitutes legal or tax advice. This summary does not describe any tax consequences arising under the laws of any state, municipality or taxing jurisdiction other than the federal laws of Mexico and the laws of the ROC.

This summary is based on the Mexican federal income tax law (*Ley del Impuesto Sobre la Renta*) and the laws of the ROC as in effect on the date of this offering memorandum. All of the foregoing are subject to change or to new or different interpretations, which change could apply retroactively and could affect the continued validity of this summary.

Mexico has entered into tax treaties with various other countries (most of which are in effect) and is negotiating tax treaties with various other countries. These tax treaties may have effects on holders of notes. This summary does not discuss the consequences (if any) of such treaties.

**Prospective purchasers of notes should consult their own tax advisors as to the Mexican, ROC or other tax consequences of the purchase, ownership and disposition of the notes, including, in particular, the application to their particular situations of the tax considerations discussed below, as well as the application of state, local, foreign or other tax laws.**

### **Mexican Tax Considerations**

This summary of certain Mexican federal tax considerations refers only to prospective holders of notes, whether individuals or corporations, that are treated as non-residents of Mexico for Mexican tax purposes and that will not hold the notes or a beneficial interest therein through a permanent establishment for tax purposes in Mexico to which income under the notes is attributable (any such non-resident holder a “Foreign Holder”).

For purposes of Mexican taxation, an individual is a resident of Mexico if he or she has established his or her primary residence in Mexico. When an individual has a home or domicile in Mexico and in another jurisdiction, the individual will be considered a resident of Mexico for tax purposes if the center of vital interest of such person is located in Mexico, which is deemed to occur if; (i) more than 50% of such individual’s total income, in any calendar year, is from Mexican sources, or (ii) such individual’s principal center of professional activities is located in Mexico. A legal entity is a resident of Mexico if it maintains the main place of its management in Mexico or has established its effective management in Mexico. Any Mexican nationals that are employed by the Mexican government are deemed residents of Mexico, even if his/her center of vital interest is located outside of Mexico. Mexican nationals who file a change of tax residence to a country or jurisdiction that does not have a comprehensive exchange of information agreement with Mexico and whether his/her income is subject to a preferred tax regime as defined by Mexican law, will be considered as a resident of Mexico for tax purposes during the fiscal year of the filing notice of such residence change and during the following three fiscal years. A Mexican citizen is presumed to be a resident of Mexico unless such person can demonstrate the contrary. If a legal entity or individual has a permanent establishment for tax purposes in Mexico, such legal entity or individual shall be required to pay taxes in Mexico on income attributable to such permanent establishment for tax purposes in accordance with Mexican federal tax law. Furthermore, for purposes of Mexican taxation, an individual or corporation that does not satisfy the requirements described above to be considered a resident in Mexico for tax purposes is treated as a non-resident of Mexico for tax purposes, and a Foreign Holder for purposes of this summary, and generally subject to taxation, at a Mexican federal level, as specified in this summary.

### ***Taxation of Interest and Principal***

Under Mexican federal laws and regulations in effect, payments of interest (or amounts deemed to be interest) made by CFE or any of the guarantors in respect of the notes to a Foreign Holder, will be subject to a withholding tax imposed at a rate of 4.9% if, as expected, the notes are registered at the *Sistema Internacional de Cotizaciones* (International Quotation System), maintained by the BMV, which is expected to occur three (3) months after issuance of the notes, and, as a result, the notes are considered as placed among the *gran público*



*inversionista* (investment public at large). If these requirements are not satisfied, the applicable withholding tax rate will be 10% or higher.

Payments of interest made by the Issuer or any of the guarantors in respect of the notes to a non-Mexican pension or retirement fund will be exempt from Mexican withholding taxes; *provided* that any such fund (i) is duly established pursuant to the laws of its country of origin and is the effective beneficiary of the interest paid; (ii) is exempt from income tax in respect of such payments in such country; and (iii) provides information to the Tax Administration Revenue Service, through us, in respect of the foregoing.

Under Mexican federal laws and regulations in effect, payments of principal under the notes, made by CFE or any of the guarantors to a Foreign Holder, will not be subject to any withholding or similar taxes imposed by Mexico.

#### ***Additional Amounts***

We have agreed, subject to specified exceptions and limitations, to pay Additional Amounts to the holders of the notes in respect of the Mexican withholding taxes mentioned above. If we pay Additional Amounts in respect of such Mexican withholding taxes, any refunds received with respect to such Additional Amounts will be for our account, but holders of notes will not be required to take any action in respect of such refunds. See “Description of the Notes—Additional Amounts.”

Holders or beneficial owners of notes may be requested to provide certain information or documentation necessary to enable us to establish the appropriate Mexican withholding tax rate applicable to such holders or beneficial owners. In the event that the specified information or documentation concerning the holder or beneficial owner, if requested, is not provided on a timely basis, our obligation to pay Additional Amounts will be limited. See “Description of the Notes—Additional Amounts.”

#### ***Taxation of Dispositions***

Under Mexican federal laws and regulations in effect, capital gains resulting from the sale or other disposition of the notes by a Foreign Holder to another Foreign Holder will not be subject to Mexican withholding or other similar taxes.

#### ***Transfer and Other Taxes***

There are no Mexican stamp, registration, or similar taxes payable by a Foreign Holder in connection with the purchase, ownership or disposition of the notes. A Foreign Holder of notes will not be liable for Mexican estate, gift, inheritance or similar tax with respect to the notes.

#### **ROC Taxation**

*The following summary of certain taxation provisions under ROC law is based on current law and practice and assumes that the notes will be issued, offered, sold and re-sold, directly or indirectly, only to professional institutional investors as defined under Paragraph 2, Article 4 of the Financial Consumer Protection Act of the ROC. It does not purport to be comprehensive and does not constitute legal or tax advice. Investors (particularly those subject to special tax rules, such as banks, dealers, insurance companies and tax-exempt entities) should consult with their own tax advisers regarding the tax consequences of an investment in the notes.*

#### ***Interest on the Notes***

As the Issuer is not an ROC statutory tax withholder, there is no ROC withholding tax on the interest and deemed interest to be paid on the notes.

ROC corporate holders must include the interest and deemed interest receivable under the notes as part of their taxable income and pay income tax at a flat rate of 20% (unless the total taxable income for a fiscal year is under NT\$500,000), as they are subject to income tax on their worldwide income on an accrual basis. The alternative minimum tax (“AMT”) is not applicable.

### ***Sale of the Notes***

In general, the sale of corporate bonds or financial bonds is subject to a 0.1% securities transaction tax (“STT”) on the transaction price. However, Article 2-1 of the Securities Transaction Tax Act of the ROC prescribes that STT will cease to be levied on the sale of corporate bonds and financial bonds from January 1, 2010 to December 31, 2026. Therefore, the sale of the notes will be exempt from STT if the sale is conducted on or before December 31, 2026. Starting from January 1, 2027, any sale of the notes will be subject to STT at 0.1% of the transaction price, unless otherwise provided by the tax laws that may be in force at that time.

Capital gains generated from the sale of bonds are exempt from ROC income tax. Accordingly, ROC corporate holders are not subject to income tax on any capital gains generated from the sale of the notes.

However, ROC corporate holders should include the capital gains from the sale of the notes in calculating their basic income for the purpose of calculating their AMT. If the amount of the AMT exceeds the ordinary income tax calculated pursuant to the Income Basic Tax Act (also known as the AMT Act), the excess becomes the ROC corporate holders’ AMT payable. Capital losses, if any, incurred by such holders could be carried over five years to offset against capital gains of the same category of income for the purposes of calculating their AMT.

### **European Union Taxation**

#### ***The Proposed Financial Transaction Tax***

The European Commission has published a proposal (the “Commission’s Proposal”) for a Directive for a common financial transaction tax (“FTT”) in Austria, Belgium, Estonia, France, Germany, Greece, Italy, Portugal, Slovakia, Slovenia and Spain (the “participating Member States”). However, Estonia has since stated that it will not participate.

The Commission’s Proposal has very broad scope and could, if introduced in its current form, apply to certain dealings in the notes in certain circumstances.

Under the Commission’s Proposal, the FTT could apply in certain circumstances to persons both within and outside of the participating Member States. Generally, it would apply to certain dealings in the notes where at least one party is a financial institution, and at least one party is established in a participating Member State. A financial institution may be, or be deemed to be, “established” in a participating Member State in a broad range of circumstances, including (a) by transacting with a person established in a participating Member State or (b) where the financial instrument which is subject to the dealings is issued in a participating Member State.

The FTT remains subject to negotiation between the participating Member States and the legality of the proposal is uncertain. It may therefore be altered prior to any implementation, the timing of which remains unclear. Additional EU Member States may decide to participate and/or certain of the participating Member States may decide to withdraw.

Prospective holders of the notes are advised to seek their own professional advice in relation to the FTT.

## **FORM OF NOTES, CLEARING AND SETTLEMENT**

### **Global Clearance and Settlement**

The notes will be issued in the form of one or more global notes (the “Global Notes”) in fully registered form, without coupons, and will be deposited on the settlement date with a common depositary for, and in respect of interests held through, Euroclear and Clearstream. Except as described herein, certificates will not be issued in exchange for beneficial interests in the Global Notes.

Except as set forth below, the Global Notes may be transferred, in whole and not in part, only to Euroclear or Clearstream or their respective nominees.

Beneficial interests in the Global Notes will be represented, and transfers of such beneficial interests will be effected, through accounts of financial institutions acting on behalf of beneficial owners as direct or indirect participants in Euroclear or Clearstream. Those beneficial interests will be in denominations of U.S.\$ 200,000 and integral multiples of U.S.\$ 1,000 in excess thereof. Any resale or transfer of those interests to U.S. persons (as defined in Regulation S) will only be permitted as described under “Notice to Investors.” Investors may hold notes directly through Euroclear or Clearstream, if they are participants in such systems, or indirectly through organizations that are participants in such systems.

Owners of beneficial interests in the Global Notes will not be entitled to have notes registered in their names, and will not receive or be entitled to receive physical delivery of notes in definitive form. Except as provided below, beneficial owners will not be considered the owners or holders of the notes under the Indenture, including for purposes of receiving any reports delivered by us or the trustee pursuant to the Indenture. Accordingly, each beneficial owner must rely on the procedures of the clearing systems and, if such person is not a participant of the clearing systems, on the procedures of the participant through which such person owns its interest, to exercise any rights of a holder under the Indenture. Under existing industry practices, if the Issuer requests any action of holders or a beneficial owner desires to give or take any action which a holder is entitled to give or take under the Indenture, the clearing systems would authorize their participants holding the relevant beneficial interests to give or take action and the participants would authorize beneficial owners owning through the participants to give or take such action or would otherwise act upon the instructions of beneficial owners. Conveyance of notices and other communications by the clearing systems to their participants, by the participants to indirect participants and by the participants and indirect participants to beneficial owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. The laws of some jurisdictions require that certain purchasers of securities take physical delivery of such securities in certificated form. These limits and laws may impair the ability to transfer beneficial interests in Global Notes.

Persons who are not Euroclear or Clearstream participants may beneficially own notes held by the common depositary for Euroclear and Clearstream only through direct or indirect participants in Euroclear and Clearstream. So long as the common depositary for Euroclear and Clearstream is the registered owner of the Global Note, the common depositary for all purposes will be considered the sole holder of the notes represented by the Global Note under the Indenture and the Global Notes.

### **Certificated Notes**

Notes represented by a Global Note will be exchangeable for Note certificates, registered in the names of owners of beneficial interests in the Global Notes, with the same terms and in authorized denominations, only if:

- the applicable depositary notifies us that it is unwilling, unable or no longer permitted under applicable law to continue as depositary for that Global Note and the Issuer does not appoint another institution to act as depositary within 90 days;
- we notify the trustee that the Issuer wishes to terminate that Global Note, or
- an event of default has occurred with regard to the notes and has not been cured or waived.

In any such instance, an owner of a beneficial interest in the Global Notes will be entitled to physical delivery of the notes represented by the Global Notes equal in principal amount to that beneficial interest and to have those notes registered in its name. Notes so issued will be in definitive registered form, in denominations of \$200,000 and

integral multiples of \$1,000 in excess thereof, unless otherwise specified by us. Notes so registered can be transferred by presentation for registration of transfer to the transfer agent at its corporate trust office and must be duly endorsed by the holder or his attorney duly authorized in writing, or accompanied by a written instrument or instruments of transfer in form satisfactory to us or the trustee duly executed by the holder or its attorney duly authorized in writing. The Issuer may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in connection with any exchange or registration of transfer of definitive notes.

## **Clearing Systems**

### ***Euroclear***

Euroclear advises that it was created in 1968 to hold securities for its participants and to clear and settle transactions between Euroclear participants through simultaneous electronic book-entry delivery against payment, thereby eliminating the need for physical movement of certificates and any risk from lack of simultaneous transfers of securities and cash. Euroclear provides various other services, including securities lending and borrowing and interfaces with domestic markets in several countries. All operations are conducted by Euroclear Bank, S.A./N.V. and all Euroclear securities clearance accounts and Euroclear cash accounts are accounts with Euroclear Bank, not the cooperative. The cooperative establishes policy for Euroclear on behalf of Euroclear participants. Euroclear participants include banks (including central banks), securities brokers and dealers and other professional financial intermediaries and may include the managers (“Euroclear participants”). Indirect access to Euroclear is also available to other firms that clear through or maintain a custodial relationship with a Euroclear participant, either directly or indirectly.

Securities clearance accounts and cash accounts with Euroclear Bank are governed by the Terms and Conditions Governing Use of Euroclear and the related Operating Procedures of the Euroclear System, and applicable Belgian laws (collectively, the “Euroclear Terms and Conditions”). The Euroclear Terms and Conditions govern transfers of securities and cash within Euroclear, withdrawals of securities and cash from Euroclear and receipts of payment with respect to securities in Euroclear. All securities in Euroclear are held on a fungible basis without attribution of specific certificates to specific securities clearance accounts. Euroclear Bank acts under the Euroclear Terms and Conditions only on behalf of Euroclear participants and has no record of or relationship with persons holding through Euroclear participants.

Distributions with respect to the notes held beneficially through Euroclear will be credited to the cash accounts of Euroclear participants in accordance with the Euroclear Terms and Conditions, to the extent received by the Euroclear Bank and by Euroclear.

### ***Clearstream***

Clearstream is incorporated under the laws of Luxembourg as a professional depository. Clearstream holds securities for Clearstream participants and facilitates the clearance and settlement of securities transactions between Clearstream participants through electronic book-entry changes in accounts of Clearstream participants, thereby eliminating the need for physical movement of certificates. Clearstream provides to its participants, among other things, services for safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Clearstream also deals with domestic securities markets in several countries. As a professional depository, Clearstream is subject to regulation by the Luxembourg Monetary Institute. Clearstream participants are financial institutions around the world including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations and certain other organizations and may include the managers. Indirect access to Clearstream is also available to others, such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a Clearstream participant either directly or indirectly.

Distributions with respect to the notes held beneficially through Clearstream will be credited to cash accounts of Clearstream participants in accordance with its rules and procedures, to the extent received by Clearstream.

## **Euroclear and Clearstream Arrangements**

So long as Euroclear or Clearstream or their nominee or their common depository is the registered holder of the Global Notes, Euroclear, Clearstream or such nominee or common depository, as the case may be, will be considered the sole owner or holder of the notes represented by such Global Notes for all purposes under the

Indenture and the notes. Payments of principal, interest and additional amounts, if any, in respect of the Global Notes will be made to Euroclear, Clearstream or such nominee or common depositary, as the case may be, as registered holder thereof. None of us, the trustee, the managers, the structuring agent or any affiliate of any of the foregoing or any person by whom any of the above is controlled (as such term is defined in the Securities Act) will have any responsibility or liability for any records relating to or payments made on account of beneficial ownership interests in the Global Notes or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

Distributions of principal and interest with respect to the Global Note will be credited in U.S. dollars to the extent received by Euroclear or Clearstream from the trustee to the cash accounts of Euroclear or Clearstream customers in accordance with the relevant system's rules and procedures.

Because Euroclear and Clearstream can only act on behalf of participants, who in turn act on behalf of indirect participants, the ability of a person having an interest in the Global Notes to pledge such interest to persons or entities which do not participate in the relevant clearing system, or otherwise take actions in respect of such interest, may be affected by the lack of a physical certificate in respect of such interest.

The holdings of book-entry interests in the Global Notes through Euroclear and Clearstream will be reflected in the book-entry accounts of each such institution. As necessary, the registrar will adjust the amounts of the Global Notes on the register for the accounts of the common depositary to reflect the amounts of notes held through Euroclear and Clearstream, respectively.

### **Initial Settlement**

Investors holding their notes through Euroclear or Clearstream accounts will follow the settlement procedures applicable to conventional eurobonds in registered form. Notes will be credited to the securities custody accounts of Euroclear and Clearstream holders on the settlement date against payment for value on the settlement date.

### **Secondary Market Trading**

Because the purchaser determines the place of delivery, it is important to establish at the time of trading of any notes where both the purchaser's and seller's accounts are located to ensure that settlement can be made on the desired value date.

Secondary market sales of book-entry interests in the notes held through Euroclear or Clearstream to purchasers of book-entry interests in the Global Note through Euroclear or Clearstream will be conducted in accordance with the normal rules and operating procedures of Euroclear and Clearstream and will be settled using the procedures applicable to conventional eurobonds in same-day funds.

You should be aware that investors will only be able to make and receive deliveries, payments and other communications involving the notes through Euroclear and Clearstream on days when those systems are open for business. Those systems may not be open for business on days when banks, brokers and other institutions are open for business in the United States or Taiwan.

In addition, because of time-zone differences, there may be problems with completing transactions involving Euroclear and Clearstream on the same business day as in the United States or Taiwan. U.S. or Taiwanese investors who wish to transfer their interests in the notes, or to make or receive a payment or delivery of the notes, on a particular day, may find that the transactions will not be performed until the next business day in Luxembourg or Brussels, depending on whether Euroclear or Clearstream is used.

Euroclear and Clearstream will credit payments to the cash accounts of Euroclear participants or Clearstream customers in accordance with the relevant system's rules and procedures, to the extent received by its depositary. Clearstream or the Euroclear Operator, as the case may be, will take any other action permitted to be taken by a holder under the Indenture on behalf of a Euroclear participant or Clearstream customer only in accordance with its relevant rules and procedures.

Euroclear and Clearstream have agreed to the foregoing procedures in order to facilitate transfers of the notes among participants of Euroclear and Clearstream. However, they are under no obligation to perform or continue to perform those procedures, and they may discontinue those procedures at any time.

### **ROC Trading**

Investors with a securities book-entry account with a Taiwan securities broker and a foreign currency deposit account with a Taiwan bank, may request the approval of the Taiwan Depository & Clearing Corporation (the “TDCC”) to the settlement of the notes through the account of TDCC with Euroclear or Clearstream and if such approval is granted by the TDCC, the notes may be so cleared and settled. In such circumstances, TDCC will allocate the respective book-entry interest of such investors in the notes to the securities book-entry account designated by such investor in the ROC. The notes will be traded and settled pursuant to the applicable rules and operating procedures of TDCC and the TPEx as domestic bonds.

In addition, an investor may apply to TDCC (by filing in a prescribed form) to transfer the Notes in its own account with Euroclear or Clearstream to the TDCC account with Euroclear or Clearstream for trading in the domestic market or vice versa for trading in overseas markets.

For such investors who hold their interest in the notes through an account opened and held by TDCC with Euroclear or Clearstream, distributions of principal and/or interest for the notes to such holders may be made by payment services banks whose systems are connected to TDCC to the foreign currency deposit accounts of the holders. Such payment is expected to be made on the second Taiwanese business day following TDCC’s receipt of such payment (due to time difference, the payment is expected to be received by TDCC one Taiwanese business day after the distribution date). However, when the holders will actually receive such distributions may vary depending upon the daily operations of the Taiwan banks with which the holder has the foreign currency deposit account.

## TRANSFER RESTRICTIONS

The notes are subject to restrictions on transfer as summarized below. By purchasing notes, you will be deemed to have made the following acknowledgements, representations to and agreements with us and the managers:

(1) You acknowledge that:

- the notes have not been registered under the Securities Act or any other securities laws and are being offered for resale in transactions that do not require registration under the Securities Act or any other securities laws;
- the notes may not be offered, sold or otherwise transferred except under an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act or any other applicable securities laws, and, if applicable, in compliance with the conditions for transfer set forth in paragraph (4) below; and
- the notes have not been, and shall not be, offered, sold or re-sold, directly or indirectly, to investors other than “professional institutional investors” as defined under Paragraph 2, Article 4 of the Financial Consumer Protection Act of the ROC. Purchasers of the notes are not permitted to sell or otherwise dispose of the notes except by transfer to the aforementioned professional institutional investors.

(2) You represent that you are not a U.S. person (as defined in Regulation S under the Securities Act) or purchasing for the account or benefit of a U.S. person and you are purchasing notes in an offshore transaction in accordance with Regulation S.

(3) You acknowledge that none of we, the managers or any person representing us or the managers has made any representation to you with respect to us or the offering of the notes, other than the information contained or incorporated by reference in this offering memorandum. You represent that you are relying only on this offering memorandum in making your investment decision with respect to the notes. You agree that you have had access to such financial and other information concerning us and the notes as you have deemed necessary in connection with your decision to purchase notes, including an opportunity to ask questions of and request information from us.

(4) You agree, and each subsequent holder of the notes by its acceptance of the notes will agree, that the notes may be offered, sold or otherwise transferred only:

- (i) in an offshore transaction complying with Rule 903 or Rule 904 of Regulation S under the Securities Act; or
- (ii) pursuant to an exemption from registration under the Securities Act (if available).

As a condition to registration of transfer of the notes pursuant to the exemption referred to in clause (ii) above, the Issuer or the trustee may require delivery of any documents or other evidence that the Issuer or the trustee each, in our or its discretion, deems necessary or appropriate to evidence compliance with such exemption, and, in each case, in accordance with the applicable securities laws of the states of the United States and other jurisdictions.

In addition, until 40 days after commencement of the offering, an offer or sale of notes within the United States by a dealer whether or not participating in the offering may violate the registration requirements of the Securities Act.

(5) You acknowledge that we, the managers and others will rely upon the truth and accuracy of the above acknowledgments, representations and agreements. You agree that if any of the acknowledgments, representations or agreements you are deemed to have made by your purchase of notes is no longer accurate, you will promptly notify us and the managers. If you are purchasing any notes as a fiduciary or agent for one or more investor accounts, you represent that you have sole investment discretion with respect to each of those accounts and that you have full power to make the above acknowledgments, representations and agreements on behalf of each account.

No action has been or will be taken by us that would permit a public offering of the Notes, or possession or distribution of this offering memorandum or any other offering or publicity material relating to Notes, in any country or jurisdiction where, or in any circumstances in which, action for that purpose is required. Accordingly, the Notes may not be offered or sold, directly or indirectly, and this offering memorandum and any other offering or publicity material relating to the Notes may not be distributed or published, in or from any country or jurisdiction except under circumstances that will result in compliance with applicable laws and regulations.

(6) You understand and agree that the notes have not been, and shall not be, offered, sold or re-sold, directly or indirectly, to purchasers other than “professional institutional investors” as defined under Paragraph 2, Article 4 of the Financial Consumer Protection Act of the ROC, which currently include: (i) overseas or domestic banks, securities firms, futures firms and insurance companies (excluding insurance agencies, insurance brokers and insurance surveyors), the foregoing as further defined in more detail in Paragraph 3 of Article 2 of the Organization Act of the Financial Supervisory Commission of the ROC, (ii) overseas or domestic fund management companies, government investment institutions, government funds, pension funds, mutual funds, unit trusts, and funds managed by financial service enterprises pursuant to the ROC Securities Investment Trust and Consulting Act, the ROC Future Trading Act or the ROC Trust Enterprise Act or investment assets mandated and delivered by or transferred for trust by financial consumers, and (iii) other institutions recognized by the Financial Supervisory Commission of the ROC. Purchasers of the notes are not permitted to sell or otherwise dispose of the notes except by transfer to the aforementioned professional institutional investors.



## SELLING

The Issuer, HSBC Bank (Taiwan) Limited, as lead manager, Morgan Stanley Taiwan Limited, as manager, and Taishin International Bank Co., Ltd., as co-manager (and, together with HSBC Bank (Taiwan) Limited and Morgan Stanley Taiwan Limited, the “managers”), have entered into a subscription agreement with respect to the notes. HSBC Bank (Taiwan) Limited and Morgan Stanley Taiwan Limited are acting as representatives of the managers and as joint bookrunners, pursuant to the subscription agreement, subject to certain conditions set forth therein, the Issuer agreed to issue and the managers have agreed to subscribe for the principal amount of notes indicated in the table below.

<u>Manager</u>	<u>Principal Amount of Notes</u>
HSBC Bank (Taiwan) Limited .....	U.S.\$ 219,000,000
Morgan Stanley Taiwan Limited .....	U.S.\$ 346,000,000
Taishin International Bank Co., Ltd.	U.S.\$ 50,000,000
<b>Total</b> .....	<b>U.S.\$ 615,000,000</b>

The subscription agreement provides that the obligations of the managers to subscribe the notes included in this offering are subject to certain conditions precedent. The managers are committed to take and pay for all the notes being offered, if any are taken.

The managers are offering the notes, subject to prior sale, when, as and if issued to and accepted by it, in accordance with the terms of the subscription agreement including, among others, approval of legal matters by its counsel, including the validity of the notes, and other conditions contained in the subscription agreement, such as the receipt by the manager of officer’s certificates and legal opinions. The subscription agreement may be terminated by the managers in certain circumstances at any time up to the time when the proceeds of the offering have been received and the notes issued. The managers reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

J.P. Morgan Securities LLC is acting as the structuring agent in connection with the offering. J.P. Morgan Securities LLC is not a licensed or regulated entity in the ROC, and has not offered or sold, and will not subscribe for or sell or underwrite, any notes offered hereby.

The Issuer has agreed to indemnify the managers and its controlling persons against certain liabilities in connection with this offering, including liabilities under the Securities Act, or to contribute to payments the managers may be required to make in respect of those liabilities. Separately, in connection with structuring services that the structuring agent provided in connection with this offering, the Issuer has agreed to indemnify the structuring agent against certain liabilities in connection with the structuring services that they are providing with respect to the notes, including liabilities under the Securities Act, or to contribute to payments the structuring agent may require to make in respect of those liabilities.

The Issuer will pay the managers’ customary fees and commissions in connection with the offering and will reimburse the managers for certain out-of-pocket fees and expenses incurred by it in connection with the offering. The Issuer will also pay a customary fee to J.P. Morgan Securities LLC in connection with its structuring services and reimburse it for certain fees and expenses incurred by it in connection with the structuring services that they are providing with respect to the notes.

The managers have advised the Issuer that they propose initially to offer the notes at the offering price set forth on the cover page of this offering memorandum. After the initial offering, the offering price or any other term of the offering may be changed.

The managers or certain of their affiliates may purchase the notes and be allocated the notes for asset management and/or proprietary purposes but not with a view to distribution. The managers or their respective affiliates may purchase the notes for its or their own account or for the accounts of their customers and enter into transactions, including credit derivatives, such as asset swaps, repackaging and credit default swaps relating to the notes and/or other securities of the Issuer at the same time as the offer and sale of the notes or in secondary market transactions. Such transactions would be carried out as bilateral trades with selected counterparties and separately

from any existing sale or resale of the notes to which this offering memorandum relates (notwithstanding that such selected counterparties may also be purchasers of the notes).

### **Notes Are Not Being Registered**

The notes have not been registered under the Securities Act or any U.S. state or other securities laws. The managers propose to offer the notes for resale in transactions not requiring registration under the Securities Act or applicable U.S. state or other securities laws, including sales pursuant to Regulation S. The managers will not offer or sell the notes except pursuant to offers and sales to non-U.S. persons that occur outside of the United States within the meaning of Regulation S. In addition, until 40 days following the commencement of this offering, an offer or sale of notes within the United States by a dealer (whether or not participating in the offering) may violate the registration requirements of the Securities Act. The managers will be deemed to have made acknowledgments, representations and agreements as described under “Transfer Restrictions.”

The information contained in this offering memorandum is exclusively our responsibility and has not been reviewed or authorized by the CNBV. The notes have not been and will not be registered with the Mexican National Securities Registry maintained by the CNBV and therefore the notes may not be publicly offered or sold in Mexico. The notes may be offered in Mexico to investors that satisfy the requirements to be considered institutional or qualified investors under Mexican law, pursuant to the private placement exemption set forth in Article 8 of the Mexican Securities Market Law and related rules thereunder. As required under the Mexican Securities Market Law, the Issuer will notify the CNBV of the offering of the notes outside of Mexico, such notice will be delivered to the CNBV to comply with a legal requirement and for information purposes only, and the delivery of such notice to, and the receipt of such notice by, the CNBV, is not a requirement for the validity of the notes and does not imply any certification as to the investment quality of the notes, the Issuer’s solvency, liquidity or credit quality or the accuracy of completeness of the information set forth herein. This offering memorandum may not be publicly distributed in Mexico.

### **New Issue of Notes**

The notes are a new issue of securities with no established trading market. The Issuer does not intend to apply for listing of the notes on any national securities exchange or for inclusion of the notes on any automated dealer quotation system other than the TPEx and the Luxembourg Stock Exchange. Application will be made to the TPEx for the listing of, and permission to deal in, the notes by way of debt issues to “professional institutional investors” as defined under paragraph 2 of Article 4 of the Financial Consumer Protection Act only and such permission is expected to become effective on or about July 30, 2019. In addition, application will be made to list the notes on the Official List of the Luxembourg Stock Exchange for trading on the Euro MTF Market. However, there can be no assurance that the notes will be listed on either of the such exchanges or if they are listed, that either such listing will be maintained. The managers are not obligated to carry out market making activities with respect to the notes. The Issuer cannot assure the liquidity of the trading market for the notes. If an active trading market for the notes does not develop, the market price and liquidity of the notes may be adversely affected. If the notes are traded, they may trade at a discount from their initial offering price, depending on prevailing interest rates, the market for similar securities, our operating performance and financial condition, general economic conditions and other factors.

### **Other Relationships**

The managers, the structuring agent and their respective affiliates are full service financial institutions engaged in various activities which may include securities trading, commercial and investment banking, financial advice, investment management, principal investment, hedging, financing and brokerage activities. The managers, the structuring agent and their respective affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates from time to time. Certain affiliates of the managers and the structuring agent are lenders under a number of our loan agreements. They have received, and may in the future receive, customary fees and commissions for these transactions. In addition to the transactions noted above, the managers, the structuring agent and their respective affiliates may, from time to time, engage in other transactions with, and perform services for, us and our affiliates in the ordinary course of their business. In addition, the managers, the structuring agent and certain of their respective subsidiaries and affiliates may hold our securities as beneficial owners, on behalf of clients or in the capacity of investment advisors.

## **Notice to Prospective Investors in Hong Kong**

This offering memorandum has not been approved by or registered with the Securities and Futures Commission of Hong Kong or the Registrar of Companies of Hong Kong. The notes will not be offered or sold in Hong Kong other than (a) to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a “prospectus” as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the notes which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) has been issued or will be issued in Hong Kong or elsewhere other than with respect to securities which are or are intended to be disposed of only to persons outside of Hong Kong or only to “professional investors” as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

## **Notice to Prospective Investors in Singapore**

This offering memorandum has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offering may not be circulated or distributed, nor may the notes be offered, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act (Chapter 289) (the “SFA”), (ii) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the notes are subscribed for under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, then securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries’ rights and interest (howsoever described) in that trust shall not be transferable for six months after that corporation or that trust has acquired the notes under Section 275 of the SFA except: (i) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), or to any person arising from an offer referred to in Section 275(1A), or Section 276(4)(i)(B) of the SFA; (ii) where no consideration is or will be given for the transfer; (iii) where the transfer is by operation of law; (iv) as specified in Section 276(7) of the SFA; or (v) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Singapore Securities and Futures Act Product Classification – Solely for the purposes of its obligations pursuant to sections 309B(1)(a) and 309B(1)(c) of the SFA (Chapter 289 of Singapore), the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A of the SFA) that the notes are “prescribed capital markets products” (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

## **Prohibition of Sales to European Economic Area Retail Investors**

The notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area (“EEA”). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, “MiFID II”); or (ii) a customer within the meaning of Directive 2016/97/EU (the “Insurance Distribution Directive”), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II. Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the “PRIIPs Regulation”) for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation. This offering memorandum has been prepared on the basis that any offer of Notes in any member state of the EEA will be made pursuant to an exemption under Directive 2003/71/EC (as amended or superseded, the “Prospectus Directive”) from

the requirement to publish a prospectus for offers of notes. This offering memorandum is not a prospectus for the purposes of the Prospectus Directive.

## **LEGAL MATTERS**

The validity of the notes will be passed upon for us by Cleary Gottlieb Steen & Hamilton LLP, New York, New York. The validity of the notes will be passed upon for the managers and the structuring agent by Simpson Thacher & Bartlett LLP. Certain matters of Mexican law relating to the notes will be passed upon for us by our General Counsel (*Abogado General*). Certain matters of Mexican law relating to the notes will be passed upon for the managers and the structuring agent by Ritch, Mueller, Heather y Nicolau, S.C. Certain matters of Taiwanese law relating to the notes will be passed upon for us by Lee and Li, Attorneys-at-Law.

## **INDEPENDENT AUDITORS**

As stated in the report included herein of KPMG Cárdenas Dosal, S.C., our independent auditors, our annual financial statements as of and for the years ended December 31, 2018, 2017 and 2016 were audited by KPMG Cárdenas Dosal, S.C.

## LISTING AND GENERAL INFORMATION

1. The Issuer will apply to have the notes admitted for listing on the Official List of the Luxembourg Stock Exchange and for trading on the Euro MTF Market of the Luxembourg Stock Exchange, and for listing and trading on the TPEx.

2. The notes have been accepted for clearance through Euroclear and Clearstream. The ISIN and Common Code for the notes are as follows:

	<u>ISIN</u>	<u>Common Code</u>
Global Note .....	XS2030333038	203033303

3. The Issuer will have obtained all necessary consents, approvals and authorizations in Mexico in connection with the issuance of, and performance of our rights and obligations under, the notes, including the registration of the indenture and the form of notes attached to the indenture; *provided* that in connection with each issuance of notes under the indenture, the Issuer will register the notes and other necessary documentation with the Ministry of Finance and Public Credit. The Mexican Congress approved our total net indebtedness for 2019 under the *Ley de Ingresos de la Federación para el Ejercicio Fiscal de 2019* (Federal Revenue Law for the Fiscal Year 2019), published in the Official Gazette of the Federation on December 28, 2018.

4. Except as disclosed in this offering memorandum, there are no pending actions, suits or proceedings against or affecting us or any of our properties, which, if determined adversely to us would individually or in the aggregate have an adverse effect on our financial condition or would adversely affect our ability to perform our obligations under the notes or which are otherwise material in the context of the issue of the notes, and, to the best of our knowledge, no such actions, suits or proceedings are threatened.

5. Except as disclosed in this offering memorandum, since December 31, 2018, there has been no change (or any development or event involving a prospective change of which we are or might reasonably be expected to be aware) which is materially adverse to our financial condition.

6. KPMG Cárdenas Dosal, S.C., an independent auditor, has agreed to the inclusion of its report in this offering memorandum in the form and context in which it is included.

7. For so long as any of the notes are outstanding and admitted for listing on the Official List of the Luxembourg Stock Exchange and for trading on the Euro MTF Market of the Luxembourg Stock Exchange, or for listing and trading on the TPEx, copies of the following items in English will be available free of charge from Deutsche Bank Luxembourg S.A., our Luxembourg transfer agent, at its office at 2, Boulevard Konrad Adenauer, L-1115 Luxembourg:

- our audited consolidated financial statements as of and for the years ended December 31, 2018, 2017 and 2016;
- our unaudited condensed consolidated interim financial information as of March 31, 2019 and for the three-month periods ended March 31, 2019 and 2018;
- our audited consolidated financial statements as of future dates and for future years; and
- any related notes to these items.

For so long as any of the notes are outstanding, the indenture, our by-laws and a copy of the CFE Law which provides for the regulatory framework of CFE will be available for inspection at the offices of the trustee.

We currently publish unaudited condensed consolidated interim financial information on a quarterly basis. These financial statements are available on our website ([www.cfe.mx](http://www.cfe.mx)). Information on our website is not a part of this offering memorandum.

This offering memorandum will be published on the website of the Luxembourg Stock Exchange, being [www.bourse.lu](http://www.bourse.lu).

8. The Issuer was created in 1937 by presidential decree, and then converted by the Mexican Congress in 1949 into an *organismo descentralizado de la Administración Pública Federal* (decentralized public entity of the Mexican government). Pursuant to the CFE Law, in accordance with the Energy Reform Decree and Secondary Legislation, the Issuer was converted into a productive state enterprise on October 7, 2014. Our principal executive office is located at Paseo de la Reforma 164, Col. Juárez, 06600 Ciudad de México, México. Our telephone number at that address is +1(5255) 5229-4000.

9. The trustee for the notes is Deutsche Bank Trust Company Americas, having its office at 60 Wall Street, New York, New York, 10005, United States. The terms and conditions of our appointment of Deutsche Bank Trust Company Americas as trustee, including the terms and conditions under which Deutsche Bank Trust Company Americas may be replaced as trustee, are contained in the indenture available for inspection at the offices of Deutsche Bank Trust Company Americas.

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*Comisión Federal de Electricidad*

**Comision Federal de Electricidad,  
State Enterprise and subsidiaries**

Unaudited condensed consolidated financial  
information  
March 31, 2019

(Translation from Spanish Language Original)

**COMISIÓN FEDERAL DE ELECTRICIDAD**  
**(Productive State Enterprise and Subsidiaries and Affiliated Companies)**  
**Unaudited Condensed Consolidated Statements of Financial Position**  
**(Amounts in thousands of Mexican pesos)**

Concept	As at 31 March 2019	As at 31 December 2018
<b>ASSETS</b>		
<b>Current assets</b>	<b>164,569,506</b>	<b>193,196,623</b>
Cash, cash equivalents and other investments	44,968,233	78,483,263
Accounts receivable	102,548,546	99,175,895
Materials for operation	17,052,727	15,537,465
Loans to workers (Housing Fund)	<b>12,729,534</b>	<b>12,367,879</b>
Plants, facilities and equipment, net	<b>1,177,614,834</b>	<b>1,186,590,258</b>
Derivative financial instruments	<b>12,856,142</b>	<b>17,783,141</b>
Other assets	<b>39,253,105</b>	<b>34,281,864</b>
Right of use asset	<b>343,601,612</b>	<b>337,493,233</b>
Deferred tax asset, net	<b>172,919,707</b>	<b>176,616,976</b>
<b>TOTAL ASSETS</b>	<b>1,923,544,439</b>	<b>1,958,329,975</b>
<b>LIABILITIES</b>		
<b>Current liabilities</b>	<b>148,460,809</b>	<b>165,074,500</b>
Short-term debt	31,773,035	39,829,270
Other accounts payable and accrued liabilities	97,093,726	109,234,093
Taxes and duties payable	4,611,511	3,724,408
Income tax	6,242,120	3,709,859
Short-term lease liability	8,740,416	8,576,870
<b>Non-current liabilities</b>	<b>1,113,302,487</b>	<b>1,114,204,900</b>
Long-term debt	309,412,462	314,795,714
Labor obligations	329,711,805	327,452,589
Other long-term liabilities	21,362,268	20,451,195
Long term lease liability	452,815,953	451,505,402
<b>TOTAL LIABILITIES</b>	<b>1,261,763,296</b>	<b>1,279,279,400</b>
<b>Equity</b>	<b>661,781,143</b>	<b>679,050,575</b>
Contributions received from the Federal Government	5,251	5,251
Contributions in kind received from the Federal Government	95,004,417	95,004,417
Retained earnings	86,397,547	100,338,214
Accumulated other comprehensive income items	462,877,286	466,206,051
Non-controlling interest	17,496,642	17,496,642
<b>LIABILITIES + EQUITY</b>	<b>1,923,544,439</b>	<b>1,958,329,975</b>

**COMISIÓN FEDERAL DE ELECTRICIDAD**  
**(Productive State Enterprise and Subsidiaries and Affiliated Companies)**  
**Statement of Income**  
**AS AT 31 MARCH 2019 AND MARCH 2018**  
**(Amounts in thousands of Mexican pesos)**

Concept	Accumulated to March	
	March 2019	March 2018
<b>Revenues</b>	<b>\$119,458,295</b>	<b>\$93,114,764</b>
Revenue from the sale of electricity	\$92,231,048	\$72,844,864
Revenue from the sale of fuel	\$11,577,957	\$9,749,895
Revenue from the transmission of electricity	\$234,989	\$159,846
Revenue from subsidies	\$10,417,160	\$9,886,255
Other income and gains	\$4,997,142	\$473,904
<b>Costs</b>	<b>\$125,363,410</b>	<b>\$114,348,513</b>
Energy and fuel supplies	\$78,232,051	\$64,504,063
Employee compensation	\$17,001,269	\$16,130,904
Maintenance, materials and general services	\$2,498,124	\$4,704,453
Taxes and duties	\$780,131	\$906,115
Wholesale Electricity Market (MEM) costs	\$722,166	\$642,502
<b>Cost of labor obligations</b>	<b>\$8,683,741</b>	<b>\$11,500,153</b>
Depreciation	\$17,445,927	\$14,042,386
Other expenses	\$0	\$1,917,937
<b>OPERATING INCOME (LOSS)</b>	<b>(\$5,905,114)</b>	<b>(\$21,233,750)</b>
<b>Financing cost</b>	<b>\$3,635,345</b>	<b>(\$11,339,229)</b>
Other financial (income) expense, net	\$7,333,980	\$3,535,725
Interest expense, net	\$6,590,996	\$7,120,043
Foreign exchange (gain) loss, net	(\$10,289,630)	(\$21,994,996)
<b>INCOME BEFORE INCOME TAX</b>	<b>(\$9,540,460)</b>	<b>(\$9,894,521)</b>
<b>Income tax</b>	<b>\$4,400,206</b>	<b>\$1,511,069</b>
<b>NET (LOSS) INCOME</b>	<b>(\$13,940,666)</b>	<b>(\$11,405,590)</b>
<b>Other comprehensive (loss) income</b>	<b>(\$3,328,766)</b>	<b>\$3,363,303</b>
<b>COMPREHENSIVE LOSS</b>	<b>(\$17,269,432)</b>	<b>(\$8,042,287)</b>

# Comisión Federal de Electricidad, Productive State Enterprise and Subsidiaries

## Consolidated Statements of Changes in Equity

As at 31 December 2016, 2017, 2018, and 31 March 2019

(Amounts in thousands of Mexican pesos)

	Contributions received from the Federal Government	Contributions in kind received from the Federal Government	Retained earnings (loss)	Other comprehensive income	Total equity holders of the parent	Non-controlling interest	Total equity
Balance as at 31 December 2017	\$ 5,251	\$ 95,004,417	\$ 100,140,833	\$ 416,780,451	611,930,952	-	\$ 611,930,952
Adoption of IFRS 16			(38,238,852)		(38,238,852)		(38,238,852)
Balances as at 1 January 2018	\$ 5,251	\$ 95,004,417	\$ 61,901,981	\$ 416,780,451	573,692,100	-	\$ 573,692,100
Non-controlling interest	-	-	-	-	-	15,494,065	15,494,065
Comprehensive income (loss) for the period	-	-	44,666,931	49,425,600	94,092,531	3,250,027	97,342,558
Distributions to the holders of Fibra E	-	-	-	-	-	(1,247,450)	(1,247,450)
Balances as at 31 December 2018	<u>5,251</u>	<u>95,004,417</u>	<u>106,568,912</u>	<u>466,206,051</u>	<u>667,784,631</u>	<u>17,496,642</u>	<u>685,281,273</u>
Adoption of IFRS 16			(6,230,698)		(6,230,698)		(6,230,698)
Balances as at 1 January 2019	<u>5,251</u>	<u>95,004,417</u>	<u>100,338,214</u>	<u>466,206,051</u>	<u>661,553,933</u>	<u>17,496,642</u>	<u>679,050,575</u>
Comprehensive income (loss) for the period			(13,940,666)	(3,328,766)	(17,269,432)		(17,269,432)
Balances as at 31 March 2019	<u>5,251</u>	<u>95,004,417</u>	<u>86,397,548</u>	<u>462,877,285</u>	<u>644,284,501</u>	<u>17,496,642</u>	<u>661,781,143</u>

**Comisión Federal de Electricidad, Productive State Enterprise and Subsidiaries**

Consolidated Statements of Cash Flows

For the Period Ended 31 March 2019 and 31 December 2018

(Amounts in thousands of Mexican pesos)

	1 March 2019	31 December 2018
Operating activities:		
Net (loss) income	\$ (13,940,666)	\$ 47,916,958
Items related to operating activities:		
Net period cost of employee benefits	8,683,741	20,539,778
Increase (decrease) in the current and deferred income tax provision	3,697,270	(52,363,237)
Items related to investing activities:		
Depreciation	12,718,341	57,535,932
Retirements of plants, facilities and equipment	2,366,818	1,008,377
Unrealized loss on foreign exchange, interest expense and changes in the fair value of financial instruments	8,432,320	32,382,087
Changes in other operating assets and liabilities:		
Accounts receivable	3,479,354	(4,108,373)
Inventory of operating materials	(1,515,261)	(894,472)
Taxes and duties payable	(3,432,538)	(5,695,946)
Other assets	(5,332,896)	(1,480,495)
Other accounts payable and accrued liabilities	(11,275,905)	(1,537,422)
Payment of employee benefits	(6,424,525)	(39,534,335)
Net cash flows (used in) from operating activities	(2,543,949)	53,768,852
Investing activities:		
Acquisition of plants, facilities and equipment	(12,054,540)	(46,114,216)
Financing activities		
Debt contracting	(8,154,907)	91,373,548
Non-controlling interest contribution	-	15,494,065
Payment of dividends	-	(1,247,450)
Payment of debt	(3,494,988)	(78,934,168)
Interest paid	(5,201,449)	(22,053,366)
Payment of financial instruments	(2,065,197)	(1,041,903)
Net cash flows (used in) from investing activities	(18,916,541)	3,590,726
Cash surplus to be (obtained from) applied to financing activities	(33,515,030)	11,245,362
Cash and cash equivalents:		
At beginning of period	78,483,263	67,237,901
At end of period	\$ 44,968,233	\$ 78,483,263

The accompanying notes are an integral part of these consolidated financial statements.

## **1. Incorporation, Business Purpose and Relevant Events**

- **Incorporation and business purpose**

Comisión Federal de Electricidad, Productive State Enterprise, and Subsidiaries (the Group), is a Mexican entity located in Mexico that was initially incorporated by Decree as a Decentralized Public Group of the Federal Government on August 14, 1937 and published in the Official Gazette on August 24, 1937. The Group's registered address is Paseo de la Reforma 164, Colonia Juárez, C.P. 06600, in Mexico City. The accompanying consolidated financial statements include the accounts of Comisión Federal de Electricidad, Productive State Enterprise, and its subsidiaries (hereinafter referred to as the Group or CFE).

As of the date of its incorporation, the Group's business purpose is to provide electricity-related services in Mexico which include the generation, transformation, transmission, distribution and commercialization of electricity to consumers in Mexico.

The Comisión Federal de Electricidad Law (CFE Law) was published on August 11, 2014 and became effective on October 7, 2014. The CFE Law mandated the transformation of CFE into a Productive State Enterprise.

The Group's business purpose as of the date of its transformation into a Productive State Enterprise is to provide public transmission and distribution of electricity services on behalf of the Mexican State. CFE also engages in activities related to the generation and commercialization of electricity, as well as activities related to the import, export, transportation, storage and trading of natural gas, among others.

- **Relevant events**

- a) Infrastructure investment trust

On February 7, 2018, CFE placed an issue for the first Energy and Infrastructure Investment Trust or Fibra E, specialized in the Mexican electricity sector, placing Fiduciary Stock Certificates (CBFEs, Spanish acronym) for investment in energy and infrastructure through the Mexican Stock Exchange. The total placement was for 16,388 million pesos and it is the first Fibra E in which domestic and foreign investors participated, highlighting the participation of institutional investors, private banks and investment funds from Mexico, the United States, Canada, Australia and Europe.

The structure of the Fibra E comprises a "Promoted Trust", created by CFE Transmisión, Productive Subsidiary Group (EPS, hereinafter CFE Transmisión) who is the EPS that contributes the collection rights of the income obtained from the provision of the public transmission of electricity services; the Irrevocable Trust of Issuance of Stock Certificates CIB/2919 (hereinafter Fibra E), who acquires from CFE Transmisión the certificates of the Promoted Trust; and CFE Capital, administrator of the Fibra E.

A detailed description of the activities of each one of these CFE Capital Trusts is as follows:

Promoted Trust

The Irrevocable Trust of Administration and Source of Payment No. 80757 (hereinafter the Promoted Trust) was incorporated on January 22, 2018 to acquire the collection rights derived from the Agreement for the Technical and Commercial Operation of Electricity Transmission entered into with the National Energy Control Center (CENACE) on March 28, 2016.

As part of the structure of the Promoted Trust, CFE Transmisión, irrevocably transferred and assigned the collection rights of the Agreement entered into with the CENACE for a term of 30 years to the Promoted Trust. In exchange for the assignment of such collection rights, the Promoted Trust granted full title of the trust rights to CFE Transmisión. Subsequently, through the issuance of the Fibra E in the market, it acquired up to 6.78% of the instruments in exchange for \$15,454,653 in cash and \$5,403,571 in instruments in favor of CFE Transmisión, equal to 25% of the issue of shares in Fibra E.

The main activities of the Promoted Trust are as follows:

1. Receive, manage and hold the collection rights contributed;
2. Open, manage and maintain the trust bank accounts;
3. Make the transfers and payments set out in the trust agreement;
4. Evaluate the reimbursement of non-budgeted expenses requested by CFE Transmisión;
5. Receive any payments arising from the collection rights and other rights derived from the agreement entered into with the CENACE;
6. Exercise any other rights arising from the agreement entered into with the CENACE;
7. Carry out the instructions issued by the Trustor, the Technical Committee or the Beneficiaries, to the extent that they are authorized to do so in accordance with the terms of the trust agreement.

Issuing Trust (Fibra E)

The Fibra E trust entered into with CI Banco, S. A., Institución de Banca Múltiple, Monex Casa de Bolsa, S.A. de C.V. and Monex Grupo Financiero (FIBRA E) was created on January 22, 2018, as a trust for the issuance of Fiduciary Stock Certificates (CBFEs).

The primary purpose of the trust is to invest in eligible entities, whose exclusive activity consists of:

1. Investing in assets and projects related to Generation, Transmission and Distribution of Electricity, and Infrastructure Projects.
2. Investing in or performing any other activity provided for in the tax regulations related to the FIBRA E, as well as in Rule 3.21.3.9. of the Miscellaneous Tax Resolutions or any other tax law that supersedes it.

The initial asset of the Trust consists of beneficiary rights that have an economic ownership interest in the Promoted Trust.

## CFE Capital

The primary purpose of this entity is to manage all types of trusts and their property, including the Fibra E and the Promoted energy and infrastructure investment trusts created in conformity with current tax legislation, including but not limited to, all the activities and acts deemed necessary or suitable for such purpose, and to provide all types of management, operation, development and regulatory compliance services.

### b) Incorporation of the Productive Subsidiary Entities of CFE

In accordance with the CFE Law, the Subsidiary Productive Entities are productive entities of the State that have legal personality and their own equity, which will be organized and operate as set forth in the provisions of said Law and in the provisions that derive from such.

The Subsidiary Productive Entities shall be subject to the provisions of Articles 3, 7 and 8 of the CFE Law, and their business purpose shall be the activities defined by CFE's Board of Directors, and they shall be bound by the provisions of the Electric Industry Law, and shall operate under the special scheme provided for in this Law in terms of budget, debt, acquisitions, leases, services and works, administrative responsibilities, remunerations, assets and State dividend.

The terms of the strict legal separation that the CFE had to observe to carry out Generation, Transmission, Distribution, Commercialization and Supply of Primary Inputs activities, and of its participation in the market that was to be carried out independently through the units it was separated into, were issued on January 11, 2016, generating economic value and profitability for the Mexican State as its owner.

The resolutions for the incorporation of the following Productive Subsidiary Entities (EPS, Spanish acronym) were published on March 29, 2016 in the Official Gazette:

- CFE Generación I, EPS; CFE Generación II, EPS; CFE Generación III, EPS; CFE Generación IV, EPS; CFE Generación V, EPS; and CFE Generación VI, EPS, whose business purpose is to generate electricity using any type of technology in Mexico, as well as to commercialize electricity in conformity with the terms set forth in Article 45 of the Electric Industry Law, excluding the supply of electricity to end users. Each of these entities may fully or partially represent the Power Plants under their control or those owned by third parties in the Wholesale Electricity Market.
- CFE Distribución, EPS; whose business purpose is to carry out the activities necessary to provide public services related to the distribution of electricity, as well as to finance, install, maintain, manage, operate and enhance the required infrastructure to provide the distribution of electricity public services as set forth in the CFE Law, the Electric Industry Law, the Terms for the Strict Legal Separation of the CFE and other applicable legal provisions.



- CFE Transmisión, EPS; whose business purpose is to carry out the activities necessary to provide the public services related to the transmission of electricity, as well as to finance, install, maintain, manage, operate and enhance the required infrastructure to provide the transmission of electricity public services as set forth in the CFE Law, the Electric Industry Law, the Terms for the Strict Legal Separation of the CFE and other applicable legal provisions.
- CFE Suministrador de Servicios Básicos, EPS; whose business purpose is to provide the services related to the basic supply of electricity referred to in the Electric Industry Law, to any person who requests such services as required by such Law.

The aforementioned resolutions establish the rules regarding the business activities, the corporate governance and the oversight and monitoring of, as well as the responsibilities, disclosure obligations and oversight mechanisms applicable to, the Productive Subsidiary Entities.

As of January 1, 2017, Comisión Federal de Electricidad, EPE (Holding Group) ceased to carry out the Transmission, Distribution, Basic Supply and Commercialization (other than the basic supply and supply of primary inputs) independent activities, and of such date these activities are carried out by the Productive Subsidiary Entities.

As of February 1, 2017, Comisión Federal de Electricidad, EPE (Holding Group) no longer directly carries out the Generation independent activity nor does it participate in the Wholesale Electricity Market; and as of such date, these activities are carried out by the Productive Subsidiary Entities.

#### Incorporation of Affiliated Entities

According to the CFE Law, affiliated entities are those in which the CFE participates, directly or indirectly, with more than fifty percent of their share capital, regardless of whether they are incorporated under Mexican or foreign legislation.

The affiliated entities shall not be state-owned entities and shall have legal nature, and they shall be organized in accordance with the private law of the place of their incorporation or creation.

CFE Intermediación de Contratos Legados, S.A. de C.V. was incorporated on March 29, 2016, in which CFE made an initial contribution of \$99,900 on February 1, 2017. The purpose of this entity is to manage, on behalf of the CFE, the legacy interconnection contracts, the agreements for the purchase and sale of surplus electricity and all the other related agreements entered into by the CFE, and to represent the Power Plants and Load Centers included in the legacy interconnection contracts as an Intermediation Generator, and will not carry out electricity supply activities.

CFE Calificados, S.A. de C.V. was incorporated on May 23, 2016, in which CFE made an initial contribution of \$19,980 and \$10,020 on September 27 and 29, 2016, respectively. The purpose of this entity is to carry out commercialization of electricity activities and other related services in Mexico or abroad.

CFE Capital, Sociedad de Responsabilidad Limitada de Capital Variable (S. de R.L. de C.V., Spanish acronym) was incorporated on December 7, 2017. This entity may set up offices, agencies or branches anywhere in the United States. Its business purpose is described on page 3.

c) Mexican Wholesale Electricity Market

As a result of the operation of the Mexican Wholesale Electricity Market (MEM) and pursuant to the Third Transitory Article of the Electricity Industry Law, the Ministry of Energy extended the term for CFE to continue carrying out the Transmission, Distribution, Basic Supply and Commercialization (other than basic supply and supply of primary inputs) independent activities, including its participation in the Wholesale Electricity Market to December 31, 2016.

d) Long-Term Auctions and Clean Energy Certificates

The Wholesale Electricity Market allows for Medium and Long-term Auctions, which are defined in the Wholesale Electricity Market Rules as follows:

Section 2.1.134 states that long-term auctions are those in which basic service suppliers and other load serving entities are allowed to enter into hedging agreements for electricity generation, Electricity Certificates, Cumulative Energy and Clean Energy Certificates (CELs, Spanish acronym) with maturity terms of 15 and 20 years.

Section 2.1.135 states that Medium-term auctions are those in which basic service suppliers and other load serving entities are allowed to enter into hedging agreements for electricity generation, Electricity Certificates, Cumulative Energy Certificates and CELs with maturity terms of 3 years.

The first Long-Term Auction in 2015 resulted in 18 awarded bids deferred among 11 companies involved. In total, these bids amount to 5.4 million MWh of energy and 5.3 million of CELs (annual committed volume, except for the first year which will have a different volume based on the Bid Commercial Operation Date). The hedging agreements resulting from this Auction will be effective in 2018.

The second Long-term Auction in 2016 resulted in 56 awarded bids and 23 companies involved. In total, these bids amount to 1,187 MW per year of energy, 8.9 Million MWh of energy, and 9.275 million of CELs (annual committed volume, except for the first year which will have a different volume based on the Bid Commercial Operation Date). The hedging agreements related to this Auction will be effective in 2019.

In the third Long-term Auction in 2017 (SMP No. 01/2017), four companies participated as sellers, namely CFE Generación VI, Vitol, Azteca X (Integen) and PGP, and the following companies participated as buyers: CFE Suministrador de Servicios Básicos, Vitol, Enel and Iberdrola; in this auction no awarding was made for CFE Suministrador de Servicios Básicos EPS.

e) Assets contributed by the Federal Government

On October 7, 2015, the Ministry of Public Administration (SFP, Spanish acronym) through the Institute of Management and Valuation of National Assets (INDAABIN, Spanish acronym), terminated the commodatum agreement of the assets contributed by the Federal Government, and delivered the assets with a certificate of delivery that includes annexes for the different types of assets to the CFE.

The CFE also obtained the legal and physical possession of the related assets, as per the aforementioned annexes. The procedures for the legal divestiture of the assets from the Federal

public domain regime began as of such date. These assets were included in the consolidated statements of financial position as at 31 December 2015, at a value of \$95,004,417, as determined by the Asset Management and Divestiture Service (SAE, Spanish acronym), which will be adjusted based on the detailed breakdown by each of the corresponding areas. In 2016, these assets are included in the Plants, facilities and equipment and Other intangible assets captions (see Notes 8 and 9), and an additional amount of \$63,000 was recognized related to these types of assets. As at 31 December 2018, this activity is still ongoing.

f) Amendments to the Collective Labor Agreement

On May 19, 2016, CFE carried out a review of the terms of the Collective Labor Agreement it entered into with the Sole Union of Electricity Workers of the Mexican Republic ("SUTERM", Spanish acronym).

As shown in Note 15, as a result of this review, various clauses that mainly affect the retirements caption were amended and are presented as a reduction in CFE's labor obligations.

g) Assumption of the Group's employee benefits liability by the Federal Government

On November 14, 2016, the Ministry of Finance and Public Credit (SHCP, Spanish acronym) published the "Agreement through which the general provisions related to the assumption by the Federal Government of CFE's employee benefits liability are issued" in the Official Gazette, whereby the Federal Government through the SHCP, assumes a portion of the pension and retirement payment obligation actuarially recognized and accounted for in CFE's financial statements, that correspond to the workers that were hired on or prior to August 18, 2008.

The Federal government had stated that it would assume a portion of CFE's labor liabilities, and this would be equal, peso by peso, to the reduction that would be achieved from the labor obligations liability at the time the Collective Labor Agreement is renegotiated. On December 29, 2016, the Federal Government announced that it had completed the review process of the savings amount of CFE's labor obligations, resulting from the amendments to the collective labor agreement.

On December 19, 2016, through official document No. 35.-187/2016, the Public Credit Unit of the SHCP, informed the CFE that the Federal Government's commitment to pay would be assumed by the SHCP through the issue of debt instruments by the Federal Government in favor of the CFE for a total amount of \$161,080,204, distributed in amounts that will be delivered annually to cover such commitment.

## **1. Basis of preparation of the consolidated financial statements**

a) **Basis of preparation**

The accompanying unaudited condensed interim financial information has been prepared in accordance with International Accounting Standard (IAS) 34 Interim Financial Reporting and does not include all the information required for a complete set of annual financial statements prepared under International Financial Reporting Standards (IFRS) as issued by the International Accounting Standard Board (IASB).

This financial information should be read in conjunction with the financial statements as at 31 December 2018 and 2017 prepared under IFRS.

The consolidated unaudited consolidated interim financial information has been prepared on a historical-cost basis, except for the Group's derivative financial instruments and plants, facilities and equipment (as at 31 December 2016), which are recognized at fair value, and the defined benefits plans which are recognized at the present value of the defined benefit obligation less the fair value of the plan's assets.

**(a) Functional and reporting currency of the unaudited consolidated interim financial information**

The accompanying unaudited consolidated interim financial information and notes thereto are presented in Mexican pesos (reporting currency), which is the same as its functional currency.

For purposes of disclosure in the notes to the unaudited consolidated financial information, all references to "pesos" or "\$" refer to Mexican pesos, all references to "dollars" refer to U.S. dollars, all references to "euros" refer to the legal currency of the European Union, all references to "yen" refer to the legal currency of Japan; and all references to "Swiss francs" refer to the legal currency of Switzerland. The financial information is presented in thousands of pesos and has been rounded to the nearest unit, except where otherwise indicated.

**(b) Unaudited condensed consolidated statements of comprehensive income**

The Group has elected to present comprehensive income in a single statement of profit or loss and other comprehensive income (OCI) called statement of comprehensive income.

CFE prepared the unaudited consolidated statements of comprehensive income, and presented ordinary costs and expenses based on their nature, since it considers that the information presented in this way is much more clearer. The Group also presents operating income (loss) in the statement of comprehensive income. Operating income is the difference between the Group's revenue and costs, and it is an important indicator for evaluating the Group's financial and economic performance.

## **2. Summary of Significant Accounting Policies**

The accounting policies applied in the preparation of the unaudited condensed consolidated interim financial information are the same as those applied by the Group in the financial statements for the year ended 31 December 2018, except for those referred to below:

**a) Financial instruments**

IFRS 9 Financial Instruments sets out the requirements for recognizing and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. This standard supersedes IAS 39 Financial Instruments: Recognition and Measurement

**b) Initial recognition and measurement**

Accounts receivable are recognized as they are generated. All other financial assets and liabilities are recognized initially when the Group becomes a party to the contractual provisions.

Financial assets (unless it is an account receivable that does not contain a significant financing component) or financial liabilities are initially measured at fair value plus, in the case of an item not measured at fair value through profit or loss, the cost of the transaction directly attributable to the acquisition or issue. An account receivable that does not contain a significant financing component is initially measured at the price of the transaction.

#### **i. Classification and subsequent measurement - Financial assets**

Financial assets are classified as follows: financial instruments measured at amortized cost (AC), fair value through other comprehensive income (FVOI) and fair value through profit or loss (FVTPL). As a result of the adoption of IFRS 9, the existing categories under IAS 39 of held-to-maturity, loans and receivables and available for sale have been eliminated.

IFRS 9 retains almost all of the existing requirements from IAS 39 regarding the classification and measurement of financial liabilities.

The adoption of IFRS 9 has not had a significant impact on the Group's accounting policies related to financial liabilities and derivative financial instruments (for derivatives that are used as hedging instruments, see Note 10).

For an explanation of how the Group classifies and measures financial instruments and recognizes the related gains and losses under IFRS 9, see Note 10.

#### **The Group recognizes revenue primarily from the following sources:**

**Sale of fuel:** revenue is recognized at a point in time, which is when the fuels are delivered to customers.

**Transmission and distribution services** - revenue is recognized over time, as the public electricity transmission services are provided.

**Third-party contributions** - revenue from the contributions received from customers to connect them to the national transmission and distribution network is recorded in the statement of comprehensive income after the Group has completed the customer's connection to the network. Customers have the option to choose their electricity provider between either the Group or another company. The revenues are presented as part of the Other revenue caption.

Through 31 December 2016, the contributions received from customers to provide electricity connection and supply services were recorded as deferred income and recognized in profit or loss on a systematic basis over the useful lives of the fixed assets financed by said contributions. Since the electricity supply services contracts entered into with such customers were for an indefinite term, they were recognized in profit or loss based on the useful lives of the asset that funded the contributions.

Contributions received from the State and Municipal Governments to electrify rural villages and poor neighborhoods, to expand the distribution network, as well as other contributions, were recorded as deferred revenue and recognized in profit or loss as Other income over the useful lives of the fixed assets financed by said contributions.

As a result of the legal separation of the Group into several legal entities and the changes in the laws that allow for the existence of other qualified suppliers besides the Group, as of 1 January 2017 contributions received from customers and the State and Municipal Governments to provide electricity connection and supply services are recorded as income in the statement of comprehensive income after the Group has completed the customer's connection to the network, since customers now have the option to choose their electricity provider between either the Group or another company.

In view of the above, the deferred income liability recognized as Third party contributions in the "Other Long-Term Liabilities" as at 31 December 2016, in the amount of \$ 33,701,253, has been recognized in the income statement as Other income from 2017. As at 31 December 2018 and 2017, revenue from third party contributions amounted to \$ 1,798,471 and \$ 1,735,011, respectively.

**Revenue from subsidies:** revenue from subsidies received from the Ministry of Finance and Public Credit is recognized at a point in time, when the subsidies are received by the Group.

#### **4. Financial Instruments – Fair Value and Risk Management**

##### **Fair values**

An analysis of the carrying amounts and fair values of the financial instruments recognized as at 31 March 2019 and 31 December 2018 and 2017 is as follows:

	<u>31 March 2019</u>	<u>31 December 2018</u>	<u>31 December 2017</u>
Financial assets:			
Cash and cash equivalents (2)	\$ 44,968,233	\$ 78,483,263	\$ 67,237,901
Accounts receivable (2)	102,548,546	99,175,895	95,067,522
Loans to workers (2)	12,729,534	12,367,879	12,339,193
Derivative financial instruments (1)	12,856,142	17,783,141	16,084,937
Financial liabilities:			
Short- and long-term debt (2)	\$ 341,185,497	\$ 347,130,269	\$ 334,117,238
Suppliers and contractors (2)	42,658,936	60,196,913	59,849,154
Deposits from customers and contractors (2)	29,106,522	25,619,843	22,974,717
(1) Fair value			
(2) Amortized cost			

The Group's Financial Officer's functions include, among others, implementing strategies, coordinating access to domestic and international financial markets, and supervising and managing



**COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries**  
**Notes to the consolidated financial statements for the three-month period ended 31 March 2019 and 31 December 2018 and 2017. (Amounts expressed in thousands of Mexican pesos, unless explicitly indicated otherwise)**

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financial risks related to the Group's operations through internal and market risk reports that analyze the degree and magnitude of the Group's exposure to financial risks. These risks include market risk (including foreign exchange risk and interest rate risk), credit risk and liquidity risk.

To mitigate the effects of its debt related risks, the Group uses hedging derivatives.

The Treasury Department is bound by the Ministry of Finance and Public Credit cash management policies that hold that investments must be made in low-risk short-term instruments. Monthly status reports are issued to the Treasury Investment Committee.

### **Credit risk**

Credit risk is the risk of financial loss to the Group if a counterparty to a financial instrument fails to meet its contractual obligations. The Group is subject to credit risk mostly in respect of its financial instruments comprising cash and short-term investments, loans and accounts receivable, and derivative financial instruments. In order to mitigate the credit risk in its cash, short-term investments and derivative financial instruments, the Group conducts transactions exclusively with counterparties that are financially solvent and that have a good reputation and high credit quality. The Group also obtains sufficient guarantees, when appropriate, to mitigate the risk of financial losses due to non-performance.

The carrying amount of the Group's financial assets represents the maximum exposure to credit risk.

For credit risk management purposes, the Group considers that the credit risk on loans and accounts receivable from consumers is limited. The Group determines the allowance for doubtful accounts based on the incurred loss model.

An aging analysis of the past due receivables, for which an allowance has not been deemed necessary as at 31 March 2019 and 31 December 2018 and 2017, is as follows:

	31 March 2019	31 December 2018	31 December 2017
Less than 90 days	\$ 3,219,326	\$ 3,778,989	\$ 2,431,134
From 90 to 180 days	3,890,539	3,498,198	2,350,281
More than 180 days	<u>14,170,297</u>	<u>13,812,362</u>	<u>10,795,106</u>
	<b>\$ <u>21,280,162</u></b>	<b>\$ <u>21,089,549</u></b>	<b>\$ <u>15,576,521</u></b>

### **Liquidity risk**

Liquidity risk is defined as the risk that an entity will encounter difficulty in meeting its obligations associated with financial liabilities that are settled by delivering cash or another financial asset.

The financing obtained by the Group is mainly through contracted debt, the leasing of plants, facilities, and equipment and PIDIREGAS. To manage liquidity risk, the Group periodically performs cash flow analyses and maintains open lines of credit with financial institutions and suppliers.

**COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries**

**Notes to the consolidated financial statements for the three-month period ended 31 March 2019 and 31 December 2018 and 2017. (Amounts expressed in thousands of Mexican pesos, unless explicitly indicated otherwise)**

In addition, the Group's budget is controlled by the Federal Government, consequently, the net debt ceiling authorized on an annual basis by the Federal Congress based on the Group's budgeted revenues, cannot be exceeded.

The following table shows the contractual maturities of the Group's financial liabilities based on the payment terms:

The following table shows the contractual maturities of the Group's financial liabilities based on the payment terms:

<b>31 March 2019</b>	<b>Less than one year</b>	<b>More than 1 year and less than 3 years</b>	<b>More than 3 years and less than 5 years</b>	<b>More than 5 years</b>	<b>Total</b>
Documented debt	\$ 15,623,412	\$ 45,973,236	45,342,542	\$ 106,044,751	\$ 212,983,941
Interest payable on documented debt	12,598,339	21,449,909	17,625,974	53,942,776	105,616,998
PIDIREGAS debt	16,149,624	25,073,034	20,278,679	66,700,219	128,201,556
Interest payable on PIDIREGAS debt	8,038,237	12,589,432	9,049,969	28,895,307	58,572,945
Suppliers and contractors	42,658,936	-	-	-	42,658,936
Other liabilities	23,592,112	-	-	-	23,592,112
<b>Total</b>	<b>\$ 118,660,659</b>	<b>\$ 105,085,611</b>	<b>\$ 92,297,164</b>	<b>\$ 255,583,053</b>	<b>\$ 571,626,487</b>

<b>As at 31 December 2018</b>	<b>Less than one year</b>	<b>More than 1 year and less than 3 years</b>	<b>More than 3 years and less than 5 years</b>	<b>More than 5 years</b>	<b>Total</b>
Documented debt	\$ 15,554,180	\$ 47,006,781	\$ 21,496,201	\$ 131,988,076	\$ 216,045,238
Interest payable on documented debt	12,751,923	22,239,932	17,887,246	56,627,971	109,507,072
PIDIREGAS debt	16,780,375	25,402,698	19,973,829	68,928,130	131,085,032
Interest payable on PIDIREGAS debt	7,979,683	12,824,805	9,391,087	30,219,922	60,415,497
Suppliers and contractors	60,196,913	-	-	-	60,196,913
Other liabilities	18,007,260	-	-	-	18,007,260
<b>Total</b>	<b>\$ 131,270,334</b>	<b>\$ 107,474,216</b>	<b>\$ 68,748,363</b>	<b>\$ 287,764,099</b>	<b>\$ 595,257,012</b>



**COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries**

Notes to the consolidated financial statements for the three-month period ended 31 March 2019 and 31 December 2018 and 2017. (Amounts expressed in thousands of Mexican pesos, unless explicitly indicated otherwise)

<b>As at 31 December 2017</b>		<b>Less than one year</b>	<b>More than 1 year and less than 3 years</b>	<b>More than 3 years and less than 5 years</b>	<b>More than 5 years</b>	<b>Total</b>
Documented debt	\$	25,918,515	\$ 29,320,404	\$ 20,473,272	\$ 131,209,737	\$ 206,921,928
Interest payable on documented debt		12,101,655	21,733,041	16,630,583	61,325,343	111,790,622
PIDIREGAS debt		21,145,914	26,125,588	20,171,431	59,752,377	127,195,310
Interest payable on PIDIREGAS debt		7,854,887	11,743,205	8,363,221	23,300,233	51,261,546
Suppliers and contractors		59,849,154	-	-	-	59,849,154
Other liabilities		20,761,051	-	-	-	20,761,051
<b>Total</b>	<b>\$</b>	<b>147,631,177</b>	<b>\$ 88,922,238</b>	<b>\$ 65,638,507</b>	<b>\$ 275,587,690</b>	<b>\$ 577,779,612</b>

**Market risk**

Because of its activities, the Group has exposure to foreign currency and interest rate risks.

**Foreign currency exchange risk management**

To fund its working capital requirements and public works financing, the Group contracts debt in foreign currency, consequently, it is exposed to exchange rate risk.

	<b>Total debt as at 31 March 2019</b>	<b>Total debt as at 31 December 2018</b>	<b>Total debt as at 31 December 2017</b>
	<b>millions of pesos</b>	<b>millions of pesos</b>	<b>millions of pesos</b>
Local currency	153,616	154,334	169,449
Foreign currency	185,533	191,061	163,047

The Group primarily uses interest rate and foreign currency swaps and foreign currency forward contracts to manage its exposure to interest rate and foreign currency fluctuations in accordance with its internal policies.

The carrying amounts of the Group's foreign currency denominated monetary assets and monetary liabilities at the end of the reporting period are discussed in Note 18.

**Foreign currency sensitivity analysis**

The Group is mainly exposed to exchange rate differences between the Mexican peso, the US dollar and the Japanese yen.

The Group's sensitivity analysis considers a 5% increase and decrease in the Mexican peso exchange rate against the other relevant foreign currencies. This 5% is the sensitivity rate used internally when the exchange risk is reported to key management personnel and represents Management's assessment of a reasonably possible change in exchange rates.

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The sensitivity analysis only includes open items denominated in foreign currency and adjusts their translation for a 5% change in foreign currency exchange rates at period end. The sensitivity analysis includes foreign loans as well as loans from foreign operations within the Group, where the loan is denominated in a currency other than the loaner's or borrower's currency. A positive number (as observed in the table below) indicates an increase in profit where the Mexican peso strengthens 5% against the relevant currency. For a 5% weakening of the Mexican peso against the relevant currency, there would be a comparable impact on the profit, and the balances below would be negative.

	Millions of pesos		
	31/03/2019	31/12/2018	31/12/2017
Gain or loss	<u>\$9,179</u>	<u>\$8,976</u>	<u>\$8,018</u>

The sensitivity analysis was estimated based on the fair value of the loans denominated in foreign currency.

Management believes that the impact of the inherent exchange risk is reflected in the electricity rates in the long-term through inflation adjustments and the peso to dollar exchange rate.

### **Interest rate risk management**

The Group is exposed to interest rate risks for loans borrowed at variable interest rates. The Group manages this risk by maintaining an appropriate mix of fixed and variable rate loans and by contracting derivative financial instruments designated as interest rate hedges:

	Total debt as at 31 March 2019	Total debt as at 31 December 2018	Total debt as at 31 December 2017
	millions of pesos	millions of pesos	millions of pesos
Fixed rate	238,337	242,971	169,449
Variable rate	100,811	102,423	163,047

### **Interest rate sensitivity analysis**

The sensitivity analysis below has been determined based on the exposure to interest rates for derivative and non-derivative financial instruments at the end of the reporting period.

For variable rate liabilities, an analysis is prepared assuming that the amount of the liability reported at the end of the reporting period was the amount in effect throughout the whole year. When reporting interest rate risk internally to key management personnel, a 0.50 point increase or decrease is used for the Mexican Equilibrium Interbank Interest Rate (EIIR or TIIE, Spanish acronym) and a 0.01 point increase or decrease for the LIBOR. These changes represent Management's assessment of a reasonably possible change in interest rates.

**Millions of pesos**

	<b>31/03/2019</b>	<b>31/12/2018</b>	<b>31/12/2017</b>
Gain or loss	\$ 83	\$ 82	\$ 114

The sensitivity analysis of the debt without considering the derivative financial instruments was estimated based on the fair value of the loans.

The sensitivity analysis of the derivative financial instruments is described in Note 10.

Therefore, the hierarchy level of the Group's Mark-to-Market for derivatives financial instruments as at 31 March 2019 is level 2 due to the following:

- a) Inputs are other than quoted prices and include inputs within Level 1 that are observable, either directly or indirectly.
- b) Quoted prices for similar assets or liabilities in active markets.
- c) Inputs other than quoted prices that are observable for the assets or liabilities.

### **Fair value of financial instruments**

#### **Measurement of fair values**

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date in the principal or, in its absence, the most advantageous market to which the Group has access at that date. The fair value of a liability reflects its non-performance risk.

When one is available, the Group measures the fair value of an instrument using the quoted price in an active market for that instrument. A market is regarded as 'active' if transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis.

If there is no quoted price in an active market, then the Group uses valuation techniques that maximize the use of relevant observable inputs and minimize the use of unobservable inputs. The chosen valuation technique incorporates all of the factors that market participants would take into account in pricing a transaction.

If an asset or a liability measured at fair value has a bid price and an ask price, then the Group measures assets and long positions at a bid price and liabilities and short positions at an ask price.

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The best evidence of the fair value of a financial instrument on initial recognition is normally the transaction price – i.e. the fair value of the consideration given or received. If the Group determines that the fair value on initial recognition differs from the transaction price and the fair value is evidenced neither by a quoted price in an active market for an identical asset or liability nor based on a valuation technique for which any unobservable inputs are judged to be insignificant in relation to the measurement, then the financial instrument is initially measured at fair value, adjusted to defer the difference between the fair value on initial recognition and the transaction price. Subsequently, that difference is recognized in profit or loss on an appropriate basis over the life of the instrument but no later than when the valuation is wholly supported by observable market data or the transaction is closed out.

Fair value of financial instruments recognized at amortized cost

Management believes that the carrying amount of the financial assets and liabilities recognized at amortized cost in the Group's condensed consolidated financial information approximates fair value, including the following:

Valuation techniques and assumptions used in determining fair value

	31 March 2019		31 December 2018		31 December 2017	
	Carrying amount	Fair value	Carrying amount	Fair value	Carrying amount	Fair value
Cash and cash equivalents	\$ 44,968,233	\$ 44,968,233	\$ 78,483,263	\$ 78,483,263	\$ 67,237,901	\$ 67,237,901
Accounts receivable	102,548,546	102,548,546	99,175,895	99,175,895	95,067,522	95,067,522
Loans to workers	12,729,534	12,729,534	12,367,879	12,367,879	12,339,193	12,339,193
Suppliers and contractors	42,658,936	42,658,936	60,377,913	60,377,913	59,849,154	59,849,154
Documented debt	212,983,941	212,983,941	216,045,238	270,631,391	206,921,928	223,791,475
PIDIREGAS debt	128,201,556	128,201,556	131,085,031	131,085,031	127,195,310	127,195,310

The fair value of the Group's financial assets and liabilities is determined as follows:

- The fair values of financial assets and financial liabilities with standard terms and conditions that are traded on active liquid markets are determined by references to quoted market prices.
- The fair value of other financial assets and liabilities (excluding derivative financial instruments) is determined in accordance with generally accepted pricing models, which are based on an analysis of discounted cash flows using current transaction prices observable in active markets and quoted prices for similar instruments.

- In conformity with the terms under which the ISDA (International Swaps and Derivatives Association) contracts were entered into, the counterparties or banking institutions are the appraisers who calculate and send the Mark-to-Market (which is the monetary valuation of the agreed upon transaction at a given time) on a monthly basis. CFE monitors this value and if there is any doubt or abnormal variance in the market value, CFE will request that the counterparty provide a new valuation.

#### Valuations at fair value recognized in the statement of financial position

The following table provides an analysis of the financial instruments valued at fair value after their initial recognition grouped in levels from 1 to 2, based on the degree to which their fair value is observable:

	Level 1		
	31 March 2019	31 December 2018	31 December 2017
<b>Available-for-sale financial assets:</b>			
Temporary investments	\$ 8,762,069	\$ 14,666,617	\$ 25,232,468
Total	\$ 8,762,069	\$ 14,666,617	\$ 25,232,468

An analysis of the fair value of the derivative financial assets grouped in level 2, based on the degree to which their fair value is observable, is included in Note 11.

The levels referred to above are considered as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2: inputs other than quoted market prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices);
- Level 3: inputs are unobservable inputs for the asset or liability.

## 5. Cash and Cash Equivalents

An analysis of Cash and cash equivalents as at 31 March 2019 and 31 December 2018 and 2017 is as follows:

	31 March 2019	31 December 2018	31 December 2017
Cash on hand and cash in banks	\$ 36,197,343	\$ 63,807,825	\$ 41,996,612
Temporary investments	8,762,069	14,666,617	25,232,468
Stock certificates	8,821	8,821	8,821
Total	\$ 44,968,233	\$ 78,483,263	\$ 67,237,901

## 6. Accounts Receivable, net

An analysis of the Group's accounts receivable as at 31 March 2019 and 31 December 2018 and 2017 is as follows:

	31 March 2019	31 December 2018	31 December 2017
Public consumers (*)	\$ 57,876,870	\$ 57,453,309	\$ 60,335,248
Government agency consumers (*)	22,266,481	22,060,633	20,887,093
	80,143,351	79,513,942	81,222,341
Impairment of receivables	(29,184,963)	(28,446,893)	(25,049,197)
	50,958,388	51,067,049	56,173,144
Other accounts receivable	33,834,760	37,205,453	33,512,184
Value added tax	17,755,398	10,903,393	5,382,194
<b>Total</b>	<b>\$ 102,548,546</b>	<b>\$ 99,175,895</b>	<b>\$ 95,067,522</b>

(\*) Includes estimates of revenue for electricity supply services that are in the process of being billed.

An analysis of the allowance for doubtful accounts as at 31 March 2019 and 31 December 2018 and 2017 is as follows:

	31 March 2019	31 December 2018	31 December 2017
Beginning balance	\$ 28,446,893	\$ 25,049,197	\$ 26,493,149
Increase	2,322	4,706,151	239,337
Charges	735,748	(1,308,455)	(1,683,289)
<b>Ending balance</b>	<b>\$ 29,184,963</b>	<b>\$ 28,446,893</b>	<b>\$ 25,049,197</b>

## 7. Inventory of operating materials

An analysis of inventory of operating materials as at 31 March 2019 and 31 December 2018 and 2017 is as follows:

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	31 March 2019	31 December 2018	31 December 2017
Spare parts and equipment	\$ 893,719	\$ 1,974,821	\$ 2,570,001
Fuel and lubricants	13,097,705	13,607,510	11,481,771
Nuclear fuel	4,022,238	4,160,797	3,994,473
	18,013,662	19,743,129	18,046,245
Allowance for obsolescence	(960,936)	(4,205,664)	(3,403,252)
Total	\$ 17,052,727	\$ 15,537,465	\$ 14,642,993

**8. Plants, Facilities and Equipment, net**

An analysis of Plants, facilities and equipment, net, as at 31 March 2019 and 31 December 2018 and 2017 is as follows:

	31 December 2018	Acquisitions	Retirements	Depreciation for the period	31 March 2019
Plants, facilities and equipment	\$2,011,989,949	\$6,536,940	(\$2,091,369)		\$2,016,435,520
Capitalized spare parts	7,306,914	1,052,547	0		8,359,461
Construction in progress	32,189,380	0	(1,465,974)		30,723,407
Advances and materials for construction	14,044,721	0	(1,140,242)		12,904,480
Subtotal	2,065,530,964	7,589,487	(4,697,585)	0	2,068,422,865
Accumulated depreciation	(878,940,815)		864,793	(12,732,118)	(890,808,140)
Total	\$1,186,590,148	\$7,589,487	(\$3,832,792)	(\$12,732,118)	\$1,177,614,725

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	<u>31 December 2017</u>	<u>Acquisitions</u>	<u>Retirements</u>	<u>Depreciation for the period</u>	<u>Reversal of impairment of assets</u>	<u>31 December 2018</u>
Plants, facilities and equipment	1,990,250,148	31,335,858	9,596,057			2,011,989,949
Capitalized spare parts	7,233,446	73,468	-	-	-	7,306,914
Construction in progress	19,907,935	12,281,445	-	-	-	32,189,380
Advances and materials for construction	<u>11,621,276</u>	<u>2,423,445</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>14,044,721</u>
Subtotal	2,029,012,804	46,114,216	9,596,057	0	0	2,065,530,964
Accumulated depreciation	(809,483,251)		(8,587,680)	(52,381,592)		(853,277,163)
Impairment	<u>(28,681,250)</u>				<u>3,017,598</u>	<u>(25,663,652)</u>
Total	1,190,848,303	46,114,216	1,008,377	-52,381,529	3,017,598	1,186,590,148

As 31 December 2018, a partial amount of the impairment recognized in 2017 was reversed in the amount of \$2,074,323.

	<u>31 December 2016</u>	<u>Acquisitions</u>	<u>Retirements</u>	<u>Depreciation for the period</u>	<u>Impairment of assets</u>	<u>31 December 2017</u>
Plants, facilities and equipment	1,943,244,845	66,682,159	19,676,856	0	0	1,990,250,148
Capitalized spare parts	6,367,288	866,157	-	-	-	7,233,445
Construction in progress	18,433,272	1,474,663	-	-	-	19,907,935
Advances and materials for construction	<u>10,856,715</u>	<u>764,561</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>11,621,276</u>
Subtotal	1,978,902,120	69,787,540	19,676,856	-	-	2,029,012,804
Accumulated depreciation	(753,820,030)	-	-	(55,663,221)	-	(809,483,251)
Impairment	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>(28,681,250)</u>	<u>(28,681,250)</u>
Total	1,225,082,090	69,787,540	19,676,856	(55,663,221)	(28,681,250)	1,190,848,303



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As at 31 December 2017 the Group carried out an impairment test to Genco VI and recognized a loss for impairment in other comprehensive income of \$28,681,250 related to plant and equipment.

Based on the periodic review of the fair values of plants, facilities and equipment in operation, CFE revalues its assets to ensure that the carrying amount does not differ significantly from the amount that would have been calculated using fair values at the end of the reporting period.

Therefore, an analysis of fixed assets must be carried out to revalue the assets and review the useful life assigned to such.

**Construction in progress** - an analysis of the construction in progress balances as at 31 March 2019 and 31 December 2018 and 2017 is as follows:

<b>Plant:</b>	<b>31 March 2019</b>	<b>31 December 2018</b>	<b>31 December 2017</b>
Steam	\$ 28,561	\$ 24,587	\$ 326
Hydroelectric	1,180,110	1,180,110	1,248,917
Nuclear power	220,163	589,870	1,316,029
Turbo gas and combined cycle	11,189,444	11,171,320	416,051
Geothermal	709,477	870,738	1,220,462
Internal combustion	682	682	682
Transmission lines, networks and substations	15,630,640	16,698,221	14,594,645
Offices and general facilities	1,764,329	1,653,852	1,110,823
<b>Total</b>	<b>\$ 30,723,406</b>	<b>\$ 32,189,380</b>	<b>\$ 19,907,935</b>

#### Fair value measurement

As mentioned in Note 1, a valuation of plants, facilities and equipment was carried out in 2016. As a result of this process, the net increase in the value of these assets of \$ 210,725,169 was recognized in other comprehensive income.

#### i. Fair value hierarchies

The fair value of plants, facilities and equipment in operation was determined by independent external appraisers with a recognized professional capacity and experience in terms of the property, plant and equipment that underwent the appraisal. The independent external appraisers provided the fair value of the plants, facilities and equipment as at 31 December 2016.

#### ii. Valuation technique and relevant unobservable inputs

The following table shows the valuation technique used to measure the fair value of investment properties, as well as the significant unobservable inputs used.

Valuation technique	Significant unobservable inputs	Interrelationship between the key unobservable inputs and the measurement of fair value
Discounted cash flows: The valuation model used the present value of the net cash flows that will be generated by the plants, facilities and equipment, considering the expected income growth rate. Net expected cash flows are discounted using risk-adjusted discount rates.	<p>Generation Useful life of the assets (30-60 years) Discount rate 7.67%-8.68%</p> <p>Transmission Useful life of the assets (30 years) Discount rate 7.67%</p> <p>Distribution Useful life of the assets (30 years) Discount rate 7.67%</p>	<p>The estimated fair value would increase (decrease) if:</p> <ul style="list-style-type: none"> <li>- Income growth is higher (lower)</li> <li>- The useful life is higher (lower)</li> <li>- The risk-adjusted discount rate is lower (higher)</li> </ul>

## 9. Right of Use Asset

### Leases

The Group has elected to adopt IFRS 16 Leases as of 1 January 2019, applying the retrospective approach to each period presented in the annual financial statements. Consequently, the cumulative effect of the adoption of IFRS 16 will be recognized as an adjustment to the beginning balance of taxable gains as at 1 January 2017.

The Group is not planning to use a practical expedient to adopt the definition on transition. This means that the Group again assessed the contracts identified as leases in accordance with IAS 17 and IFRIC 4.

### Right of use asset

**An analysis of the net balances of the Right of use assets as at 31 March 2019 and 31 December 2018 is as follows:**

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**31 March 2019**

<b>Right of use assets</b>	<b>31 December 2018</b>	<b>Acquisitions</b>	<b>Retirements</b>	<b>Restatement</b>	<b>Depreciation for the year</b>	<b>31 March 2019</b>
Property	\$ 356,727	\$ 2,681	\$ -	\$ -	\$ -	\$ 359,408
Automotive equipment	2,302	-	-	-	-	2,302
Furniture and equipment	48,219	-	-	-	-	48,219
Technological equipment	1,569	-	-	-	-	1,569
Infrastructure	111,636,127	10,819,507	-	-	-	122,455,634
Gas pipelines	<u>287,211,961</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>287,211,961</u>
Subtotal	<u>399,256,905</u>	<u>10,822,188</u>				<u>410,079,093</u>
Accumulated depreciation	<u>(61,763,672)</u>				<u>(4,713,809)</u>	<u>(66,477,481)</u>
Total	<u>\$ 337,493,233</u>	<u>\$ 10,822,188</u>	<u>\$</u>	<u>\$</u>	<u>\$ (4,713,809)</u>	<u>\$ 343,601,612</u>

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**As at 31 December 2018**

<b>Right of use assets</b>	<b>1 January 2018</b>	<b>Acquisitions</b>	<b>Retirements</b>	<b>Restatement</b>	<b>Depreciation for the year</b>	<b>31 December 2018</b>
Property	\$ 225,146	\$ 131,581	\$ -	\$ -	\$ -	\$ 356,727
Automotive equipment	2,302	-	-	-	-	2,302
Furniture and equipment	743	47,476	-	-	-	48,219
Technological equipment	1,569	-	-	-	-	1,569
Infrastructure	111,636,127	-	-	-	-	111,636,127
Gas pipelines	<u>205,594,715</u>	<u>81,617,246</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>287,211,961</u>
Subtotal	<u>317,460,602</u>	<u>81,796,303</u>				<u>399,256,905</u>
Accumulated depreciation	<u>(44,428,453)</u>				<u>(17,335,219)</u>	<u>(61,763,672)</u>
Total	<u>\$ 273,032,149</u>	<u>\$ 81,796,303</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (17,335,219)</u>	<u>\$ 337,493,233</u>

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**December 2017**

Right of use assets	1 January 2017	Acquisitions	Retirements	Restatement	Depreciation for the year	31 December 2017
Property	\$ 195,710	\$ 29,436	\$ -	\$ -	\$ -	\$ 225,146
Automotive equipment	2,302	-	-	-	-	2,302
Furniture and equipment	-	743	-	-	-	743
Technological equipment	1,569	-	-	-	-	1,569
Infrastructure	111,626,783	9,344	-	-	-	111,636,127
Gas pipelines	118,730,936	86,863,779	-	-	-	205,594,715
Subtotal	230,557,300	86,903,302	-	-	-	317,460,602
Accumulated depreciation	(30,226,463)	-	-	-	(14,201,990)	(44,428,453)
Total	\$ 200,330,837	\$ 86,903,302	\$ -	\$ -	\$ (14,201,990)	\$ 273,032,149

## 10. Intangibles and Other Assets

An analysis of Intangibles and other assets as at 31 March 2019 and 31 December 2018 and 2017 is as follows:

	31 March 2019	31 December 2018	31 December 2017
Rights of way (1)	\$ 35,211,631	\$ 30,444,834	\$ 29,979,671
Deposits and advances	4,041,475	3,837,030	2,857,316
Total	\$ 39,253,105	\$ 34,281,864	\$ 32,836,987

(1) Includes rights of way in the amount of \$24,064,610 that are part of the assets contributed by the Federal Government to the Group through INDAABIN.

## 11. Derivative Financial Instruments

### a. Accounting classifications and fair values

CFE is exposed to interest rate and foreign currency risks which it tries to mitigate through a hedging program that includes the use of derivative financial instruments. The Group mainly uses

foreign exchange "Cross Currency Swaps" and "Forwards" to mitigate its foreign currency risk. To reduce its interest rate risk exposure, the Group uses interest rate swaps.

Also, for the periods ended 31 March 2019 and 31 December 2018 and 2017, the derivative financial instruments have been designated as and qualify mainly as cash flow hedges since they are referenced to contracted debt. The effective portion of gains or losses on cash flow derivatives is recognized in equity under the concept of "Effects on the fair value of derivatives", and the ineffective portion is charged to profit or loss of the period.

The fair value of the total derivative financial position as at 31 March 2019 amounts to \$12,856,142 and as at 31 December 2018 and 2017 it amounts to \$17,783,141 and \$16,084,937, respectively.

**Derivative financial instruments for trading purposes** - As at 31 March 2019 and 31 December 2018 and 2017, CFE maintains its position in derivative financial instruments for trading purposes, the fair value of which represented a liability of \$116,439 in March 2019 and an asset of \$24,963 as at 31 December 2018, and a liability of \$438,116 as at 31 December 2017.

This transaction consists of a series of currency forwards that allow the Group to lock in a JPY/USD exchange rate of 54.0157 JPY per USD over the established term of the transaction. As part of this transaction, CFE pays annual interest in U.S. dollars at a rate of 8.42%. These instruments have not been designated as hedges as required by the financial reporting standard, consequently, the valuation effect of these instruments is recognized in financial cost; a gain (loss) in said value offsets a loss (gain) in the underlying liability.

In addition to the series of forwards, the derivative instrument includes two options: a long European call option through which CFE has the right to purchase Japanese yens upon maturity in the spot market in case the yen/dollar exchange rate is quoted below 118.75 yens per dollar, and a short European call option through which CFE is required to sell dollars at the yen/dollar exchange rate of 27.80, if the prevailing exchange rate at the settlement date exceeds this level.

The Group suspends cash flow hedge accounting when the derivative has matured, the hedge is not effective enough to offset the changes in the cash flows of the hedged item, or the Group decides to revoke the hedge designation. The gains or losses recognized in Other comprehensive income and accumulated in Equity, remain in Equity and are recognized when the forecast transaction is ultimately recognized in profit or loss.

If CFE decides to cancel this economic hedge (currency forwards on the yen/dollar exchange rate), it would give rise to an estimated extraordinary loss at 31 March 2019 and 31 December 2018 and 2017 as follows:

Thousands of pesos						
Instrument	Underlying	Maturity	31 March 2019	31	31	
				December	December	
				2018	2017	
FWD	Exchange rate and					
JPY/USD	interest rate	2036	(116,439)	24,963	(438,115)	
		Total	<b>(116,439)</b>	<b>24,963</b>	<b>(438,115)</b>	

**Financial instruments for hedging purposes** – As at 31 March 2019 and 31 December 2018 and 2017, CFE maintains its hedging derivative position on exchange rates and interest rates, as shown below:

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Instrument	Underlying	Type of hedge	Maturity	Primary position (Lines/Bonds)	Hedge Ratio	31 March 2019	31 December 2018	31 December 2017
CCS	Exchange rate and interest rate	Cash flow	2021	1100000074 to 76	100%	210,699	237,481	339,264
CCS	Exchange rate and interest rate	Cash flow	2022	1100000077 to 79	100%	57,728	71,531	93,469
CCS	Exchange rate and interest rate	Cash flow	2023	1100000080	100%	943,227	1,815,259	3,971,843
CCS	Exchange rate and interest rate	Cash flow	2024	1100002956	100%	2,778,938	3,835,201	5,081,946
CCS	Exchange rate and interest rate	Cash flow	2027	1100003606	100%	1,892,888	2,585,145	2,589,860
CCS	Exchange rate and interest rate	Cash flow	2032	1200002801	100%	224,231	387,053	(427,998)
CCS	Exchange rate and interest rate	Cash flow	2036	1200000551	100%	3,621,827	4,718,366	4,763,554
CCS	Exchange rate and interest rate	Cash flow	2042	Pidiregas Line BOND 2042	100%	543,790	1,015,880	-
CCS	Exchange rate and interest rate	Cash flow	2047	Formosa 1	100%	667,192	1,210,485	-
CCS	Exchange rate and interest rate	Cash flow	2045	BOND 2045	60%	911,903	-	-
CCS	Exchange rate and interest rate	Cash flow	2048	Formosa 2	100%	877,058	1,714,359	-
Participating Swap	Exchange rate and interest rate	Cash flow	2027	Bond 2027	100%	185,380	83,185	(108,664)
Forwards	Exchange rate	Cash flow	Less than one year	CFE Qualified	100%	19	115	105,058
IRS	Interest rate	Cash flow	2020	1100003807, 1200001251 and 1200001451	100%	57,701	84,118	114,720
<b>Subtotal</b>						<b>12,972,581</b>	<b>17,758,178</b>	<b>16,523,052</b>
CCS	Exchange rate JPY/USD	Trading		Line of credit in yens	N/A	(116,439)	24,963	(438,115)
<b>Total thousands of Mexican pesos</b>						<b>12,856,142</b>	<b>17,783,141</b>	<b>16,084,937</b>

The table above includes the mark to market of the hedging derivatives. As at 31 March 2019 the total mark to market corresponding to the hedging and trading derivatives was \$12,856,142 based on their carrying amount.

The results of the effectiveness tests for these hedging instruments showed that the relationships are highly effective. CFE estimated that the amount of ineffectiveness is minimum.

The economic relationship criteria is documented in the Hedge File and included in the hedging instrument, mainly the lines of credit and bonds included in the hedge ratio.



Fair value (Mark to market - MTM) is determined using valuation techniques at present value to discount future cash flows, which are estimated using observable market data. The carrying amount of OI includes the fair value (mark to market) and the reclassifications to profit and loss correspond to accrued interest and currency hedging (gain or loss).

#### **b. Measurement of fair values**

The valuation techniques for estimating the fair value of derivative instruments are described in the accounting policy mentioned above, depending on the derivative instrument for which the fair value is estimated. CFE uses the corresponding valuation technique to estimate such value.

#### **Adjustment of fair value or Mark to Market by credit risk**

IFRS 13 requires derivative instruments to include an adjustment for the risk that the financial counterparties will have difficulty meeting their obligations and accordingly, the fair values of derivatives are adjusted for this risk. This is known as a Credit Value Adjustment.

To reflect counterparty risk, the valuation is adjusted based on the probability of default and the recovery rate with the counterparties of the derivative positions.

The net of the fair value of derivative financial instruments (Mark to Market) effective as at 31 March 2019, before considering credit risk, amounts to \$13,620,470 which is included in the balance sheet and represents the amount in favor of the Corporate with the counterparties.

The net of the fair value of derivative financial instruments (Mark to Market) effective as at 31 December 2018, before considering credit risk, amounts to \$18,027,897 which is included in the balance sheet and represents the amount in favor of the Corporate with the counterparties.

The net of the fair value of derivative financial instruments (Mark to Market) effective as at 31 December 2017, before considering credit risk, amounts to \$17,112,665 which is included in the balance sheet and represents the amount in favor of the Corporate with the counterparties.

CFE applies a credit valuation adjustment (CVA) to reflect the creditworthiness of the counterparty of the derivative financial instrument. The CVA is the market value of the counterparty credit risk and reflects the estimated fair value of the hedging required to cover the counterparty credit risk included in such instruments

#### **Methodology to adjust fair value or Mark to Market by credit risk**

This mechanism was approved by the Interinstitutional Delegate Committee for Financial Risk Management associated to the financial position and price of fossil fuels (CDIGR), as the methodology for adjusting derivative financial instruments to fair value.

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As at 31 March 2019, the adjustments to fair values based on the CVA (Credit Valuation Adjustment) are shown below:

Counterparty	Fair value MTM subject to CVA	Adjusted fair value MTM	Adjustment as at 31 March 2019
BBVA BANCOMER	798,490	773,178	25,312
BNP PARIBAS	569,100	559,571	9,529
CITIBANAMEX	437,575	422,391	15,184
CREDIT AGRICOLE	5,715	5,607	108
CREDIT SUISSE	30,367	29,462	905
DEUTSCHE BANK	2,659,248	2,460,868	198,380
GOLDMAN SACHS	2,159,022	2,088,422	70,600
HSBC	5,773	5,648	125
JP MORGAN	2,263	2,217	46
MORGAN STANLEY	1,331,379	1,160,409	170,970
SANTANDER	1,220,157	1,194,534	25,623
BARCLAYS BANK	4,289,890	4,161,688	128,202
BANK OF AMERICA	111,447	108,542	2,905
MONEX	44	44	-
GOLDMAN SACHS (Trading)	-	(116,439)	-
	<b>13,620,470</b>	<b>12,856,142</b>	<b>647,889</b>

As at 31 December 2018, the adjustments to fair values based on the CVA (Credit Valuation Adjustment) are shown below:

**Thousands of pesos**

Counterparty	Fair value MTM subject to CVA	Adjusted fair value MTM	Adjustment as at 31 December 2018
BBVA BANCOMER	227,559	225,761	1,798
BNP PARIBAS	3,051,653	2,977,803	73,850
CITIBANAMEX	2,232,949	2,146,936	86,013
CREDIT AGRICOLE	1,687,633	1,679,195	8,438
CREDIT SUISSE	771,993	767,593	4,400
DEUTSCHE BANK	1,081,491	1,074,569	6,922
GOLDMAN SACHS	5,035,369	4,976,669	58,700
HSBC	1,088,699	1,082,711	5,988
JP MORGAN	7,694	7,650	44
MORGAN STANLEY	7,793	7,763	30
SANTANDER	392,195	390,156	2,039
BARCLAYS BANK	2,442,869	2,421,372	21,497
GOLDMAN SACHS (Trading)	-	24,963	(24,963)
	<b>18,027,897</b>	<b>17,783,141</b>	<b>244,756</b>

As at 31 December 2017, the adjustments to fair values based on the CVA (Credit Valuation Adjustment) are shown below:

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**Thousands of pesos**

Counterparty	Fair value MTM subject to CVA	Adjusted fair value MTM	Adjustment as at 31 December 2017
CREDIT SUISSE	233,994	233,994	-
DEUTSCHE BANK	3,102,561	3,102,561	-
MORGAN STANLEY	2,811,977	2,663,721	148,256
SANTANDER	3,133,420	3,133,420	-
BNP PARIBAS	1,409,163	1,408,675	488
BBVA BANCOMER	2,270,034	2,270,034	-
GOLDMAN SACHS	2,234,522	2,234,522	-
CITIBANAMEX	128,596	128,426	170
CREDIT AGRICOLE	14,663	14,663	-
HSBC	15,476	4,875	10,601
JP MORGAN	5,915	(424,143)	430,058
BARCLAYS BANK	1,752,344	1,752,304	(40)
J Aron (Trading)	-	(438,115)	438,115
	<b>17,112,665</b>	<b>16,084,937</b>	<b>1,027,648</b>

**Fair Value hierarchy or Mark-to-Market**

To increase consistency and comparability of fair value measurements and related disclosures, IFRS established a fair value hierarchy that categorizes into three levels the inputs to valuation techniques. This hierarchy grants the highest priority to quoted prices (unadjusted) in active markets for assets and liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3).

The availability of relevant inputs and their relative subjectivity might affect the selection of appropriate valuation techniques. However, the fair value hierarchy prioritizes the inputs to valuation techniques.

**Level 2 inputs**

As explained above, and according to the terms under which the ISDA contracts were entered into, the counterparties or banking institutions are the appraisers and they calculate and send the Mark-to-Market calculation monthly.

Therefore, the hierarchy level of the Group's Mark-to-Market for derivatives financial instruments as at 31 March 2019 is level 2 due to the following:

- a) Inputs are other than quoted prices and include inputs within Level 1 that are observable, either directly or indirectly.
- b) Quoted prices for similar assets or liabilities in active markets.

c) Inputs other than quoted prices that are observable for the assets or liabilities

### **c. Financial risk management**

CFE is exposed to the following financial risks for maintaining and using derivative financial instruments:

- Credit risk
- Liquidity risk
- Market risk

#### **Credit risk**

Credit risk associated with financial derivative instruments is the risk of experiencing a financial loss if a counterparty to these financial instruments fails to meet its financial obligations. To mitigate its credit risk, the Group follows a policy of maintaining a significant portion of its positions with investment grade counterparties and substantially limiting its positions with counterparties below investment grade.

To manage credit risk, the Group monitors the credit rating and the probability of default of the counterparty, which is applied to the market value of the derivative.

The carrying amount of the derivative financial assets represents the maximum exposure to credit risk. As at 31 March 2019 and 31 December 2018 and 2017, it amounted to \$13,620,470, 417,783,141 and \$16,084,937, respectively.

#### **Liquidity risk**

The liquidity risk associated with financial derivative instruments is the risk that CFE may encounter difficulties in meeting the financial obligations arising from these instruments.

To manage credit risk, the Group monitors the market value of the derivative and the use by the operating lines (threshold).

Exposure to liquidity risk for holding derivative financial instruments arises from the carrying amount of the financial liabilities corresponding to these instruments. As at 31 March 2019 and 31 December 2018 and 2017, this amounted to \$251,753,139, \$72,614,881 and \$589,533, respectively.

#### **Market risk**

The market risk associated with derivative financial instruments is the risk that changes in market prices, such as exchange rates and interest rates, will affect CFE's income for holding derivative financial instruments.

CFE uses financial derivative instruments to manage market risk, generally seeking access to hedge accounting to control or immunize the volatility that could arise in the results.

*a) Currency exchange risk*

54.7% of CFE's debt is denominated in foreign currency, mainly in US dollars, whereas most of CFE's assets and revenues are denominated in pesos. As a result, CFE is exposed to devaluation risks of the peso against the dollar. In conformity with its risk management policy, CFE has contracted currency swaps to reduce the impact of currency fluctuations. The effect of this instrument is to replace the obligation to pay fixed interest rates in dollars for an obligation to pay a fixed rate in pesos. As at 31 March 2019 and 31 December 2018 and 2017, CFE maintains foreign exchange swaps as a hedge of its debt in foreign currency of \$115,022, \$108,837 and \$72,135 million pesos, respectively.

To cover the exchange risks of the \$32 billion debt in yens, CFE uses a series of exchange rate forwards under which it purchases Japanese yens. The market value of this transaction as at 31 March 2019 and 31 December 2018 and 2017 was \$(116,439), \$24,973 and \$(438,115), respectively. These derivative instruments were not designated as hedges.

*Sensitivity analysis for exchange rate effects*

A possible and reasonable strengthening (weakening) of the MXN/USD and JPY/USD exchange rate as at 31 March 2019 would have affected the fair value of the total position of the derivative financial instruments in foreign currency, and thus, profit and loss of the period and other comprehensive income (since some of them are designated as hedges), as shown in the following table:

<b>31/03/2019</b>	<b>Instrument</b>	<b>+100 pips</b>	<b>-100 pips</b>
	Cross Currency	57,035	(57,035)
	JPY/USD	2,694	(2,694)
	FWD	28	(28)
	<b>Total</b>	<b>59,757</b>	<b>(59,757)</b>

This analysis assumes that the other variables, specifically interest rates, remain constant (amounts in thousands of pesos).

*b) Interest rate risk*

29.7% of CFE's debt accrues interest at variable rates, which is calculated at the TIIE rate in the case of debt denominated in pesos. As at 31 March 2019 and 2018, CFE hedged \$3,912 and \$4,833, respectively, of its peso-denominated debt bearing variable interest rates.

*Interest rate sensitivity analysis*

A potential and reasonable strengthening (weakening) of interest rates as at 31 March 2018 would have affected the fair value of the total position of derivative financial instruments associated with variable interest rates, and thus, profit and loss of the period and other comprehensive income (since some of them are designated as hedges), as shown in the following table:

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<b>31/03/19</b>	<b>+ 100 basis points</b>	<b>- 100 basis points</b>
Interest rate swaps	39,125	(39,125)

This analysis assumes that the other variables, in particular interest rates, remain constant.

## 12. Short-Term and Long-Term Debt

An analysis of the Group's debt as at 31 March 2019 and 31 December 2018 and 2017 is as follows:

	<b>31 March 2019</b>	<b>31 December 2018</b>	<b>31 December 2017</b>
Bank loans	\$ -	\$ 7,494,715	\$ 1,433,452
Documented debt	15,623,412	15,554,180	25,918,515
PIDIREGAS debt	16,149,624	16,780,375	21,145,914
<b>Total short-term debt</b>	<b>31,773,035</b>	<b>39,829,270</b>	<b>48,497,881</b>
Documented debt	197,360,529	200,491,058	181,003,413
PIDIREGAS debt	112,051,933	114,304,657	106,049,396
<b>Total long-term debt</b>	<b>309,412,461</b>	<b>314,795,715</b>	<b>287,052,809</b>
<b>Total debt</b>	<b>\$ 341,185,497</b>	<b>\$ 354,624,984</b>	<b>\$ 335,550,690</b>

An analysis of the debt and each its concepts is as follows:

As at 31 March 2019 and 31 December 2018 and 2017, the following affiliated entities have bank loans with third parties:

	<b>31 March 2019</b>	<b>31 December 2018</b>	<b>31 December 2017</b>
CFE Internacional LLC	\$ -	\$ 394,273	\$ -
CFEnergía	-	7,100,442	1,433,452
<b>Total bank loans</b>	<b>\$ -</b>	<b>\$ 7,494,715</b>	<b>\$ 1,433,452</b>

**a) CFE Internacional LLC**

In December 2018 CFE International LLC acquired a short-term loan from JPMorgan Chase Bank NA that is repayable in a term of 30 days, with repayment due by January 17, 2019, and which bears interest at a rate equal to the LIBOR plus a margin of 1.25%.

**b) CF Energía**

- i. On December 22, 2017, CF Energía contracted a revolving line of credit with Grupo Financiero Banorte of USD \$85,000,000 million (eighty million dollars), which can be withdrawn in dollars and/or local currency for up to the aforementioned amount. Drawdowns in Mexican pesos bear interest equal to the 28-day Mexican weighted interbank rate (TIIE) + 95 and drawdowns in U.S. dollars bear interest equal to the one-month London Interbank Offered Rate (LIBOR) + 195.

On August 17, 2018, CF Energía entered into an agreement with Banorte to amend the current account loan agreement entered into on December 22, 2017 in order to increase the available line of credit to USD\$ 250,000,000 (two hundred fifty million dollars 00/100).

- ii. ii. On December 20, 2018, CF Energía contracted a revolving line of credit with Monex for up to USD \$25,000,000 (twenty-five million dollars 00/100), which may be drawn down in U.S. dollars or Mexican pesos. Drawdowns in Mexican pesos bear interest equal to the Mexican weighted interbank rate (TIIE) + 2 percentage points and drawdowns in U.S. dollars bear interest equal to the LIBOR + 1.75 percentage points, as indicated on the corresponding promissory notes.
- iii. An analysis of bank loans at 31 December 2018 is as follows:
- Drawdowns made against the line of credit with BANORTE on December 27 in the amounts of \$ 4,450,000 and \$ 150,000, which will mature on January 28, 2019. Interest accrued on the drawdowns mentioned above amounted to \$4,860, which was recognized as part of comprehensive financing cost. the Group repaid the principal plus accrued interest on this loan on January 22, 2019.
  - As at December 31, CF Energía obtained a one-time special line of credit from BANORTE in the amount of \$ 2,000,000, which will mature on February 4, 2019. This drawdown will bear interest at a rate equal to the Mexican weighted interbank rate (TIIE) plus 1 percentage point. The Group repaid the principal plus accrued interest on this loan on January 28, 2019.
  - On December 27, 2018, the Group drew down \$ 495,000 against its line of credit with MONEX. This drawdown will mature on January 28, 2019. Accrued interest on the drawdown amounted to \$582, which was recognized as part of comprehensive financing cost. the Group repaid the principal plus accrued interest on this loan on January 22, 2019.
- iv. As at 31 December 2017, bank loans are comprised of the drawdowns made on December 27, 2017 in the amount of USD \$65,000,000 (sixty-five million dollars 00/100) and USD \$150,000,000 (one hundred fifty million dollars 00/100), both of which mature on January 22, 2018. CF Energía repaid the drawdowns in due time and form in January 2018.

- v. CFEnergía repaid the drawdowns referred to in the preceding points in January 2019.
- vi. The loan agreement stipulates affirmative and positive loan covenants that the Group must adhere to. These loan covenants require the Group to refrain from doing the following until the loan has been repaid in full:
  - a) Modify its corporate purpose, except for adding complementary or secondary activities to its main activity;
  - b) Modify its line of business and the nature of its principal activities or cease engaging in them altogether;
  - c) Initiate its dissolution or liquidation;
  - d) Merge into another company or carry out a corporate transformation or spin-off, etc;

The Group agrees that its non-compliance with any of these obligations would be sufficient cause for the Bank to demand the immediate settlement of the loan, plus all accrued interest and related accessory charges.

An analysis of the debt and each its concepts is as follows:



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**i) Documented debt**

An analysis of the documented debt as at 31 March 2019 and 31 December 2018 and 2017 is as follows:

**FOREIGN DEBT -**

				2019	2018		2017		
Foreign debt	Type of credit	Weighted interest rate	Maturities	Local currency	Foreign currency (thousands)	Local currency	Foreign currency (thousands)	Local currency	Foreign currency (thousands)
IN US DOLLARS: at an exchange rate									
of \$19.3201 per dollar as at 31 March 2019	BILATERAL	Fixed and variable – 2.27%	Various through 2023	1,629,462	84,340	1,892,101	96,129	1,720,686	86,962
and of \$19.6829 as at December 2018	BONDS	Fixed and variable – 5.28%	Various through 2045	93,760,445	4,853,000	96,020,078	4,878,350	97,696,627	5,206,964
	REVOLVING	Fixed and variable – 3.12%	Various through 2020	987,222	51,098	1,459,081	74,129	2,660,379	134,453
	SYNDICATED	Fixed and variable – 3.9%	2023	11,592,060	600,000	11,809,740	600,000	-	-
TOTAL IN U.S. DOLLARS				107,969,189	5,588,438	111,181,000	5,648,608	102,077,692	5,428,379
IN EUROS: at an exchange rate of				22,941	1,055	24,710	1,100	41,741	1,768
\$21.7546 per euro as at March 2019 and of	REVOLVING	Fixed and variable – 2.05%	Various through 2020	1,140	52	2,307	103	4,946	210
TOTAL EUROS				24,081	1,107	27,017	1,203	46,687	1,978
IN SWISS FRANCS: at an exchange rate of				-	-	-	-	-	-
\$19.8329 per Swiss franc as at March 2019	BILATERAL	Fixed and variable – 0%	Various through 2015						
and of \$19.6829 as at December 2018	REVOLVING	Fixed and variable – 0.87%	Various through 2021	229,700	11,803	338,458	16,970	909,359	45,080
TOTAL SWISS FRANCS:				229,700	11,803	338,458	16,970	909,359	45,080
IN JAPANESE YENS: at an exchange rate of									
of \$0.1778 per Japanese yen at March 2018	BILATERAL	Fixed and variable – 1.33%	Various through 2021	290,551	1,662,192	388,555	2,170,700	676,485	3,874,487
and of \$0.179 as at December 2018				290,551	1,662,192	388,555	2,170,700	676,485	3,874,487
Bond		Fixed - 3.83%	2032	5,593,600	32,000,000	5,728,000	32,000,000	5,587,200	32,000,000
Assets received for financial instruments, net (Note 10b)				(387,335)		(423,970)		(255,199)	
				5,206,265	32,000,000	5,304,030	32,000,000	5,332,001	32,000,000
TOTAL JAPANESE YENS				5,496,816	33,662,192	5,692,585	34,170,700	6,008,486	35,874,487

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TOTAL FOREIGN DEBT				113,719,786	117,239,060	109,042,224	
DOMESTIC DEBT -				2019	2018	2017	
Domestic debt	Type of credit	Weighted interest rate	Maturities	Local currency	Foreign currency (thousands)	Local currency	Foreign currency (thousands)
LOCAL CURRENCY	BANKING	Fixed and variable – 9.27%	Various through 2023 Various through 2027	7,500,000		7,500,000	
	STOCK MARKET	Fixed and variable – 7.77%		70,987,330		70,987,330	
TOTAL MEXICAN PESOS:				78,487,330		78,487,330	
IN UDIS: at an exchange rate of \$6.2586 per UDI as at 31 March 2019 and of \$6.2266 as at December 2018	STOCK MARKET	Fixed - 4.49%	2,032	20,157,544		20,054,478	
TOTAL UDIS				20,157,544		20,054,478	
TOTAL DOMESTIC DEBT				98,644,874		98,541,808	
Summary							
Total foreign debt				113,719,786		117,239,060	
Total domestic debt				98,644,874		98,541,808	
Interest payable				2,957,591		2,602,680	
Unamortized debt expenses				(2,338,310)		(2,338,310)	
Total documented debt				212,983,941		216,045,238	
Short-term debt				12,665,821		12,951,500	
Short-term interest payable				2,957,591		2,602,680	
Total short-term				15,623,412		15,554,180	
Long-term debt				199,698,839		202,829,368	

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Unamortized debt expenses	<u>(2,338,310)</u>	<u>(2,338,310)</u>	<u>(2,338,310)</u>
Total long-term	197,360,529	200,491,058	181,003,413
Total short- and long-term	212,983,941	216,045,238	206,921,929

The short-term and long-term documented debt liabilities mature as follows:

<u>31-03-2019</u>	<u>Amount</u>
2019	15,623,412
2020	21,894,824
2021	24,676,035
2022	225,507
2023	21,012,234
2024	24,314,717
2025	21,164,221
SUBSEQUENT YEARS	84,072,991
<b>TOTAL</b>	<b>212,983,941</b>

### **Documented debt**

In the first quarter of 2019, no new debt has been taken out.

An analysis of drawdowns from January 1 to December 31, 2018 is as follows:

### **Domestic debt**

In the first quarter of 2019, no new debt has been taken out.

In February 2018, CFE drew down 2,500 million pesos against its revolving line of credit with BBVA Bancomer, S. A. and in March it drew down 2,500 million pesos, that bear monthly interest at the 28-day TIIE rate plus 0.48%.

In May 2018, CFE drew down 5,000 million pesos against its revolving line of credit with Banco Santander, S.A., that bears monthly interest at the 28-day TIIE rate plus 0.20%.

In June 2018, CFE placed three Stock Certificate issuances in the domestic market for a total amount of 15,290.0 million pesos.

1. Second reopening of the CFE 17 series for an amount of 2,550.0 million pesos, that bears semi-annual interest at a fixed rate of 8.18% and matures in December 2027.
2. First reopening of the CFE 17 series for an amount of 1,342,321,400 UDIS, equal to 8,053.020 million pesos, that bears semiannual interest at a fixed rate of 4.54% and matures in September 2032.
3. Of the CFE 18 series, Stock Certificates were auctioned for an amount of 4,687.33 million pesos that bears variable interest at the 28-day TIIE rate plus 0.30% and matures in June 2021.

In July 2018, CFE drew down 4,000 million pesos against its revolving line of credit with Banco Santander, S.A., that bears monthly interest at the 28-day TIIE rate plus 0.20% and 3,000 million pesos against its revolving line of credit with BBVA Bancomer, S.A., that bears monthly interest at the 28-day TIIE rate plus 0.30%, both with monthly interest payments.

In October, CFE drew down 4,000 million pesos against its revolving line of credit with Banco Santander, S.A., that bears monthly interest at the 28-day TIIE rate plus 0.20% and 3,000 million pesos against its revolving line of credit with BBVA Bancomer, S.A., that bears monthly interest at the 28-day TIIE rate plus 0.30%, both with monthly interest payments.

In April 2017, CFE drew down \$2,500 million pesos against its revolving line of credit with Banco Santander (México), S.A., and in July 2017 it drew down an additional \$2,500 million pesos, that bear monthly interest at the 28-day TIIE rate plus 0.1%. These amounts were repaid in October 2017.

In July 2017, CFE placed two Stock Certificate issues:

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1. Of the CFE 17 series, Stock Certificates were auctioned in the amount of \$7,000 million pesos at a fixed interest of 8.2% and mature in December 2027.
2. Of the CFE 17-2 series, Stock Certificates were auctioned in the amount of \$1,000 million pesos that bears variable interest at the 28-day TIIE rate plus 0.4% and matures in July 2020.

In August 2017, CFE drew down \$2,500 million pesos against its revolving line of credit with BBVA Bancomer, S. A. that bears monthly interest at the 28-day TIIE rate plus 0.5%. This amount was repaid in November 2017.

In October 2017, CFE placed three Stock Certificate issuances:

1. First reopening of the CFE 17 series in the amount of \$3,000 million pesos, that bears monthly interest at a fixed rate of 8.2% and matures in December 2027.
2. First reopening of the CFE 17-2 series in the amount of \$1,500 million pesos, that bears monthly variable interest at the 28-day TIIE rate plus 0.4% and matures in July 2020.
3. Base placement of the CFE 17U series in the amount of 944,092,800 UDIS, that bears interest at a fixed rate of 4.5%, and matures in September 2032.

In November 2017, CFE drew down \$2,500 million pesos against its revolving line of credit with Banco Santander (México), S.A., that bears monthly interest at the 28-day TIIE rate plus 0.1%. This amount was repaid in December 2017.

### **Foreign debt**

In July 2018, CFE drew down \$20.87 million US dollars against its line of credit with Banamex, S.A. to finance enriched uranium for the Laguna Verde Central, for a term of three years and semiannual payments and interest payments, at the 6-month USD LIBOR rate + 0.90%.

In July, CFE drew down \$300 million US dollars against the syndicated loan (BBVA Bancomer, S.A. is the Administrative Agent), at the USD LIBOR rate plus 1.15%, This amount was repaid in August 2017.

In August 2018, CFE drew down \$900 million US dollars against the syndicated revolving loan signed in July 2018 for a total of \$1,260 million US dollars with Mizuho Bank, LTD., as the administrative agent, at the USD LIBOR rate plus 0.95%, for a term of 5 years.

In September, CFE drew down \$5.2 million US dollars against the line of credit with BBVA, S.A. Madrid, to finance Spanish goods and services with a guaranty of Compañía Española de Seguros de Crédito a la Exportación (the Spanish Export Credit Agency).

In November 2018, CFE drew down \$21.52 million US dollars against its line of credit with Banamex, S.A. to finance enriched uranium for the Laguna Verde Central, for a term of three years and semiannual payments and interest payments, at the 6-month USD LIBOR rate + 0.90%.

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In January, CFE drew down \$126.3 million dollars against its line of credit with Banco Santander, (Mexico), S. A. to finance enriched uranium for the Laguna Verde Central, for a term of three years and semiannual payments and interest payments, at the 6-month USD LIBOR rate + 1.5%.

In February, CFE drew down \$200 million dollars against the syndicated loan (BBVA Bancomer, S.A. is the Administrative Agent), at the USD Libor rate plus 1.2%, This amount was repaid in November 2017.

In addition, to finance various payments of Financed Public Work (OPF, Spanish acronym) projects, \$750 million dollars were placed through the issue of an international bond. Such bond bears 5.2% fixed interest, and the last payment will be in September 2047.

Lastly, to finance imports from Japan, Canada and Switzerland, CFE drew down \$115,488,810 JPY (equal to 1.0 million dollars) against its line of credit with Japan Bank for International Cooperation (JIBC), \$2.1 million dollars against its line of credit with Export Development of Canada (EDC), as well as \$218,049.75 CHF (equal to \$229,745.80 million dollars) against its line of credit with UBS Switzerland AG (UBS).

**ii) Debt for long-term infrastructure projects (PIDIREGAS)**

An analysis of the balances and maturities of the PIDIREGAS (direct investment) debt and capital lease obligations as at 31 March 2019 and 31 December 2018 and 2017 is as follows:

	31 March 2019		31 December 2018		31 December 2017	
Short-term	\$	16,149,624	\$	16,780,375	\$	21,145,914
Long-term						
2018						688,164
2019		-		-		1,705,968
2020		211,268		479,952		293,720
2021		171,148		171,891		3,493,333
2022		2,075,776		2,196,057		2,154,690
2023		1,555,108		1,577,996		5,748,122
2024		4,201,923		4,520,686		-
2025		1,912,414		-		-
Subsequent years		101,924,295		105,358,075		91,965,399
Total long-term	\$	112,051,932	\$	114,304,657	\$	106,049,396
Total		<u>128,201,556</u>		<u>131,304,657</u>		<u>127,195,310</u>

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**-Direct investment (PIDIREGAS):**

As at 31 March 2019 and 31 December 2018 and 2017, the debt corresponding to the acquisition of plants, facilities and equipment through PIDIREGAS was recognized in accordance with International Financial Reporting Standards, an analysis is as follows:

Credit amount	Term of the agreement	Balances as at 31 March 2019 (amounts in thousands of the corresponding currency)				Balance as at 31 December 2018 (amounts in thousands of the corresponding currency)				Balances as at 31 December 2017 (amounts in thousands of the corresponding currency)			
		Local currency		Foreign currency		Local currency		Foreign currency		Local currency		Foreign currency	
		Short-term	Long-term	Short-term	Long-term	Short-term	Long-term	Short-term	Long-term	Short-term	Long-term	Short-term	Long-term
<b>Foreign debt</b>													
- million dollars	2019	-	-	-	-	144,872	-	7,360	-	539,009	145,636	27,241	7,360
27 million dollars	2020	527,464	-	27,302	-	537,369	268,684	27,301	13,651	540,203	810,304	27,301	40,952
36 million dollars	2026	87,429	612,000	4,526	31,677	89,070	623,492	4,525	31,677	89,540	716,320	4,525	36,202
279 million dollars	2029	527,693	4,871,880	27,313	252,166	537,603	5,232,168	27,313	265,823	540,438	5,800,198	27,313	293,136
432 million dollars	2032	1,163,848	7,175,552	60,240	371,403	1,185,703	7,310,297	60,240	371,403	1,191,956	8,540,805	60,240	431,644
824 million dollars	2036	849,145	15,067,549	43,951	779,890	865,091	15,350,493	43,951	779,890	869,653	16,301,098	43,951	823,841
699 million dollars	2047	965,372	12,530,342	49,967	648,565	983,500	12,765,641	49,967	648,565	1,367,974	22,954,350	69,137	1,160,090
1,420 million dollars	2048	1,069,009	26,365,597	55,331	1,364,672	1,072,434	26,855,367	54,487	1,364,401	-	-	-	-
<b>Total foreign debt</b>		5,189,960	66,622,920	268,630	3,448,373	5,415,642	68,406,142	275,144	3,475,410	5,138,773	55,268,711	259,708	2,793,225

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<b>Domestic debt</b>									
-	million pesos	2018	-	-	-	-	-	1,915,888	-
432	million pesos	2019	432,204	-	554,554	-	1,011,552	542,528	
768	million pesos	2020	556,672	211,268	656,653	211,268	1,143,268	895,664	
293	million pesos	2021	121,828	171,148	121,828	171,891	181,999	293,720	
3,270	million pesos	2022	1,193,985	2,075,776	1,298,802	2,196,057	2,265,874	3,493,333	
2,117	million pesos	2023	561,559	1,555,108	576,694	1,577,996	792,720	2,154,690	
5,439	million pesos	2024	1,237,153	4,201,923	1,302,860	4,520,686	1,578,043	5,748,122	
2,404	million pesos	2025	491,312	1,912,414	491,312	1,985,983	644,745	2,736,176	
11,554	million pesos	2026	2,051,277	9,503,066	2,051,277	9,566,386	2,550,125	12,027,493	
8,234	million pesos	2027	1,290,776	6,942,920	1,332,149	7,364,884	1,612,159	9,360,896	
2,353	million pesos	2028	299,327	2,053,418	261,525	1,714,698	-	-	
4,814	million pesos	2033	503,787	4,310,129	444,262	3,871,210	-	-	
1,506	million pesos	2036	83,664	1,422,294	83,664	1,422,294	83,664	1,505,959	
11,788	million pesos	2042	726,946	11,060,728	726,944	11,286,341	753,692	12,013,283	
<b>Total domestic debt</b>			<b>9,550,490</b>	<b>45,420,192</b>	<b>9,902,524</b>	<b>45,889,694</b>	<b>14,533,729</b>	<b>50,771,864</b>	
Interest payable			1,409,174		1,462,209		1,473,412		
<b>CEBURES</b>				8,821		8,821		8,821	
<b>Total PIDIREGAS debt</b>			<b>16,149,624</b>	<b>112,051,933</b>	<b>16,780,375</b>	<b>114,304,657</b>	<b>21,145,914</b>	<b>106,049,396</b>	



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- a. As at 31 March 2019 and 31 December 2018 and 2017, minimum payment commitments on PIDIREGAS are as follows:

	<b>31 March 2019</b>	<b>31 December 2018</b>	<b>31 December 2017</b>
PIDIREGAS	<b>185,356,506</b>	<b>190,029,498</b>	<b>176,974,622</b>
less:			
Unaccrued interest	<b>58,572,945</b>	<b>60,415,497</b>	<b>49,788,133</b>
Present value of obligations	<b>126,783,561</b>	<b>129,614,001</b>	<b>127,186,489</b>
less:			
Current portion of obligations	<b>14,740,449</b>	<b>15,318,165</b>	<b>21,145,914</b>
Long-term portion of PIDIREGAS	<b>112,043,112</b>	<b>114,295,836</b>	<b>106,040,575</b>
CEBURES	<b>8,821</b>	<b>8,821</b>	<b>8,821</b>
Total CEBURES and PIDIREGAS	<b>112,051,933</b>	<b>114,304,657</b>	<b>106,049,396</b>

### Capital lease obligations (conditioned investment)

As at 31 March 2019, CFE has entered into 26 contracts with private investors, called independent energy producers (PIE, Spanish acronym). Such contracts establish an obligation for CFE to pay various considerations to the PIEs in exchange for the PIEs to guarantee the provision of electricity supply services, based on a previously agreed-upon generation capacity through power generation plants financed and built by said investors.

The future payments obligation includes: a) rules for quantifying the acquisition amount of the power generating plants whenever a contingent event occurs that, under the terms of each contract, is considered an event of force majeure, applicable from the construction stage of each project until the termination of the contracts; and b) fixed charges for power generation capacity, as well as variable charges for the operation and maintenance of the generation plants, which are determined in accordance with the variable terms set forth in the contracts, applicable from the start-up testing stage until the termination of the contracts.

The lease agreements with private investors are for 25-year terms. The average annual interest rate on these lease agreements is 11.19%.

	<u>Minimum lease payments</u>			<u>Present value of minimum lease payments</u>		
	<u>31/03/2019</u>	<u>31/12/2018</u>	<u>31/12/2017</u>	<u>31/03/2019</u>	<u>31/12/2018</u>	<u>31/12/2017</u>
Current liabilities	\$17,979,329	\$18,103,949	\$15,631,775	\$8,740,416	\$8,576,870	\$8,121,848
From one to five years	81,162,907	83,338,889	86,151,051	43,139,465	42,800,629	38,507,349
More than five years	82,532,778	98,336,124	103,923,053	60,894,877	64,629,251	75,596,469
Total accumulated equity	\$181,675,014	\$199,778,962	\$205,705,879	\$112,774,758	\$116,006,750	\$122,225,666

An analysis of the capital lease obligation as at 31 March 2019 is as follows:

Name	Lease beginning date	Original amount of the obligation	<u>Foreign currency</u>		<u>Local currency</u>	
			Short term	Long term	Short term	Long term
CT MERIDA III	JUN-00	242,685	14,908	122,588	288,018	2,368,421
CC HERMOSILLO	OCT-01	156,144	8,480	95,293	163,827	1,841,062
CC SALTILLO	NOV-01	152,383	8,223	84,490	158,873	1,632,355
TUXPAN II	DEC-01	283,133	14,091	180,237	272,235	3,482,189
EL SAUZ BAJIO	MAR-02	399,773	20,184	265,500	389,951	5,129,478
CC MONTERREY	MAR-02	330,440	16,876	161,082	326,052	3,112,117

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CC ALTAMIRA II	MAY-02	233,234	11,168	163,901	215,775	3,166,583
CC RIO BRAVO II	MAY-02	232,108	11,857	129,800	229,073	2,507,751
CC CAMPECHE	MAY-03	196,554	9,002	123,467	173,911	2,385,395
CC TUXPAN III AND IV	MAY-03	587,064	26,240	391,883	506,959	7,571,227
CC MEXICALI	JUL-03	569,345	25,667	325,718	495,889	6,292,901
CC CHIHUAHUA III	SEP-03	275,327	12,507	154,370	241,644	2,982,452
CC NACO NOGALES	OCT-03	238,016	10,455	105,539	201,993	2,039,028
CC ALTAMIRA III AND IV	DEC-03	600,897	25,774	370,223	497,948	7,152,752
RIO BRAVO III	APR-04	312,602	12,263	218,685	236,916	4,225,025
CC LA LAGUNA II	MAR-05	367,578	13,562	264,673	262,028	5,113,510
CC RIO BRAVO IV	APR-05	270,697	9,189	205,069	177,536	3,961,948
CC VALLADOLID III	JUN-06	288,160	9,930	208,737	191,856	4,032,816
CC TUXPAN V	SEP-06	284,997	8,017	231,591	154,884	4,474,369
CC ALTAMIRA V	OCT-06	532,113	12,865	454,748	248,561	8,785,771
CC TAMAZUNCHALE	JUN-07	482,562	13,367	389,836	258,251	7,531,674
CCC NORTE	AUG-10	450,097	12,737	357,490	246,086	6,906,741
CCC NORTE II	JAN-14	427,733	9,188	379,852	177,522	7,338,775
Total			316,550	5,384,772	6,115,786	104,034,341

- (1) The short-term balance does not include interest in the amount of \$2,624,630, \$2,501,319 and \$2,639,798 as at 30 March 2019 and 31 December 2018 and 2017, respectively.

### 13. Changes in Lease Liabilities

31 December 2018	\$ 460,082,272
Acquisitions	10,808,913
Retirements	
Interest	3,857,270
Charges	(4,939,665)
Exchange differences	(8,252,421)
<b>Total liabilities</b>	<b>\$ 461,556,369</b>

### 14. Other Accounts Payable and Accrued Liabilities

An analysis of Other accounts payable and accrued liabilities as at 31 March 2019 and 31 December 2018 and 2017 is as follows:

	<u>31 March 2019</u>	<u>31 December 2018</u>	<u>31 December 2017</u>
Suppliers and contractors	\$ 42,658,936	\$ 60,196,912	\$ 59,849,154
Employees	1,736,157	4,680,424	4,213,117

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Deposits from users and contractors	29,106,522	25,619,843	22,974,717
Other liabilities	23,592,112	18,736,913	20,761,052
<b>Total</b>	<b>\$ 97,093,726</b>	<b>\$ 109,234,092</b>	<b>\$ 107,798,040</b>

## 15. Taxes and Duties Payable

An analysis of Taxes and duties payable as at 31 March 2019 and 31 December 2018 and 2017 is as follows:

### Payable by CFE

	31 March 2019	31 December 2018	1 January 2018
Income tax payable on behalf of third parties	785,085	389,296	411,290
Mexican Social Security Institute (IMSS) contributions	497,272	755,693	698,046
Rights for the use and exploitation of national waters	412,839	813,342	370,375
Payroll tax	75,824	61,492	45,556
Federal Housing Financing Agency (INFONAVIT) contributions	1,881	10,760	12,481
Special tax on production and services (IEPS)	16,154	50,002	-
VAT payable	1,406,822	848,082	-
<b>Subtotal</b>	<b>3,195,877</b>	<b>2,928,667</b>	<b>1,537,748</b>

### Withholdings

Income tax withheld from employees	1,194,357	571,327	738,923
Withheld value added tax	33,043	40,056	68,441
Income tax on interest paid abroad	55,188	35,342	27,993
Income tax on foreign residents	(0)	31	45,677
0.5% to contractors	12,460	29,303	50,404
Income tax on professional fees and rent to individuals	4,693	2,932	7,101
0.2% to contractors	598	517	547
Other	1,600	2,372	422
	<b>1,301,939</b>	<b>681,880</b>	<b>939,508</b>
<b>Total Taxes and Duties</b>	<b>4,497,816</b>	<b>3,610,547</b>	<b>2,477,255</b>

The deferred tax liability as at December 2018 amounts to \$113,860 thousand pesos.

## 16. Other Long-Term Liabilities

An analysis of Other long-term liabilities as at 31 March 2018 and 31 December 2018 and 2017 is as follows:

	31 March 2019	31 December 2018	31 December 2017
Third-party contributions	\$ 6,685,474	\$ 5,839,143	\$ 8,039,903
Asset retirement obligation	8,675,506	8,610,763	11,101,187
Other provisions	6,001,288	6,001,288	4,283,577
<b>Total</b>	<b>\$ 21,362,268</b>	<b>\$ 20,451,195</b>	<b>\$ 23,424,666</b>

## 17. Employee Benefits

CFE has employee benefits plans for terminations of employee relationships and for retirements for reasons other than a restructuring event. The retirement benefits plan considers the number of years of service completed by the employee and the employee's compensation at the retirement date. The retirement benefits plan includes the seniority bonus that employees are entitled to receive upon termination of the employee relationship, as well as other defined benefits.

The actuarial valuations of the plan assets and the present value of the defined benefit obligation are performed annually by independent actuaries using the projected unit credit method.

No significant changes or amendments were made to the plans during the six-month period ended as at 31 March 2019.

## 18. Foreign Currency Position

As at 31 March 2019 and 31 December 2018 and 2017, CFE had the following foreign currency denominated assets and liabilities:

2019					
Assets			Liabilities		
Cash and cash equivalents	Suppliers	Domestic debt	Foreign debt	Capital lease obligations and PIDIREGAS	Short foreign currency position

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U.S. dollars	216,598	66,120	5,857,912	9,418,326	15,125,760
Euros	0		1,107		1,107
Japanese yens	-		1,662,192		1,662,192
Swiss francs	0		11,803		11,803

Name	2018					
	Assets			Liabilities		
	Cash and cash equivalents	Suppliers	Domestic debt	Foreign debt	Capital lease obligations and PIDIREGAS	Foreign currency position
U.S. dollars	127,920	234,417	-	5,918,083	9,517,257	15,541,837
Euros	-	-	-	1,202	-	1,202
Japanese yens	-	-	-	2,170,700	-	2,170,700
Swiss francs	-	-	-	16,970	-	16,970

Name	2017					
	Assets			Liabilities		
	Cash and cash equivalents	Suppliers	Domestic debt	Foreign debt	Capital lease obligations and PIDIREGAS	Foreign Currency Position
U.S. dollars	1,215,536	21,659	-	5,428,378	9,096,684	13,331,185
Euros	505	-	-	2,360	-	1,855
Japanese yens	1,335,513	-	-	3,874,487	-	2,538,974
Swiss francs	31,644	-	-	45,080	-	13,436

*Note: The JPY foreign debt includes the 32 billion bond in yens.*

The foreign currency denominated assets and liabilities were translated to local currency at the exchange rate published in the Official Gazette by Banco de Mexico as at 31 December 2018, as shown below:

Currency	March 2019	December 2018	December 2017
U.S. dollars	19.3201	19.6829	19.7867
Japanese yen	0.1748	0.1790	0.1746
Swiss francs	19.4612	19.9440	20.1721
Euro	21.7546	22.4691	23.6062

## **19. Contingencies and Commitments**

### **Contingencies**

CFE is party to several lawsuits and claims filed against it in the normal course of its business. The amounts of such lawsuits are deemed immaterial with respect to the Group's current financial position and its expected financial performance in the following years.

### **Commitments**

#### **a. Natural gas supply contracts**

The Group has entered into contracts for services related to the reception, storage, transportation, regasification and supply of liquefied natural gas. The contractual commitments consist of acquiring, during the supply period, daily base amounts of natural gas as set forth in the respective contracts.

#### **b. Financed public work contracts**

As at 31 March 2018, CFE has entered into several financed public work contracts and the payment commitments will begin on the dates when the private investors complete the construction of each of the investment projects and deliver the related the assets to CFE for their operation. The estimated amounts of such financed public work contracts and the estimated dates of construction completion and start up of operations are shown in the table included on the next page.

**Transmission lines and substations:**

**COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries**  
**Notes to the consolidated financial statements for the three-month period ended 31 March 2019 and 31 December 2018 and 2017. (Amounts expressed in thousands of Mexican pesos, unless explicitly indicated otherwise)**

Project	Capacity		Estimated amount of the contract expressed in millions of:		Operation stage
	Kmc	MVA	Dollars	Pesos	
188 SE 1116 Transformación del Noreste F4	97.60	500.00	50.00	966.01	31-MAY-17
209 SE 1212 Sur - Peninsular F9 (DIST)	20.31	20.00	8.17	157.83	12-AUG-17
321 SLT 1920 Subestaciones y Líneas de Distribución F5	1.42	30.00	5.46	105.43	31-AUG-17
274 SE 1620 Distribución Valle de México F2	26.20	420.00	89.80	1,734.94	31-OCT-17
304 LT 1805 Línea de Transmisión Huasteca - Monterrey	441.80		126.83	2,450.37	30-JAN-18
310 SLT 1821 Divisiones de Distribución F1 (DIST)		50.00	4.69	90.61	01-MAR-18
336 SLT 2001 Subestaciones y Líneas Baja California Sur - Noroeste F1	225.00	950.00	44.50	859.65	25-MAY-18
274 SE 1620 Distribución Valle de México F1	16.10	780.00	94.60	1,827.68	31-MAY-18
350 SLT 2121 Reducción de Pérdidas de Energía en Distribución F1 (DIST)	3.10	2.51	1.36	26.26	26-AUG-18
266 SLT 1603 Subestación Lago	80.40	660.00	91.20	1,761.95	22-SEP-18
337 SLT 2002 Subestaciones y Líneas de las Áreas Norte - Occidental F1	208.70	975.00	35.84	692.34	19-OCT-18
349 SLT 2120 Subestaciones y Líneas de Distribución F1 (DIST)	7.90	120.00	5.97	115.38	21-NOV-18
310 SLT 1821 Divisiones de Distribución F6 (DIST)	31.97		4.58	88.49	12-JAN-19
338 SLT 2020 Subestaciones, Líneas y Redes de Distribución F2 (DIST)	4.84	60.00	8.51	164.45	19-FEB-19
288 SLT 1722 Distribución Sur F3	3.96	40.00	6.00	115.86	23-FEB-19
348 SE 2101 Compensación Capacitiva Baja - Occidental	0.00	0.00			
300 LT 1812 Red de Transmisión Asociada al CC Topolobampo III	276.00		24.49	473.21	13-MAR-19
	1,445.30	4,607.51	602.00	11,630.46	

**Generation**

	MCA capacity	Estimated amount of the contract expressed in millions of:		Operation stage
		Dollars	Pesos	
268 CCI Guerrero Negro IV	7.52	20.63	398.60	01-APR-17
296 CC Empalme I	770.22	476.84	9,212.70	06-NOV-17
298 CC Valle de México II	615.23	425.31	8,217.10	31-JAN-18
38 CC Norte III (Juárez) C2	906.71	562.37	10,865.00	13-APR-18
313 CC Empalme II	791.17	397.00	7,670.10	28-APR-18
327 CG Azufres III F2 (DIST)	25.00	51.29	990.80	15-JUN-18
289 CH Chicoasén II	240.00	386.42	7,465.70	12-SEP-18
42 CC Noroeste (Topolobampo II) C2	887.39	334.50	6,462.60	02-JAN-19
45 CC Topolobampo III C2	665.88	630.87	12,188.50	01-JAN-20
	4,909.12	3,285.23	63,471.10	

**Renovation and/or modernization**

Project	Estimated amount of the contract expressed in millions of:		Operation stage
	Dollars	Pesos	
312 RM CH Temascal Unidades 1 a 4 (GEN)	26.5	512.0	18/09/2018



**COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries**  
**Notes to the consolidated financial statements for the three-month period ended 31 March 2019 and 31 December 2018 and 2017. (Amounts expressed in thousands of Mexican pesos, unless explicitly indicated otherwise)**

278 RM CT José López Portillo (GEN)	214.0	4,134.5	27/02/2019
258 RM CT Altamira U1 y 2	380.0	7,341.4	01/07/2019
	620.5	11,987.9	

These projects are registered under the PIDIREGAS scheme (long-term productive infrastructure projects).

### c. Trusts

#### 1 Area of competence

1.1. CFE currently participates as Trustor or Beneficiary in 10 (ten) Trust Funds, of which 1 (one) is in the process of termination.

1.2. In conformity with its purpose and operating characteristics, the trust funds can be classified in the following groups:

- a. Energy saving
- b. Prepaid expenses
- c. Construction contract management
- d. Indirect participation trust funds

#### a. Energy saving

Trust funds to promote energy saving programs.

Trust fund	Role of CFE		
	Trustor	Trustee	Trust Beneficiary
Trust fund for Energy Savings (FIDE), created on August 14, 1990	Creation of the Trust: Confederación de Cámaras Industriales (CONCAMIN), Cámara Nacional de la Industria de Transformación (CANACINTRA), Cámara Nacional de Manufacturas Eléctricas (CANAME), Cámara Nacional de la Industria de la Construcción (CNIC), Cámara Nacional de Empresas de Consultoría (CNEC) and Sindicato Único de Trabajadores Electricistas de la República Mexicana (SUTERM)	Nacional Financiera, S.N.C.	<p><b>a.</b> Electric energy consumers who are beneficiaries of the services rendered by the Trust fund.</p> <p><b>b.</b> CFE, only for the materials that will form part of the public energy services infrastructure.</p>

**COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries**  
**Notes to the consolidated financial statements for the three-month period ended 31 March 2019 and 31 December 2018 and 2017. (Amounts expressed in thousands of Mexican pesos, unless explicitly indicated otherwise)**

Trust fund	Role of CFE		
	Trustor	Trustee	Trust Beneficiary
Mexicali Housing Thermal Isolation Trust (FIPATERM), created on October 19, 1990	CFE	Banco Nacional de Obras y Servicios Públicos, S.N.C.	CFE

As at 31 March 2019 and 31 December 2018 and 2017, the Housing Thermal Isolation Program (FIPATERM) Trust has assets of \$1,554,179, \$1,532,366 and \$1,487,051 and liabilities of \$60,852, \$56,188 and \$70,634, respectively.

**b. Prepaid expenses**

Prepaid expenses finance and cover expenses prior to the execution of projects and are subsequently recoverable and charged to the entity that incurs such expenses to comply with the regulations applicable to the type of project.

Trust fund	Role of CFE			Type of project
	Trustor	Trust Beneficiary	Trustee	
CPTT prepaid expense management, created on August 11, 2003	CFE	CFE	Banco Nacional de Comercio Exterior, S.N.C.	Direct investment
Management and transfer of ownership 2030, created on September 30, 2000	CFE	<b>Primary beneficiary:</b> Contract winners <b>Second beneficiary:</b> <b>CFE</b>	Banobras, S.N.C.	Conditioned investment

As at 31 March 2018 and 31 December 2018 and 2017 the Administration of Prior Expenses has assets of \$3,536,569, \$3,533,406 and \$3,763,171, and liabilities of \$3,125,598, \$3,104,881 and \$3,356,828, respectively.

The Domain Transfer and Administration Trust 2030 has assets of \$447,446.

**c. Construction contract management**

At the beginning of the '90s, the Federal Government implemented several off-budget schemes to continue to invest in infrastructure projects. The schemes were designed under two modalities:

- Turnkey Projects (1990)
- Build, Lease and Transfer Projects (1996)

Turnkey Projects. - Under this scheme, works were carried out for the construction of power generation plants and installation of transmission lines, through an irrevocable management and transfer of ownership trust, linked to a lease agreement. Under this modality, the trustee is responsible for the following:

Contracting credits, managing the trust property (assets), receiving the lease payments from CFE, and transferring the asset at no cost to CFE after the leases have been paid in an amount sufficient to pay the contracted credits.

CFE participates in the payment of the leases to the trustee, based on the credits contracted by the trust, instructing the trustee to pay the contractors receiving, in exchange, invoices approved by the construction area, payment of taxes and other charges, including trustee fees.

The trusts for managing and transferring ownership were carried out in accordance with the Guidelines for the performance of thermoelectric projects with off-budget funds, as well as with the Guidelines for the performance of transmission lines and substations with off-budget funds issued by the Ministry of Public Administration (formerly known as the Ministry of Comptrollership and Administrative Development).

The Trust shown below has completed its payment commitments; therefore, it is in process of termination by the General Counsel.

Trust fund	Role of CFE		Trustee
	Trustor	Trust Beneficiary	
Topolobampo II (Electrolyser, S. A. de C. V.), created on November 14, 1991	Bufete Industrial Construcciones, S. A. de C. V. and Electrolyser, S. A. de C. V., with respect to its contribution to the Trust	<b>Primary beneficiary:</b> Electrolyser, S. A. de C. V., with respect to its contribution to the Trust and <b>Second beneficiary:</b> CFE	Santander, S. A.

Build, Lease and Transfer Projects (“CAT”, Spanish acronym).- The transition stage to carry out the CAT trusts began in 1996, whereby the trustee manages the trust property (assets) and transfers it to CFE after the lease payments have been covered. Credits are contracted directly with a consortium that is a special purpose entity, for which there is an irrevocable management and transfer of ownership trust contract.

In these types of trusts, CFE participates in making the lease payments based on quarterly amortization tables presented by the consortiums in their bids. Most of these tables include forty quarterly payments.

**COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries**  
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The only project under this modality that is still in force is the one related to the CT Samalayuca II trust fund:

Trust fund	Role of CFE		Trustee
	Trustor	Trust Beneficiary	
C.T. Samalayuca II, created on May 2, 1996	Compañía Samalayuca II, S.A. de C.V.	<b>Primary beneficiary:</b> The foreign bank that is the common representative of the creditors; <b>Second beneficiary:</b> Compañía Samalayuca II, S.A. de C.V. <b>Third beneficiary:</b> CFE	Banco Nacional de México, S.A.

As at 31 March 2019 and 31 December 2018 and 2017, the Group's fixed assets amount to \$21,995,855, \$21,706,678 and \$21,255,499, respectively; and the Group's liabilities amount to \$142,851, \$144,871 and \$684,644, which correspond to the CAT trusts referred to above.

**Coal Terminal of the Thermoelectric Power Station Presidente Plutarco Elías Calles**

Trust fund	Role of CFE		Trustee
	Trustor	Trust Beneficiary	
Coal Terminal of the Thermoelectric Power Station Presidente Plutarco Elías Calles (Petacalco) was created on November 22, 1996	Techint, S. A., Grupo Mexicano de Desarrollo, S.A. de C.V. and TechintCompagnia Tecnica Internazionale S.P.A.	<b>Primary beneficiary:</b> Carbonser, S.A. de C.V. <b>Second beneficiary:</b> CFE	Banco Nacional de México, S. A. (Banamex)

The irrevocable management, guarantee, and transfer of ownership trust agreement number 968001 was entered into 1996 which, among other considerations, sets forth that the trustee will enter into a service contract with CFE.

Upon the entry into force of the coal management service contract between CFE and Banco Nacional de México, S. A. (Banamex) as trustee of the Petacalco Trust, comprised of Techint Compagnia Tecnica Internazionale S.P.A., Grupo Mexicano de Desarrollo, S. A. de C. V., and Techint, S. A. that was entered into on November 22, 1996, in accordance with clause 8.1, CFE will pay the invoice amounts related to the fixed charge for capacity.

Facility	Fixed charge for capacity for Jan-Mar 2019
Petacalco Coal	\$19,918

**d. Indirect participation trust funds**

Additionally, CFE maintains an indirect relationship since it is not a Trustor, but it participates as a beneficiary in two guarantee and loan payment Trusts, created by Financial Institutions as Trustors and Trust Beneficiaries for the issue of securities linked to credits granted to CFE. CFE is named as Second Beneficiary of the Trust, due to the specific possibility that it may acquire some of the certificates issued and it maintains representation in its Technical Committees in conformity with the contractual provisions. (See Note 11).

CFE is required to reimburse to the Trust in the terms of the Indemnity Contract that forms part of the Trust Contract, the expenses incurred by the Trust for the issue of securities and their management.

Trust fund	Role OF CFE		Trustee
	Trustor	Trust Beneficiary	
Trust No. 232246 created on November 3, 2006	Banco Nacional de Mexico, S.A., a member entity of Grupo Financiero Banamex	<b>Primary beneficiary:</b> Each of the preferred holders of each issue. <b>Second beneficiary:</b> CFE	HSBC México, S.A., Grupo Financiero HSBC
Trust No. 411 created on August 6, 2009	Banco Nacional de Mexico, S.A., a member entity of Grupo Financiero Banamex	<b>Primary beneficiary:</b> Each of the preferred holders of each issue. <b>Second beneficiary:</b> CFE	Banamex

Regarding Trust N° 194, created on May 3, 2004 by ING (México), S.A. de C.V. Casa de Bolsa, ING Grupo Financiero and Deutsche Securities S.A. de C.V. Casa de Bolsa, first and second Trustors, respectively, with the participation of CFE as Second Beneficiary, on January 10, 2018, the parties, CFE as Secondary Trustor and Acciones y Valores Banamex, S.A. de C.V., Casa de Bolsa, Member of the Banamex Financial Group, as alternate trustor of Bank of America, S.A., Institución de Banca Múltiple, alternate trustor of The Royal Bank of Scotland México, S.A., Institución de Banca Múltiple, formerly ABN Amro Bank (México), S.A., Institución de Banca Múltiple, alternate trustor of Bank of America México, S.A., Institución de Banca Múltiple, universal successor-in-title of Bankboston, S.A., Institución de Banca Múltiple y Banco Monex, S.A., Institución de Banca Múltiple, Monex Grupo Financiero as agent under the Management Agreement, (as assignee of ING Bank (México), S.A., Institución de Banca Múltiple, ING Grupo Financiero (currently Corporación General de Servicios Especializados, S.A., in liquidation), entered into a Termination and Extinguishment Agreement of the Trust in view of the fact that the Preferred Stock Certificates issued were issued fully paid in and the purpose for which it was created was met. In the Termination and Extinguishment Agreement referred to above, the Trustee was instructed to transfer the remaining cash of the Trust Property to the Second Trust Beneficiary, as well as the ownership of credit rights, if any, in the Common Fund and, any remaining Trust Property, which occurred on October 4, 2018.

As at 31 March 2019, available funds in trust No. 232246 amount to \$8,821.

## 2 Legal nature

2.1 In conformity with the Federal Public Administration Act, none of the trusts are considered Public Trusts with the status of "entity", pursuant to the following:

- a. In six of the Trusts, CFE is not a Trustor in their creation.
- b. The four remaining trusts do not have an organic structure similar to the state-owned entities that comprise them as "entities" in terms of the Law.

2.2 The SHCP has maintained a record for purposes of the Federal Budget and Financial Responsibility Law, of 4 (four) of the Trusts, due to the allocation of federal funds or the contribution of land owned by CFE where the works will be carried out.

Registration of Trusts with SHCP		
No.	Trusts	Record
1	Mexicali Housing Thermal Isolation Trust (FIPATERM)	700018TOQ058
2	Prior Expense Trust	200318TOQ01345
3	Trust Management and Transfer of Ownership 2030	200318TOQ01050
4	Trust for Power Savings (FIDE)	700018TOQ149

### Long-term auctions

In 2017, the Group participated as a buyer in the long-term auction announced by CENACE for the month of November 2017, acquiring through the auction a commitment to purchase energy of 539.8 (MW / year) for 15 years, purchase of energy of 5,003,133.78 (MWh / year) for 15 years and to purchase CELs of 5,422,143.18 for 20 years. On April 13, 2018, CFE entered into the agreement with the Chamber of Compensation (who acts as the counterparty).

## 20 . Segment Information

### Information regarding the operating segments

The information presented to the Board of Administration to seek approval of budgets, investments and measure compliance with respect to the business objectives set out by the Board is consolidated financial information and not by each operating activity of the Group.

### Information by type of services

**COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries**  
**Notes to the consolidated financial statements for the three-month period ended 31 March 2019 and 31 December 2018 and 2017. (Amounts expressed in thousands of Mexican pesos, unless explicitly indicated otherwise)**

Information on products and services	31 March 2019	31 March 2018
Domestic service	16,604,237	18,653,384
Commercial service	11,415,741	37,617,291
Public lighting service	3,827,068	2,281,160
Agricultural service	1,341,723	1,789,665
Industrial service	56,285,395	10,735,025
<b>Total sales</b>	89,474,164	71,076,525
Block for resale	300,193	-
<b>Total electricity supply revenue</b>	89,774,357	71,076,525
<b>OTHER PROGRAMS</b>		
Consumption in the process of being billed	838,550	-55,563
Illegal uses	611,562	211,165
Measurement failure	587,987	395,638
Billing error	418,593	150,880
<b>Total income obtained from other programs</b>	2,456,692	702,120
	92,231,049	71,778,645
Other operating income	-	1,066,219
<b>Revenue from the sale of electricity</b>	<b>92,231,048</b>	<b>72,844,864</b>

## 21. Subsequent Events

The Ministry of Energy issued the agreement amending the terms for the strict legal separation of Comisión Federal de Electricidad which were published in the Official Gazette on January 11, 2016.

As of the date of publication of this Agreement in the Official Gazette, CFE will have 60 calendar days to submit to the Ministry of Energy its proposal for the reallocation of assets and power generation contracts to the EPS and Affiliated Entities that it considers better contribute to efficiency.

Once the allocation of the assets and power generation contracts are published in the Official Gazette, the CENACE will carry out within 30 calendar days the reallocation of the assets registered in the Market Information System according to the new structure.

During a period of two years as of the date of issuance of the allocation of the assets and power generation contracts, the transfer of the assets, rights and obligations required for the reorganization referred to in the agreement will not need to be formalized in a public document, therefore, the resolutions of the Board of Directors will serve as title deed or deed transferring ownership for all legal purposes, including the registration in the relevant public registries.

## **22. Issuance of the Consolidated Financial Information**

The consolidated financial statements and its notes has been approved by the Chief Financial Officer.



**Comision Federal de Electricidad,  
Productive State Enterprise and subsidiaries**

Consolidated financial statements

December 31, 2018, 2017 and 2016

(With Independent Auditors' Report Thereon)

(Translation from Spanish Language Original)

# Independent Auditors' Report

To the Board of Directors of

Comisión Federal de Electricidad, Productive State Enterprise:

(Thousands of pesos)

## Opinion

We have audited the consolidated financial statements of Comisión Federal de Electricidad, Productive State Enterprise and subsidiaries ("the Entity"), which comprise the consolidated statement of financial position as at December 31, 2018, 2017 and 2016, the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and notes, comprising significant accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of Comisión Federal de Electricidad, Productive State Enterprise and subsidiaries as at December 31, 2018, 2017 and 2016, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards (IFRS).

## Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Entity in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Mexico, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

## Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

## Impairment of accounts receivable

See note 6 to the consolidated financial statements

### Key Audit Matter

As of December 31, 2018, the provision for impairment of accounts receivable amounts \$28,446,893 and represents 36% of total accounts receivable.

The methodology used by the Company to determine the impairment of its collective portfolio, is carried out under the concept of the expected credit loss as required by accounting regulations. In addition, the provision for impairment of accounts receivable determined by the company, considers, within the three stages required by the standard; the probability factors of default both at 12 months and throughout the remaining life of the asset, significant increase, exposure levels, severity of loss, among others.

We consider this issue as a key audit matter due to the judgment involved and due to the type of industry and market where the company perform its operations, there is a risk involved in the proper determination of this accounting estimate.

### How our audit addressed the Key Audit Matter

Our audit procedures to this key audit matter, include, among others, the following:

- We obtained an integration of the accounts receivable from the Company which are subject to impairment and were compared against the carrying amount of each component subject to analysis.
- We test the completeness, existence and valuation of accounts receivable at the end of the year ended December 31, 2018.
- With the support of our valuation specialists, we evaluated the reasonableness of the methodology used by the Company to determine the impairment of its collective portfolio, and the reasonableness of the provision for impairment of the accounts receivable determined by the Company, as well as the revelations included in the company's financial statements.

## Valuation of the defined benefit pension liability for an amount of \$327,452,589

See note 15 to the consolidated financial statements

### Key Audit Matter

The Company has established post-employment defined benefit plans for all of its employees.

The valuation of the pension liabilities require significant levels of judgment and technical expertise to select the appropriate assumptions. Changes in key assumptions, including wage increases, inflation, discount rates, pensions and mortality increases, could have a material impact on the calculation of the liability. Therefore, we consider this issue as a key audit matter.

### How our audit addressed the Key Audit Matter

As part of our audit procedures, we have challenged and evaluated the significant judgments made by Management and the expert actuaries hired by the Company, as further described below, and also evaluated the objectivity and competence of such experts.

With the participation of our specialists, we evaluate the hypothesis used. Among which we reviewed the discount and inflation rates used in the valuation of pension liabilities were in accordance with the economic situation of the country at the valuation date considering the Company's particular information with internally developed benchmarks. In addition, we compared the assumptions around wage increases and mortality rates were aligned to the Company's experience.

	<p>Additionally, we evaluate the consistency of judgments and assumptions made by Management, including a comparison with those used in previous years, and we tested the employees' demographic information used to determine the liability.</p> <p>We also evaluated the disclosures in the notes to the Company's consolidated financial statements.</p>
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#### Emphasis of Matter – Comparative information

During 2018, accounting changes that are disclosed in Note 2 (a) were made to the consolidated financial statements. As a result of that, the consolidated financial statements as of December 31, 2017 and 2016 were restated retrospectively. Our opinion has not been modified in respect of this matter.

#### Other Information

Management is responsible for the other information. The other information comprises the Annual Report corresponding to the annual period ended on December 31, 2018, that shall be filed to the National Banking and Securities Commission and the Mexican Stock Exchange (Annual Report), but does not include the consolidated financial statements and our auditors' report thereon. It is estimated that the Annual Report will be available to us after the date of this auditor's report.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information when is available and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or whether appears to be materially misstated. If, based on the work performed, we conclude that there is a material misstatement in the other information, we are required to report that fact to those charged with governance of the Company. We have nothing to report about it.

#### Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRS and for such internal control as Management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Entity or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Entity's financial reporting process.

## Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Entity's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Entity to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Entity to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

KPMG Cárdenas Dosal S. C.

A handwritten signature in black ink, appearing to read 'EPP' with a stylized flourish.

Eduardo Palomino

Mexico City, May 29, 2019.

**Comisión Federal de Electricidad, Productive State Enterprise and subsidiaries**

December 31, 2018, 2017 and 2016

Consolidated statements of financial position

(Thousands of pesos)

*These financial statements have been translated from the Spanish language original and for the convenience of foreign/English-speaking readers.*

<b>Assets</b>	<b>2018</b>	<b>2017 (Restated)</b>	<b>2016 (Restated)</b>
Current assets:			
Cash and cash equivalents (note 5)	\$ 78,483,263	67,237,901	42,266,944
Accounts receivable, net (note 6)	99,175,895	95,067,522	63,236,187
Inventory of materials for operation, net (note 7)	15,537,465	14,642,993	14,025,765
Total current assets	193,196,623	176,948,416	119,528,896
Loans to employees	12,367,878	12,339,193	11,193,712
Plants, facilities and equipment, net (note 8)	1,243,525,992	1,252,938,487	1,287,172,275
Derivative financial instruments (note 10)	17,783,141	16,084,937	15,646,025
Intangible assets (note 9)	34,288,797	32,836,986	32,643,820
Deferred tax assets (note 16)	157,561,570	76,867,662	-
	<u>\$ 1,658,724,001</u>	<u>1,568,015,681</u>	<u>1,466,184,728</u>
<b>Liabilities and equity</b>			
Current liabilities:			
Loans and borrowings and current installments of long-term debt (note 11)	\$ 48,406,140	56,619,730	41,728,216
Other payables and accrued liabilities (note 12)	109,234,092	107,798,040	61,873,453
Other taxes and duties payable (note 13)	3,610,547	2,477,256	3,111,857
Income tax (note 16)	3,823,719	2,828,070	-
Total current liabilities	165,074,498	169,723,096	106,713,526
Non-current liabilities:			
Documented debt (note 11)	422,225,594	401,156,627	413,981,607
Other long-term liabilities (note 14)	20,451,195	23,424,667	50,156,845
Long-term employee benefits (note 15)	327,452,589	361,780,339	361,114,287
Total non-current liabilities	770,129,378	786,361,633	825,252,739
Total liabilities	935,203,876	956,084,729	931,966,265
Equity:			
Contributions received from the Federal Government	5,251	5,251	5,251
Contributions in kind received from the Federal Government	95,004,417	95,004,417	95,004,417
Accumulated results	144,807,764	100,140,833	(8,043,541)
Other comprehensive income	466,206,051	416,780,451	447,252,336
Total Equity - Controlling interests	706,023,483	611,930,952	534,218,463
Non-controlling interests	17,496,642	-	-
Total Equity	723,520,125	611,930,952	534,218,463
	<u>\$ 1,658,724,001</u>	<u>1,568,015,681</u>	<u>1,466,184,728</u>

See accompanying notes to consolidated financial statements.

**Comisión Federal de Electricidad, Productive State Enterprise and subsidiaries**

For the years ended December 31, 2018, 2017 and 2016

Consolidated statements of comprehensive income

(Thousands of pesos)

*These financial statements have been translated from the Spanish language original  
for the convenience of foreign/English-speaking readers.*

	<b>2018</b>	<b>2017</b>	<b>2016</b>
	<u>                    </u>	<u>(Restated)</u>	<u>(Restated)</u>
Revenues (note 2 (a)):			
Electricity supply service revenue (note 21)	\$ 375,707,624	365,358,887	313,090,120
Subsidy income	81,405,300	65,914,800	30,000,000
Third party fuel revenue	59,571,662	22,022,929	-
Freight revenue	6,176,843	4,986,642	2,170,632
Other income, net	<u>24,484,835</u>	<u>31,322,284</u>	<u>3,722,721</u>
Total revenues	<u>547,346,264</u>	<u>489,605,542</u>	<u>348,983,473</u>
Costs:			
Energy and other fuel supplies	284,385,583	232,718,432	158,291,870
Energy and other fuel supplies - Third party	50,993,057	19,138,000	-
Salaries and related costs	63,152,703	57,885,419	55,344,194
Maintenance, materials and general services	23,348,610	19,554,823	29,529,137
Tax and duties	3,800,709	2,603,543	2,576,311
Wholesale Electrical Market costs (MEM)	3,015,572	2,693,373	3,519,334
Employee benefits costs (note 15)	20,539,778	47,903,316	(111,828,000)
Depreciation	57,535,932	59,467,421	53,383,792
Other expenses	<u>7,673,382</u>	<u>(180,117)</u>	<u>(1,912,654)</u>
Total costs	\$ <u>514,445,326</u>	<u>441,784,210</u>	<u>188,903,984</u>
Operating results	<u>32,900,938</u>	<u>47,821,332</u>	<u>160,079,489</u>
Comprehensive financing result, net:			
Interest expense	35,133,034	23,548,524	32,185,638
Financial income and cost, net	3,812,636	-	906,878
Foreign exchange (income) loss	<u>(1,598,453)</u>	<u>(10,572,863)</u>	<u>32,747,661</u>
Total comprehensive financing results, net	<u>37,347,217</u>	<u>12,975,661</u>	<u>65,840,177</u>
(Loss) income before income tax and other comprehensive income	<u>(4,446,279)</u>	<u>34,845,671</u>	<u>94,239,312</u>
Income tax (note 16):	<u>(52,363,237)</u>	<u>(73,338,703)</u>	<u>-</u>
Net income	\$ <u>47,916,958</u>	<u>108,184,374</u>	<u>94,239,312</u>
Net income attributable to:			
Controlling interests	44,666,931	108,184,374	94,239,312
Non-controlling interests	<u>3,250,027</u>	<u>                    </u>	<u>                    </u>
	47,916,958	108,184,374	94,239,312
Other comprehensive income (note 17):			
Revaluation of plant, facilities and equipment	1,580,651	(28,681,250)	210,725,169
Remeasurements of employee benefits liabilities	39,591,661	(12,192,264)	(44,064,000)
Recognition of the assumptions by the Federal Government in the settling of obligations for employee benefits liabilities	-		161,080,204
Cash flow hedging	<u>(12,252,497)</u>	<u>10,401,629</u>	<u>6,752,359</u>
Deferred comprehensive income tax	<u>20,505,785</u>	<u>                    </u>	<u>                    </u>
Total other comprehensive income	<u>49,425,600</u>	<u>(30,471,885)</u>	<u>334,493,732</u>
Comprehensive income	\$ <u><u>97,342,558</u></u>	<u><u>77,712,489</u></u>	<u><u>428,733,044</u></u>

See accompanying notes to consolidated financial statements.



**Comisión Federal de Electricidad, Productive State Enterprise and subsidiaries**

For the years ended December 31, 2018, 2017 and 2016

Consolidated statements of changes in equity

(Thousands of pesos)

*These financial statements have been translated from the Spanish language original and for the convenience of foreign/English-speaking readers.*

	<b>Contributions received from the Federal Government</b>	<b>Contributions in kind received from the Federal Government</b>	<b>Accumulated results</b>	<b>Other comprehensive income</b>	<b>Total equity controlling interests</b>	<b>Total equity non controlling interests</b>	<b>Total Equity</b>
Balances at January 1st, 2016	\$ 5,251	95,004,417	(77,821,615)	112,758,604	129,946,657	-	129,946,657
Initial application of IFRS 9 and 15 (note 2(a))	-	-	(24,461,238)		(24,461,238)	-	(24,461,238)
Balance at January 1st, 2016 restated	<u>5,251</u>	<u>95,004,417</u>	<u>(102,282,853)</u>	<u>112,758,604</u>	<u>105,485,419</u>	<u>-</u>	<u>105,485,419</u>
Initial application of IFRS 9 and 15 (note 2(a))	-	-	17,983,159	-	17,983,159	-	17,983,159
Comprehensive income of the period	-	-	76,256,153	334,493,732	410,749,885	-	410,749,885
Balances at December 31, 2016	<u>5,251</u>	<u>95,004,417</u>	<u>(8,043,541)</u>	<u>447,252,336</u>	<u>534,218,463</u>	<u>-</u>	<u>534,218,463</u>
Initial application of IFRS 9 and 15 (note 2(a))	-	-	273,981	-	273,981	-	273,981
Comprehensive income of the period	-	-	107,910,393	(30,471,885)	77,438,508	-	77,438,508
Balances at December 31, 2017	<u>5,251</u>	<u>95,004,417</u>	<u>100,140,833</u>	<u>416,780,451</u>	<u>611,930,952</u>	<u>-</u>	<u>611,930,952</u>
Non-controlling insterests	-	-	-	-	-	15,494,065	15,494,065
Comprehensive income of the period			44,666,931	49,425,600	94,092,531	3,250,027	97,342,558
Distributions to Fibra E shareholders						(1,247,450)	(1,247,450)
Balances at December 31, 2018	<u>\$ 5,251</u>	<u>95,004,417</u>	<u>144,807,764</u>	<u>466,206,051</u>	<u>706,023,483</u>	<u>17,496,642</u>	<u>723,520,125</u>

See accompanying notes to consolidated financial statements.

**Comisión Federal de Electricidad, Productive State Enterprise and subsidiaries**

For the years ended December 31, 2018, 2017 and 2016

Consolidated statements of cash flows

(Thousands of pesos)

*These financial statements have been translated from the Spanish language original and for the convenience of foreign/English-speaking readers.*

	<b>2018</b>	<b>2017</b>	<b>2016</b>
		<b>(Restated)</b>	<b>(Restated)</b>
Cash flows from operating activities:			
Net income	\$ 47,916,958	108,184,374	94,239,312
Operating activities:			
Employee benefits costs	20,539,778	47,903,316	(111,828,000)
Increase in provisions of deferred and current income tax	(52,363,237)	(73,338,703)	
Investing activities:			
Depreciation	57,535,932	59,467,421	53,383,792
Disposal of plants, facilities and equipment	1,008,377	15,872,657	13,507,370
Foreign exchange loss, interest expense and changes in financial derivative instruments' fair value	<u>32,382,087</u>	<u>(671,532)</u>	<u>75,486,238</u>
Changes in operating assets and liabilities:			
Accounts receivable	(4,108,373)	(31,831,331)	(1,340,928)
Inventory of materials for operation	(894,472)	(617,228)	1,505,556
Taxes and duties payable	(5,695,946)	2,193,469	1,028,578
Other assets	(1,480,495)	(1,338,651)	308,572
Other payables and accrued liabilities	(1,537,422)	19,192,409	10,178,187
Payments to employees benefits	<u>(39,534,335)</u>	<u>(35,045,000)</u>	<u>(35,162,080)</u>
Net cash from operating activities	<u>53,768,852</u>	<u>109,971,201</u>	<u>101,306,597</u>
Cash flows from investing activities:			
Acquisitions of plants, facilities and equipment	<u>(46,114,216)</u>	<u>(69,787,540)</u>	<u>(50,908,106)</u>
Cash flows from financing activities:			
Proceeds from debt	91,373,548	61,201,355	48,016,302
Non-controlling interests contribution	15,494,065	-	-
Dividends paid	(1,247,450)	-	-
Payments of debt	(78,934,168)	(46,789,232)	(75,339,572)
Interest paid	(22,053,366)	(26,093,619)	(15,696,658)
Payments of financial instruments	(10,893,772)	(9,265,343)	(3,270,957)
Collections from financial instruments	<u>9,851,869</u>	<u>5,734,135</u>	<u>2,562,159</u>
Net cash from financing activities	<u>3,590,726</u>	<u>(15,212,704)</u>	<u>(43,728,726)</u>
Cash excess on financing activities	11,245,362	24,970,957	6,669,765
Cash and cash equivalents:			
At beginning of period	<u>67,237,901</u>	<u>42,266,944</u>	<u>35,597,179</u>
At end of period	\$ <u><u>78,483,263</u></u>	<u><u>67,237,901</u></u>	<u><u>42,266,944</u></u>

See accompanying notes to consolidated financial statements.

## **1. CFE's Incorporation, Business Purpose and Relevant Events**

### **• Incorporation and business purpose**

Comisión Federal de Electricidad, Productive State Enterprise (EPE, Spanish acronym), its subsidiaries, affiliates and trusts (hereinafter CFE or the Entity) is a Mexican entity that was incorporated by Decree as a Decentralized Public Entity of the Federal Government on August 14, 1937 and published in the Official Gazette on August 24, 1937. The CFE's registered address is Paseo de la Reforma 164, Colonia Juárez, C.P. 06600, in Mexico City. The consolidated financial statements accompanying these notes include Comisión Federal de Electricidad, Productive State Enterprise (as the ultimate controlling entity of the economic group to which it belongs) and its subsidiaries, affiliates and trusts over which it exercises control (See Note 3a).

As of the date of its incorporation, the Group's business purpose is to provide electricity-related services in Mexico which include the generation, transformation, transmission, distribution and commercialization of electricity to consumers in Mexico.

The Comisión Federal de Electricidad Law (CFE Law) was published on August 11, 2014 and became effective on October 7, 2014. The CFE Law mandated the transformation of CFE into a Productive State Enterprise (EPE).

CFE's business purpose as of the date of its transformation into a Productive State Enterprise (EPE) is to provide public transmission and distribution of electricity services on behalf of the Mexican State. CFE also engages in activities related to the generation and commercialization of electricity, as well as activities related to the import, export, transportation, storage and trading of natural gas, among others.

### **• Relevant Events**

#### **i) Infrastructure investment trust**

On February 7, 2018, CFE placed an issue for the first Energy and Infrastructure Investment Trust or Fibra E, (Fiduciary Stock Certificates [CBFEs] for investment in energy and infrastructure) through the Mexican Stock Exchange. The total placement was for \$ 16,388 million pesos and it is the first Fibra E in which domestic and foreign investors participated, highlighting the participation of institutional investors, private banks and investment funds from Mexico, the United States, Canada, Australia and Europe.

The structure of the Fibra E comprises the Irrevocable Trust of Administration and Source of Payment No. 80758 (hereinafter the Promoted Trust), the Irrevocable Trust of Issuance of Stock Certificates CIB/2919 (hereinafter Fibra E) and to CFE Capital.

A detailed description of the activities of each one of these CFE Capital Trusts is as follows:

Promoted Trust

The Irrevocable Trust of Administration and Source of Payment No. 80758 was incorporated on January 22, 2018 to acquire the collection rights derived from the Agreement for the Technical and Commercial Operation of Electricity Transmission entered into with the National Energy Control Center (CENACE, Spanish acronym) on March 28, 2016.

As part of the structure of the Promoted Trust, CFE Transmisión irrevocably transferred and assigned to the Promoted Trust the collection rights of the Agreement entered into with the CENACE for a period of 30 years. In exchange for the assignment of such collection rights, the Promoted Trust granted full title of the trust rights to CFE Transmisión. Subsequently, through the Issuance of the Fibra E in the market, it acquired up to 6.78% of the instruments in exchange for \$15,454,653 in cash, net of the transaction costs on the issue that amounted to \$756,060 and \$5,403,571 in instruments in favor of CFE Transmisión, equal to 25% of the issue of shares in Fibra E.

The main activities of the Promoted Trust are as follows:

1. Receive, manage and hold the collection rights contributed;
2. Open, manage and maintain the trust bank accounts;
3. Make the transfers and payments set out in the trust agreement;
4. Evaluate the reimbursement of non-budgeted expenses requested by CFE Transmisión;
5. Receive any payments arising from the collection rights and other rights derived from the agreement entered into with the CENACE;
6. Exercise any other rights arising from the agreement entered into with the CENACE;
7. Comply with the instructions given to it by the Trustor, the Technical Committee or the Beneficiaries to the extent that they are authorized to do so in accordance with the terms of the trust agreement.

Issuing Trust (Fibra E)

The Fibra E trust entered into with CI Banco, S. A., Institución de Banca Múltiple, Monex Casa de Bolsa, S.A. de C.V. and Monex Grupo Financiero (FIBRA E) was created on January 22, 2018, as a trust for the issuance of Fiduciary Stock Certificates (CBFEs).

The primary purpose of the Trust is to invest in eligible entities, whose exclusive activity consists of:

1. Investing in assets and projects related to Generation, Transmission and Distribution of Electricity, and Infrastructure Projects.
2. Investing in or performing any other activity provided for in the tax regulations related to the FIBRA E, as well as in Rule 3.21.3.9. of the Miscellaneous Tax Resolutions or any other tax law that supersedes it.

The initial asset of the Trust consists of Beneficiary Rights that have an economic ownership interest in the Promoted Trust.

### CFE Capital

The primary purpose of this entity is to manage all types of trusts and their property, including the Fibra E and the Promoted energy and infrastructure investment trusts created in conformity with current tax legislation, including but not limited to, all the activities and acts deemed necessary or suitable for such purpose, and to provide all types of management, operation, development and regulatory compliance services.

#### ii) Incorporation of the Productive Subsidiary Entities of CFE

In accordance with the CFE Law, the Productive Subsidiary Entities are productive entities of the State that have legal personality and their own equity, which will be organized and operate as set forth in the provisions of said Law and in the provisions that derive from such.

The Subsidiary Productive Entities shall be subject to the provisions of Articles 3, 7 and 8 of the CFE Law, and their business purpose shall be the activities defined by CFE's Board of Directors, and they shall be bound by the provisions of the Electric Industry Law, and shall operate under the special scheme provided for in this Law in terms of budget, debt, acquisitions, leases, services and works, administrative responsibilities, remunerations, assets and State dividend.

The terms of the strict legal separation that the CFE had to observe to carry out Generation, Transmission, Distribution, Commercialization and Supply of Primary Inputs activities, and to its participation in the market that was to be carried out independently through the units it was separated into were issued on January 11, 2016, generating economic value and profitability for the Mexican State as its owner.

The resolutions for the incorporation of the following Productive Subsidiary Entities (EPS, Spanish acronym) were published on March 29, 2016 in the Official Gazette:

- CFE Generación I, EPS, CFE Generación II, EPS, CFE Generación III, EPS, CFE Generación IV, EPS, CFE Generación V, EPS and CFE Generación VI, EPS, whose business purpose is to generate electricity using any type of technology in Mexico, as well as to commercialize electricity in conformity with the terms set forth in Article 45 of the Electric Industry Law, excluding the supply of electricity to end users. Each of these entities may fully or partially represent the Power Plants under their control or those owned by third parties in the Wholesale Electricity Market.
- CFE Distribución, EPS; whose business purpose is to carry out the activities necessary to provide public services related to the distribution of electricity, as well as to finance, install, maintain, manage, operate and enhance the required infrastructure to provide the distribution of electricity public services as set forth in the CFE Law, the Electric Industry Law, the Terms for the Strict Legal Separation of the CFE and other applicable legal provisions.
- CFE Transmisión, EPS; whose business purpose is to carry out the activities necessary to provide the public services related to the transmission of electricity, as well as to finance, install, maintain, manage, operate and enhance the required infrastructure to provide the transmission of electricity public services as set forth in the CFE Law, the Electric Industry Law, the Terms for the Strict Legal Separation of the CFE and other applicable legal provisions.

**COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries**  
**Notes to the consolidated financial statements for the three years ended 31 December 2018, 2017 and 2016**  
**(Amounts expressed in thousands of Mexican pesos, unless explicitly indicated otherwise)**

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- CFE Suministrador de Servicios Básicos, EPS; whose business purpose is to provide the services related to the basic supply of electricity referred to in Electric Industry Law to any person who requests such services in terms of such Law.

The aforementioned resolutions establish the rules regarding the business activities, the corporate governance and the oversight and monitoring of, as well as the responsibilities, disclosure obligations and oversight mechanisms applicable to, the Productive Subsidiary Entities.

As of January 1, 2017, Comisión Federal de Electricidad, EPE (Holding Entity) ceased to carry out the Transmission, Distribution, Basic Supply and Commercialization (other than the basic supply and supply of primary inputs) independent activities, and of such date these activities are carried out by the Productive Subsidiary Entities (EPS).

As of February 1, 2017, Comisión Federal de Electricidad, EPE (Holding Entity) no longer directly carries out the Generation independent activity nor does it participate in the Wholesale Electricity Market; and as of such date, these activities are carried out by the Productive Subsidiary Entities.

#### Incorporation of Affiliated Entities

According to the CFE Law, affiliated entities are those in which the CFE participates, directly or indirectly, with more than fifty percent of their share capital, regardless of whether they are incorporated under Mexican or foreign legislation.

The affiliated entities shall not be state-owned entities and shall have legal nature, and they shall be organized in accordance with the private law of the place of their incorporation or creation.

CFE Intermediación de Contratos Legados, S.A. de C.V. was incorporated on March 29, 2016, in which CFE made an initial contribution of \$99,900 on February 1, 2017. The purpose of this entity is to manage, on behalf of the CFE, the legacy interconnection contracts, the agreements for the purchase and sale of surplus electricity and all the other related agreements entered into by the CFE, and to represent the Power Plants and Load Centers included in the legacy interconnection contracts as an Intermediation Generator, and will not carry out electricity supply activities.

CFE Calificados, S.A. de C.V. was incorporated on May 23, 2016, in which CFE made an initial contribution of \$19,980 and \$10,020 on September 27 and 29, 2016, respectively. The purpose of this entity is to carry out commercialization of electricity activities and other related services in Mexico or abroad.

CFE Capital, Sociedad de Responsabilidad Limitada de Capital Variable (S. de R.L. de C.V., Spanish acronym) was incorporated on December 7, 2017. This entity may set up offices, agencies or branches anywhere in the United States. Its business purpose is described on page 3.

#### iii) Mexican Wholesale Electricity Market (MEM, Spanish acronym)

As a result of the operation of the Mexican Wholesale Electricity Market (MEM) and pursuant to the Third Transitory Article of the Electricity Industry Law, the Ministry of Energy extended the term for CFE to continue carrying out the Transmission, Distribution, Basic Supply and Commercialization

(other than basic supply and supply of primary inputs) independent activities, including its participation in the Wholesale Electricity Market (MEM) to December 31, 2016.

iv) Long-Term Auctions and Clean Energy Certificates

The Wholesale Electricity Market allows for Medium and Long-term Auctions, which are defined in the Wholesale Electricity Market Rules as follows:

Section 2.1.134 states that long-term auctions are those in which basic service suppliers and other load serving entities may enter into hedging agreements for electricity generation, Electricity Certificates, Cumulative Energy and Clean Energy Certificates (CELs, Spanish acronym) with maturity terms of 15 and 20 years.

Section 2.1.135 states that Medium-term auctions are those in which basic service suppliers and other load serving entities may enter into hedging agreements for electricity generation, Electricity Certificates, Cumulative Energy Certificates and CELs with maturity terms of 3 years.

The first Long-Term Auction in 2015 resulted in 18 awarded bids deferred among 11 companies involved. In total, these bids amount to 5.4 million MWh of energy and 5.3 million of CELs (annual committed volume, except for the first year which will have a different volume based on the Bid Commercial Operation Date). The hedging agreements resulting from this Auction will be effective in 2018.

The second Long-Term Auction in 2016 resulted in 56 awarded bids and 23 companies involved. In total, these bids amount to 1,187 MW per year of energy, 8.9 Million MWh of energy, and 9.275 million of CELs (annual committed volume, except for the first year which will have a different volume based on the Bid Commercial Operation Date). The hedging agreements related to this Auction will be effective in 2019.

In the third Long-Term Auction in 2017 (SMP No. 01/2017), four companies participated as sellers, namely CFE Generación VI, Vitol, Azteca X (Integen) and PGP, and the following companies participated as buyers: CFE Suministrador de Servicios Básicos, Vitol, Enel and Iberdrola; in this auction no awarding was made for CFE Suministrador de Servicios Básicos EPS.

v) Assets contributed by the Federal Government

On October 7, 2015, the Ministry of Public Administration (SFP, Spanish acronym) through the Institute of Management and Valuation of National Assets (INDAABIN, Spanish acronym), terminated the commodatum agreement of the assets contributed by the Federal Government, and delivered the assets with a certificate of delivery that includes annexes for the different types of assets to the CFE.

The CFE also obtained the legal and physical possession of the related assets, as per the aforementioned annexes. The procedures for their legal divestiture from the Federal public domain regime began as of such date. These assets were included in the consolidated statements of financial position as of December 31, 2015, at a value of \$95,004,417, as determined by the Asset Management and Divestiture Service (SAE, Spanish acronym), which will be adjusted based on the



detailed breakdown by each of the corresponding areas. In 2016, these assets are included in the Plants, facilities and equipment and other intangible assets captions (see Notes 8 and 9), and an additional amount of \$63,000 was recognized related to these types of assets. As of December 31, 2018, this activity is still ongoing.

vi) Amendments to the Collective Labor Agreement

On May 19, 2016, CFE carried out a review of the terms of the Collective Labor Agreement it entered into with the Sole Union of Electricity Workers of the Mexican Republic ("SUTERM", Spanish acronym).

As shown in Note 15, as a result of this review, various clauses that mainly affect the retirements caption were amended and are presented as a reduction in the Entity's labor obligations.

vii) Assumption of the Entity's employee benefits liability by the Federal Government

On November 14, 2016, the Ministry of Finance and Public Credit (SHCP, Spanish acronym) published the "Agreement through which the general provisions related to the assumption by the Federal Government of CFE's employee benefits liability are issued" in the Official Gazette, whereby the Federal Government through the SHCP, assumes a portion of the pension and retirement payment obligation actuarially recognized and accounted for in CFE's financial statements, that correspond to the workers that were hired on or prior to August 18, 2008.

The Federal government had stated that it would assume a portion of CFE's labor liabilities, and this would be equal, peso by peso, to the reduction that would be achieved from the labor obligations liability at the time the Collective Labor Agreement is renegotiated. On December 29, 2016, the Federal Government announced that it had completed the review process of the savings amount of CFE's labor obligations, resulting from the amendments to the collective labor agreement.

On December 19, 2016, through official document No. 35.-187/2016, the Public Credit Unit of the SHCP, informed the CFE that the Federal Government's commitment to pay would be assumed by the SHCP through the issue of debt instruments by the Federal Government in favor of the CFE for a total amount of \$161,080,204, distributed in amounts that will be delivered annually to cover such commitment.

## **2. Basis of preparation of the consolidated financial statements**

### **a) Basis of preparation**

The accompanying consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) (issued by the International Accounting Standards Board (IASB)).



**COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries**  
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**(Amounts expressed in thousands of Mexican pesos, unless explicitly indicated otherwise)**

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Changes in accounting policies and disclosures

The accounting policies applied in the preparation of the consolidated financial statements for the year ended 31 December 2018 are consistent with those used in the preparation of the Entity's annual consolidated financial statements for the years ended 31 December 2017, 2016 and 1 January 2016.

The Entity adopted IFRS 15 "Revenue from Contracts with Customers" and IFRS 9 "Financial Instruments" that became effective on 1 January 2018 retrospectively. The accumulated effect of the adoption of new accounting pronouncements IFRS 15 and IFRS 9 in the Financial Statement of Financial Position as of January 1, 2016 is as follows:

	<u>Accumulated effect</u>
Total IFRS 15	\$ (10,431,408)
Total IFRS 9	<u>(14,029,829)</u>
Total	<u>\$ (24,461,237)</u>

The effect of the initial adoption of these standards is mainly attributable to the cancellation of the revenue that does not meet the requirements under IFRS 15 - Step 1, identify the contract, since the Entity performed an assessment and determined that certain contracts correspond to revenue that will not be recovered despite the fact that the electricity was delivered, since these contracts are from areas that have problems related to regularization of rates and social resistance and the unrecovered amounts of the electricity delivered are more than one year past due.

The nature and effect of changes resulting from the adoption of these accounting standards is described below:

i) IFRS 15, Revenue from Contracts with Customers

In May 2014, the IASB issued IFRS 15 Revenue from Contracts with Customers. The new revenue recognition standard seeks to standardize the multiple regulations previously included in various standards and may require the use of more judgments and estimates than with the revenue recognition processes under the existing revenue recognition standards.

IFRS 15 replaces IAS 11 "Construction Contracts" (IAS 11), IAS18 "Revenue" and related Interpretations, and is applied, with limited exceptions, to all the revenue from contracts with customers. IFRS 15 establishes a five-step model to account for revenue arising from contracts with customers and requires that revenue be recognized at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer.

IFRS 15 also requires entities to exercise judgment, taking into consideration all the relevant facts and circumstances when applying each step of the model to contracts with their customers. The standard also specifies the accounting for the incremental costs of obtaining a contract and the costs directly related to fulfilling a contract. In addition, the standard also requires extensive disclosures.

The two transition methods allowed under the new standard are the full retrospective approach and the modified retrospective approach. The Entity elected to use the full retrospective approach; the initial effects of the adoption of IFRS 15 were recognized in retained earnings as of January 1, 2016.

It is important to mention that the effects of IFRS 15 gave rise to a decrease in accounts receivable since revenue from the conflict areas is not recognized and thus, a decrease in the allowance.

#### Electricity supply services

Through 31 December 2017, revenue from electricity supply services was recognized when the electricity was delivered to the customers, which was considered to be the point in time at which the customer accepts the electricity and the risks and benefits related to the transfer of ownership. Other criteria that was applied for revenue recognition included that both revenue and costs could be measured reliably by the Entity, it was probable that the economic benefits associated with the transaction would flow to the Entity and the Entity did not retain continuing involvement over the goods sold.

Under IFRS 15, revenue is recognized when a customer obtains control of a good or service, and the first step is the identification of a contract. Among other requirements, IFRS 15 requires that the collectability of a contract be reasonably assured to be able to recognize it as revenue. The Entity identified that certain divisions have problems related to regularization of rates and social resistance and the customers no longer have the capacity to pay or are not willing to pay the amount owed. In view of the above, the Entity performed a new assessment of these contracts, and has preliminarily determined that they do not meet the revenue recognition requirements and therefore, it does not recognize revenue on the electricity delivered to these customers since it does not expect to collect them.

Specifically, the Entity considered that in the following cases a contract was not identified under IFRS 15. This determination gives rise to the main effects of the adoption of this standard:

- a) Customers have been identified in different parts of the country called "conflict areas" for which a flow of resources to the entity is considered to be unlikely. As a result, the Entity does not recognize such revenue.

The customers considered in the unrecognized revenue have two characteristics in common:

- (a) Their account receivable is more than 360 days overdue.
  - (b) They are identified by each one of the divisions as conflict areas.
- b) Users have been identified in different geographical areas in Mexico that receive their supply of electricity illegally. The illegal use of electricity is primarily through illegal connections to the CFE network. Since there is no signed agreement between the Entity and the customer, even though it has been identified that the customer is consuming electricity through illegal means and has been informed of this fact, revenue is recognized until such agreement is formalized or the related collection is carried out.

ii) IFRS 9, Financial Instruments

IFRS 9, Financial Instruments was issued in July 2014 and supersedes IAS 39, Financial Instruments, and is related to the recognition and measurement of financial instruments, impairment value and hedge accounting.

As a result of the adoption of IFRS 9, the Entity has adopted consequential amendments to IAS 1 Presentation of Financial Statements which require impairment of financial assets to be presented in a separate line item in the statement of profit or loss and other comprehensive income. Previously, CFE's approach was to include the impairment of trade receivables in other expenses. Consequently, CFE reclassified impairment losses recognized under IAS 39 from 'other expenses' to 'impairment losses on trade receivables and contract assets' in the statement of comprehensive income for the years ended 31 December 2017 and 2016.

The change in the methodology used from IAS 39 to IFRS 9 resulted in a decrease in the estimated allowance for accounts receivable. The most important changes are as follows: I) the early recognition of the allowance for accounts receivable in the stage of delinquency prior to 360 days in the accounts receivable portfolio II) reserving the full balance of the bad debt balances, notes receivable for regularizations, consumers of the state and federal government and notes receivable regardless of their stage of delinquency and III) the allowance for accounts receivable of the different portfolios of the different entities that make up the Entity.

IFRS 9 replaces the incurred loss model in IAS 39 with an expected credit loss (ECL) model. The new impairment model applies to the financial assets measured at amortized cost, the contract assets and the debt investments to be measured at fair value with value changes recognized in OCI, but not to the investments in equity instruments.

The methodology used prior to IAS 39 was an incurred loss model, whereby CFE reserved the full amount of the outstanding balance more than 330 days overdue for cash count, and for bad debt balances, regularization notes receivable and federal and state government consumers, more than 730 days overdue. Also, only 10% of the full balance of regular notes receivable was reserved.

For the expected credit loss model (ECL) under IFRS 9, the Entity uses the Roll Rate (RR) model or matrices for the Basic Supply portfolio, which analyzes the historical portfolio information and calculates the percentage of customers or amounts that have rolled from one delinquency stage to the next at any given time, and the Loss Rate Approach (LRA) model for the portfolios of the other subsidiaries, which uses an approach where the probability of default is assessed as a measure based on past losses, it specifically analyzes the historical information of the portfolio and calculates the percentage of impaired customer balances.

In the case of the allowance for bad debts, general agreements and government agreements, there is no historical information that would allow to use an impairment model similar to the one described above. To ensure that the current policy complies with the regulatory requirements of IFRS 9, the general agreements, government agreements and allowance for bad debt regular accounts will be provided for in full.

With respect to the Loss Given Default (LGD) parameter, an analysis is performed whereby the recovery of the EOD (Exposure of Default) amounts is estimated using information from the allocation of recovery by external agents in the case of the Roll Rate (RR) model; in the case of the LRA model, the estimation of probability of default (PD) and severity of loss is carried out jointly, i.e. the individual calculation of the LGD is not carried out.

IFRS 9 includes a rebuttable presumption that a financial asset that is more than 90 days past due should be considered as overdue or in default. Notwithstanding the above, to extend the period referred to above, CFE Suministro Básico carried out an analysis as of January 1, 2016 whereby the collection and recovery were identified using the general cash count portfolio. Based on the analysis, it was concluded that the EOD gap is beyond the 360-day period given that the historical probability of recovery after this period is estimated at 2%, a percentage that is considered significant due to the size of the portfolio. In the case of the other subsidiaries, since their terms are shorter, they use the EOD recommended by the standard of 90 days. When the portfolio balances are more than 30 days past due, the Entity considers them as a significant increase in risk.

Under the IFRS 9 general model, the Entity has adopted a criterion based on a forward-looking analysis of the macroeconomic conditions and historical PDs. This model allows to adjust the PDs observed on a historical basis with the forward-looking factors that at the time result relevant. The forward-looking factors are observable public economic variables that, through statistical methods, allow to predict or discard an increase in the credit risk of the portfolio. This model allows to adjust the PDs observed on a historical basis with the forward-looking factors that at the time result relevant. The forward-looking factors are observable public economic variables that, through statistical methods, allow to predict or discard an increase in the credit risk of the portfolio.

The Entity has considered the following economic variables for its analysis: Global indicator of economic activity, MXP/USD exchange rate, daily wage, reference rate of Banco de México, interbank reference rates, unemployment rate.

Based on the statistical results, it was determined that the PDs of the selected key nodes do not correlate significantly with respect to each of the forward-looking factors analyzed, therefore, the Entity considers that there are no factors in the economy in general that could prospectively affect the probabilities of default.

The Entity uses the estimated factors described above to calculate the estimated credit loss allowance.

#### Annual impacts of the adoption of IFRS 15 and IFRS 9

The accumulated effect of the adoption of new accounting pronouncements IFRS 15 and IFRS 9 as of January 1, 2016 is as follows:

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	As of January 1, 2016	Effects of IFRS 15	Effects of IFRS 9	As of January 1, 2016 restated
<b>Assets</b>				
Accounts receivable, net	\$ 85,930,673	\$ (12,108,097)	\$ (14,029,829)	\$ 59,792,747
Recoverable VAT <sup>(1)</sup>	425,558	1,676,689	-	2,102,247
Other current assets	51,128,500	-	-	51,128,500
<b>Total current assets</b>	<b>137,484,731</b>	<b>(10,431,408)</b>	<b>(14,029,829)</b>	<b>113,023,494</b>
Total non-current assets	1,115,907,151	-	-	1,115,907,151
<b>Total assets</b>	<b>1,253,391,882</b>	<b>(10,431,408)</b>	<b>(14,029,829)</b>	<b>1,228,930,645</b>
Other equity accounts	207,768,272	-	-	207,768,272
Accumulated results	(77,821,615)	(10,431,408)	(14,029,829)	(102,282,852)
<b>Total equity</b>	<b>\$ 129,946,657</b>	<b>\$ (10,431,408)</b>	<b>\$ (14,029,829)</b>	<b>\$ 105,485,420</b>

The effects of the retrospective application of IFRS 15 and IFRS 9 in the financial statements previously issued as of December 31, 2017 and 2016, are as follows:

Effects as of and for the year ended December 31, 2016

In the consolidated statement of financial position as December 31, 2016, which is the same as that as of January 1, 2017:

	As of December 31, 2016 as they were presented	Effects of IFRS 15	Effects of IFRS 9	As of December 31, 2016 (restated)
<b>Assets</b>				
Accounts receivable, net	\$ 69,714,264	\$ (15,750,304)	\$ 7,075,603	\$ 61,039,563
Recoverable VAT <sup>(1)</sup>	-	2,196,624	-	2,196,624
Other current assets	56,292,709	-	-	56,292,709
Total current assets	126,006,973	(13,553,680)	7,075,603	119,528,896
Total non-current assets	1,346,655,832	-	-	1,346,655,832
<b>Total assets</b>	<b>1,472,662,805</b>	<b>- (13,553,680)</b>	<b>7,075,603</b>	<b>1,466,184,728</b>
Other equity accounts	542,262,004	-	-	542,262,004
Accumulated results	(1,565,464)	(13,553,680)	7,075,603	(8,043,541)
<b>Total equity</b>	<b>\$ 540,696,540</b>	<b>\$ (13,553,680)</b>	<b>\$ 7,075,603</b>	<b>\$ 534,218,463</b>

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In the Consolidated Statement of Comprehensive Income:

	As of December 31, 2016 as they were presented	Effects of IFRS 9 and IFRS 15	As of December 31, 2016 (restated)
Electricity supply services revenue (IFRS 15)	\$ (316,212,392)	\$ 3,122,272	\$ (313,090,120)
Other revenue	(35,893,354)	-	(35,893,354)
<b>Total revenue</b>	<b>(352,105,746)</b>	<b>3,122,272</b>	<b>(348,983,474)</b>
Other costs	190,816,637	-	190,816,637
Other expenses (IFRS 9)	19,192,778	(21,105,431)	(1,912,653)
<b>Total operating costs</b>	<b>210,009,415</b>	<b>(21,105,431)</b>	<b>188,903,984</b>
Financing cost	65,840,177	-	65,840,177
<b>Income before income tax</b>	<b>(76,256,154)</b>	<b>(17,983,159)</b>	<b>(94,239,313)</b>
Income tax	-	-	-
<b>Net income</b>	<b>\$ (76,256,154)</b>	<b>\$ (17,983,159)</b>	<b>\$ (94,239,313)</b>

In the Consolidated Statement of Cash Flows:

	As of December 31, 2016 as they were presented	Effects of IFRS 9 and IFRS 15	As of December 31, 2016 (restated)
Income before taxes on profits	\$ 76,256,154	\$ 17,983,159	\$ 94,239,313
Items related to operating activities	25,050,443	( 17,983,159)	7,067,284
<b>Net cash flows from operating activities</b>	<b>\$ 101,306,597</b>	<b>\$ -</b>	<b>\$ 101,306,597</b>

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Effects as of and for the year ended December 31, 2017

In the Consolidated Statement of Financial Position:

	As of December 31, 2017 as they were presented	Effects of IFRS 15	Effects of IFRS 9	as of December 31, 2017 (restated)
<b>Assets</b>				
Accounts receivable, net	\$ 98,800,368	(20,750,196)	\$ 11,635,153	\$ 89,685,325
Recoverable VAT <sup>(1)</sup>	2,471,252	2,910,945	-	5,382,197
Other current assets	81,880,894	-	-	81,880,894
Total current assets	183,152,514	(17,839,251)	11,635,153	176,948,416
Total non-current assets	1,391,067,267	-	-	1,391,067,267
<b>Total assets</b>	<b>1,574,219,781</b>	<b>(17,839,251)</b>	<b>11,635,153</b>	<b>1,568,015,683</b>
Other equity accounts	511,790,119	-	-	511,790,119
Accumulated results	106,344,932	(17,839,251)	11,635,153	100,140,834
<b>Total equity</b>	<b>\$ 618,135,051</b>	<b>\$ (17,839,251)</b>	<b>\$ 11,635,153</b>	<b>\$ 611,930,953</b>

In the Consolidated Statement of Comprehensive Income:

	As of December 31, 2017 as they were presented	Effects of IFRS 9 and IFRS 15	As of December 31, 2017 (restated)
Electricity supply services revenue (IFRS 15) <sup>(2)</sup>	\$ (369,644,457)	4,285,570	(365,358,887)
Other revenue	(124,246,653)	-	(124,246,653)
<b>Total revenue</b>	<b>(493,891,110)</b>	<b>4,285,570</b>	<b>(489,605,540)</b>
Other costs	441,964,326	-	441,964,326
Other expenses (IFRS 9)	4,379,434	(4,559,551)	(180,117)
<b>Total operating costs</b>	<b>446,343,760</b>	<b>(4,559,551)</b>	<b>441,784,209</b>
Financing cost	12,975,661	-	12,975,661
<b>Income before income tax</b>	<b>(34,571,689)</b>	<b>(273,981)</b>	<b>(34,845,670)</b>
Income tax	(73,338,703)	-	(73,338,703)
<b>Net income</b>	<b>\$ (107,910,392)</b>	<b>\$ (273,981)</b>	<b>\$ (108,184,373)</b>



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In the Consolidated Statement of Cash Flows:

	As of December 31, 2017 as they were presented	Effects of IFRS 9 and IFRS 15	As of December 31, 2017 (restated)
Income before taxes on profits	\$ 107,910,933	273,980	108,184,913
Items related to operating activities	2,060,806.32	( 273,980)	1,786,826
<b>Net cash flows from operating activities</b>	<b>\$ 109,971,739</b>	<b>\$ -</b>	<b>\$ 109,971,739</b>

- (1) This concept is not presented in the Accounts receivable, net caption in the Consolidated Statement of Financial Position.
- (2) The Revenue from the sale of electricity caption originally reported amounted to \$373,747,978, and in the preparation of the financial statements as of December 31, 2018, \$4,103,521 was reclassified to the Transmission of electricity services caption, which changed from the \$883,121 originally reported to \$4,986,642. The total amount of the revenue reported as of December 31, 2017 was not affected by such restatement.

(a) Basis of measurement

The consolidated financial statements have been prepared on a historical-cost basis, except for the Entity's derivative financial instruments and plants, facilities and equipment (as of December 31, 2016), which are recognized at fair value, and the defined benefit plans which are recognized at the present value of the defined benefit obligation minus the fair value of the plan's assets.

As part of the activities related to the strict legal separation of CFE, in 2016 the Entity revalued the plants, facilities and equipment that were contributed to the EPS as part of the incorporation process of the EPS. As a result of the above, the Entity recognized a net increase in the value of these assets of \$210,725,169 and a decrease in the same amount in other comprehensive income.

(b) Functional currency and presentation of the financial statements

The consolidated financial statements and notes thereto are presented in Mexican pesos, the Entity's reporting currency, which is the same as its functional currency.

For purposes of disclosure in the notes to the consolidated financial statements, all references to "pesos" or "\$" refer to Mexican pesos, all references to "dollars" refer to U.S. dollars, all references to "euros" refer to the legal currency of the European Union, all references to "yen" refer to the legal currency of Japan; and all references to "Swiss francs" refer to the legal currency of Switzerland. The financial information is presented in thousands of pesos and has been rounded to the nearest unit, except where otherwise indicated.



(c) Consolidated Statements of Comprehensive Income

The Entity has elected to present comprehensive income in a single statement of profit or loss and other comprehensive income (OCI) called Statement of comprehensive income.

CFE prepared the consolidated statements of comprehensive income, presenting ordinary costs and expenses based on their nature, since it considers that the information presented in this way is much clearer. The Entity also presents operating income (loss) in the statement of comprehensive income. Operating income is the difference between the Entity's revenue and costs, and it is an important indicator for evaluating the Entity's financial and economic performance.

(d) Use of judgments and estimates

In the preparation of the consolidated financial statements, estimates are made for certain items, some of which are highly uncertain, and their estimation involves judgments made based on the information available. In the following discussion, some of the matters identified which could materially affect the consolidated financial statements if (1) different estimates are used than the ones that could reasonably have been used, or (2) in the future, estimates are changed in response to changes that are likely to occur.

The discussion below addresses only those estimates that the Entity considers the most important based on the degree of uncertainty and the likelihood of a material impact if a different estimate were used. There are other areas in which the Entity uses estimates about uncertain matters, but the reasonably likely effect of different estimates is not material to the Entity's financial presentation.

The information related to the judgments made in the process of applying the Entity's accounting policies that have the most significant effect on the amounts recognized in the financial statements is described in the following notes:

- Note 3n) - revenue recognition: determining whether revenue from unbilled electricity delivered is recognized over time or at a point in time;
- Note 3 i) - leases: determining whether a contract contains a lease; and classification of leases.

The information related to estimate assumptions and uncertainties as of December 31, 2018 that have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next financial year is included in the following notes:

- Note 3 n)- revenue recognition: estimation of revenue from unbilled electricity delivered;
- Note 3k) and 15 - measurement of defined benefit obligations: key actuarial assumptions;
- Note 3 l) and 16 - recognition of deferred tax assets: availability of future taxable profits against which the deductible temporary differences can be used, and the losses offset from prior periods;
- Note 3 i) and 8 - impairments tests on the value of property, plant and equipment: key assumptions

- Note 3 m) - recognition and measurement of provisions and contingencies: key assumptions related to the likelihood and magnitude of an outflow of resources; and
- Note 3 f) - measurement of the expected credit losses for accounts receivable: key assumptions to determine the weighted-average loss rate;
- Note 20 - Contingencies and commitments

#### The estimated useful lives of plant, property and equipment

CFE currently depreciates most of its plants and facilities in operation based on the estimated useful life determined on the specific operating conditions and expected maintenance of each of the countries in which it operates. Estimates are based on historical experience with similar assets and other factors, considering the energy demand expectations in the Mexican market.

The estimated useful life is reviewed annually to determine, for each specific class of assets, whether it should be changed. Derived from such analysis, the Entity may shorten or extend the estimated useful life of a class of assets in response to market changes or other factors. This results in an increase or decrease in depreciation expense. See Notes 3i) and 8.

#### Impairment in the value of long-lived assets

Due to the nature of its activities, CFE has a large amount of long-lived assets, including plants, facilities and equipment, as well as intangible assets which are included in the consolidated statements of financial position. The Entity must carry out an impairment test of the value of its long-lived assets when the circumstances so require. The impairment analysis for long-lived assets requires the Entity to estimate the recoverable amount of each asset, which is the greater of its fair value (minus any disposal costs) and its value in use. To estimate the fair value of a long-lived asset, the Entity usually uses a valuation model that requires management to make certain assumptions and estimates. In order to estimate the fair value of long-lived assets, the Entity typically make various assumptions about the future prospects for the business that the asset relates to, considering market factors specific to that business, and it estimates future cash flows to be generated by that business. Based on this impairment analysis of the value of the assets, including all the related assumptions and estimates, as well as the guidance provided in the IFRS in relation to the impairment of long-lived assets, the use of different assumptions and estimates could have a substantial impact on the amounts reported by the Entity. More conservative assumptions of the anticipated future benefits could result in impairment charges, which would decrease net income and result in lower asset values on the Entity's statement of financial position. Conversely, less conservative assumptions could result in smaller or no impairment charges, higher net income and higher asset values. The key assumptions used to determine the recoverable amount for the different CGUs are disclosed and further explained in Notes 3 i) and 18.

#### Deferred taxes

CFE is required to estimate its income tax in each of the jurisdictions in which it operates. This process involves estimating, jurisdiction by jurisdiction, its actual exposure to current taxes, as well as assessing the temporary differences resulting from the deferred treatment of certain items, such as provisions and carryforwards, for tax and accounting reporting purposes, as well as the available tax loss carryforwards. These items give rise to deferred tax assets and liabilities, which are included in Note 16.

The analysis is based on estimates of taxable income in the jurisdictions where the Entity has operations and the period on which the deferred tax assets and liabilities will be recovered or settled. If the actual results differ from these estimates or are adjusted in future periods, the Entity's financial position and consolidated results of operations may be materially affected.

In assessing the future realization of deferred tax assets, the Entity considers future taxable income, ongoing planning strategies and future results in its operations. In the event that the estimates of projected future taxable income are lowered, or changes in current tax regulations are enacted that would impose restrictions on the timing or extent of the Entity's ability to use the tax benefits of net operating loss carryforwards in the future, an adjustment to the recorded amount of deferred tax assets would be made, with a related charge to income. See Note 16.

### Provisions

Provisions are recognized when at the end of the reporting period the Entity has a present obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. This obligation may be legal or constructive and may arise from regulations, contracts, common practice or public commitments that have created a reasonable expectation by third parties that the Entity will assume certain responsibilities. The recorded amounts of the Entity's reserves are management's best estimate of the expenditure that will be required to settle the obligation, using all available information at the reporting date, including the opinions of outside experts like legal advisors or consultants. Provisions are adjusted to recognize changes in the circumstances of ongoing matters and additional provisions are created for new matters.

When the Entity is unable to reliably measure an obligation, no provision is recorded, and the matter is only disclosed in the notes to the consolidated financial statements. Due to inherent uncertainty of these estimates, the Entity's actual expense incurred could differ from the originally estimated amount. See Notes 3 m) and 20.

### Labor obligations

The amounts related to the pension and retirement plan obligations and other post-retirement obligations that were recognized as liabilities in the consolidated statement of financial position and as expenses in the consolidated statement of comprehensive income, are determined annually on an actuarial basis considering several assumptions and estimates on the post-retirement benefits and terminations. The assumptions that are primarily affected by the estimates are as follows:

- a) The salary increase rate, which is calculated for the following year;
- b) The discount rates used to calculate the present value of future obligations;
- c) The expected inflation rate; and
- d) Return on pension plan assets

These estimates are calculated by the Entity's independent experts, who prepare an actuarial study using the projected unit credit method.

#### Allowance for doubtful accounts

The Entity created an allowance for the accounts receivable whose collection is considered unlikely, using the Roll Rates (RR) that analyzes the historical portfolio information and calculates the percentage of customers or amounts that progressed through successive stages of delinquency at a given time, and the Loss Rate Approach (LRA) model for the portfolios of the other subsidiaries that uses an approach where the probability of default is assessed as a measure based on past losses, it specifically analyzes the historical information of the portfolio and calculates the percentage of impaired customer balances.

The Entity applies this model and has adopted criteria based on a forward-looking analysis of the macroeconomic conditions and historical probabilities of default. This model allows to adjust the PDs on a historical basis with the forward-looking factors that at the time result relevant. The economic variables considered by the Entity are as follows: Global indicator of economic activity, MXP/USD exchange rate, daily wage, reference rate of Banco de México, interbank reference rates, unemployment rate.

The amount of the loss determined by the methodology described above can significantly differ from the actual losses in the portfolio.

#### Leases

The Entity analyses service contracts in order to identify whether they involve the use of a clearly identified asset that is for the exclusive benefit of the Entity and that the control of such lies in the CFE. If such conditions are met, the Entity must determine the fair value of the assets identified in such contracts.

In the determination of fair value, the minimum fixed amounts to be paid during the maximum term of the contract in question are determined and are discounted to their present value using a discount rate that uses estimated interest rates and that also considers the source currency. If based on the analysis of contracts, different conclusions are reached and if the discount rates are different, the values included in the financial statements could be significantly different.

### **3. The accounting policies followed by the Entity are follows:**

#### **a) Basis of consolidation**

The accompanying consolidated financial statements include the accounts of CFE and those of its subsidiaries, affiliated entities and trusts over which it exercises control. The financial statements of the subsidiaries were prepared for the same reporting period and following the same accounting policies as those of the Entity. The Entity is considered to have control when it has power over another entity; it is exposed, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

CFE reassesses whether or not it controls an entity and whether the facts or circumstances indicate that there are changes in one or more of the control elements.

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The subsidiaries are consolidated on a line-by-line basis as of the date on which the CFE acquires control. Intercompany balances and transactions and any unrealized income and expenses arising from intra-group transactions are eliminated on consolidation. Unrealized gains arising from transactions with equity accounted investees are eliminated proportionally to the Entity's interest in the subsidiary. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

The equity interest in the main subsidiaries, affiliated entities and trusts, over which CFE retains control as of December 31, 2018 and 2017, the date on which the subsidiaries and entities were created, considering that in 2016 it was a single company are as follows:

**Subsidiary Entities**

- CFE Distribución, EPS; CFE Transmisión, EPS; CFE Generación I, EPS; CFE Generación II, EPS; CFE Generación III, EPS; CFE Generación IV, EPS; CFE Generación V, EPS; CFE Generación VI, EPS, and CFE Suministrador de Servicios Básicos, EPS.

**Affiliated Entities**

- CFE Calificados, S.A. de C.V., CFE International, LLC., CFENERGÍA, S.A. de C.V., CFE Intermediación de Contratos Legados, S. A. de C. V., and CFE Capital, S. de R. L. de C. V.

The entities listed above were incorporated and their principal place of business is in Mexico, except for CFE International LLC which is located in the United States.

The equity interest held by these entities is 100%.

- The trust funds controlled by CFE are as follows:

Trust fund	Role of CFE			Type of project
	Trustor	Trust Beneficiary	Trustee	
Trust Management and Transfer of Ownership 2030	CFE	Primary beneficiary: contract winners Second beneficiary: CFE	BANOBRAS, S. N. C.	Conditioned investment
Trust for the establishment of a Revolving Financing Fund for the Housing Thermal Isolation Program of the Valley of Mexicali, B.C.	CFE	CFE	BANOBRAS, S. N. C.	Energy saving
Prior Expense Trust	CFE	CFE	BANCOMEXT, S. N. C.	Direct investment

**b) Non-controlling interest**

Changes in the Entity's ownership interest in a subsidiary that do not result in a loss of control are recorded as equity transactions.

**c) Transactions in foreign currency**

Transactions in foreign currency are translated to the functional currency of the CFE entities at the date of the transactions. Foreign currency denominated assets and liabilities are translated to the functional currency using the exchange rate ruling at the reporting date. Non-monetary assets and liabilities that are measured at fair value in a foreign currency are translated to the Entity's functional currency using the exchange rate that prevailed at the date when the fair value was determined. Non-monetary items that are recognized at their historical cost and are translated using the exchange rate prevailing at the date of the transaction. Foreign currency translation differences are generally recognized in profit or loss.

Foreign currency differences resulting from the translation of the following items are recognized in other comprehensive income:

Qualified cash flow hedges provided the hedge is effective.

Transactions in foreign currency are translated using the exchange rate prevailing on the day of the related transactions. Foreign currency monetary assets and liabilities are valued in local currency using the closing exchange rate prevailing at the date of the consolidated financial statements and at the historical or average exchange rate in profit or loss; exchange differences between the transaction date and the payment or collection date are recognized in profit or loss as part of financial costs.

The financial statements of foreign operations are translated to the reporting currency, initially identifying if the functional currency and reporting currency of the foreign operations are different and, subsequently, the functional currency is translated to the reporting currency, using the historical exchange rate and/or the closing exchange rate at the end of the year.

**d) Cash and cash equivalents**

Cash and cash equivalents are represented by cash, bank deposits, and temporary and short-term investments. Cash and bank deposits are presented at nominal value and the returns on these investments are recognized in the income statement as they accrue.

Cash equivalents correspond to readily marketable investments with short-term maturities, and are valued at fair value and the risk of changes in their value is low.

**e) Financial instruments**

IFRS 9 Financial Instruments sets out the requirements for recognizing and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. This standard supersedes IAS 39 Financial Instruments: Recognition and Measurement

**Initial recognition and measurement**

Accounts receivable are recognized as they are generated. All other financial assets and liabilities are recognized initially when the Entity becomes a party to the contractual provisions.

Financial assets (unless it is an account receivable that does not contain a significant financing component) or financial liabilities are initially measured at fair value plus, in the case of an item not measured at fair value through profit or loss, the cost of the transaction directly attributable to the acquisition or issue. An account receivable that does not contain a significant financing component is initially measured at the price of the transaction.

**i. Classification and subsequent measurement - Financial assets**

Financial assets are classified as follows: financial instruments measured at amortized cost (AC), fair value through other comprehensive income (FVOCI) and fair value through profit or loss (FVTPL). As a result of the adoption of IFRS 9, the existing categories under IAS 39 of held-to-maturity, loans and receivables and available for sale have been eliminated.

IFRS 9 retains almost all of the existing requirements from IAS 39 regarding the classification and measurement of financial liabilities.

The adoption of IFRS 9 has not had a significant impact on the Entity's accounting policies related to financial liabilities and derivative financial instruments (for derivatives that are used as hedging instruments, see Note 10).

For an explanation of how the Entity classifies and measures financial instruments and recognizes the related gains and losses under IFRS 9, see Note 10.

**Financial assets**

At initial recognition, a financial asset is classified as measured at: amortized cost, at fair value through other comprehensive income- debt investment, at fair value through other comprehensive income- investment in equity, or at fair value through profit or loss.

Financial assets are not reclassified after their initial recognition, unless the Entity changes its business model to one that manages the financial assets, in which case all the affected financial assets would be classified on the first day of the first reporting period following the applicable change in business model.

Financial assets are classified, at initial recognition, as subsequently measured at amortized cost, fair value through other comprehensive income and fair value through profit or loss.



The Entity measures financial assets at amortized cost only where both of the following conditions are met:

1. the asset is held within a business model whose objective is to hold assets to collect contractual cash flows;
2. the asset's contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

All the financial assets not classified as measured at amortized cost or at fair value through other comprehensive income as described above, are measure at fair value through profit or loss. This includes all the derivative financial instruments (see Note 10 a). At initial recognition, the Entity may irrevocably designate a financial asset that would otherwise have to be measured at amortized cost or fair value through other comprehensive income to be measured at fair value through profit or loss if doing so would eliminate or significantly reduce a measurement or recognition inconsistency.

Business model assessment:

The Entity makes an assessment of the objective of a business model in which an asset is held at a portfolio level because this best reflects the way the business is managed and information is provided to management. The information considered includes:

- the stated policies and objectives for the portfolio and the operation of those policies in practice. In particular, whether management's strategy focuses on earning contractual interest revenue, maintaining a particular interest rate profile, matching the duration of the financial assets to the duration of the liabilities that are funding those assets or realizing cash flows through the sale of the assets;
- how the performance of the portfolio is evaluated and reported to the Entity's management;
- the risks that affect the performance of the business model (and the financial assets held within that business model) and, specifically, how those risks are managed;
- how managers of the business are compensated (e.g. whether compensation is based on the fair value of the assets managed or the contractual cash flows collected); and
- the frequency, volume and timing of sales in prior periods, the reasons for such sales and its expectations about future sales activity.

Transfers of financial assets to third parties in transactions that do not qualify for derecognition are not considered sales for this purpose, consistent with the Entity's continuing recognition of the assets.

Financial assets that are held for trading or are managed and whose performance is evaluated on a fair value basis are measured at fair value through profit or loss.



Financial assets - Assessment whether contractual cash flows are solely payments of principal and interest:

For the purposes of this assessment, 'principal' is defined as the fair value of the financial asset on initial recognition. 'Interest' is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g. liquidity risk and administrative costs), as well as profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Entity considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making the assessment, the Entity considers:

- contingent events that would change the amount or timing of cash flows;
- terms that may adjust the contractual coupon rate, including variable rate features;
- prepayment and extension terms;
- terms that limit the Entity's claim to cash flows from specified assets (e.g. non-recourse asset arrangements).

A prepayment feature is consistent with the solely payments of principal and interest criterion if the prepayment amount substantially represents unpaid amounts of principal and interest on the principal amount outstanding, which may include reasonable additional compensation for early termination of the contract. Additionally, for a financial asset acquired at a significant discount or premium to its contractual paramount, a feature that permits or requires prepayment at an amount that substantially represents the contractual par amount plus accrued (but unpaid) contractual interest (which may also include reasonable additional compensation for early termination) is treated as consistent with this criterion if the fair value of the prepayment feature is insignificant on initial recognition.

Financial Assets - Subsequent measurement and profit and losses:

Financial assets at fair value through profit or loss

- These assets are subsequently measured at fair value. Net gains and losses, including any interest income, are recognized in profit or loss. However, in the case of derivatives designated as hedging instruments.

Financial assets at amortized cost

- These assets are subsequently measured at amortized cost using the effective interest rate method. The amortized cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss

#### Financial assets

CFE would classify its financial assets in one of the following categories:

- loans and receivables;
- held-to-maturity;
- available-for-sale; and
- at fair value through profit or loss

Financial Assets - Subsequent measurement and profit and losses:

Financial assets at fair value through profit or loss

- Measured at fair value, including interest or dividend income, through profit or loss. However, in the case of derivatives designated as hedging instruments.

Financial assets held-to-maturity

- Measured at amortized cost using the effective interest rate method.

Loans and receivables

- Measured at amortized cost using the effective interest rate method.

Available-for-sale financial assets

- Measured at fair value and the changes, other than impairment losses and foreign exchange differences on debt instruments, were recognized in other comprehensive income and were accumulated in the fair value reserve. Upon derecognition of these assets, the cumulative equity gain or loss was reclassified to profit or loss.

#### Financial Liabilities - Classification, measurement and profit and losses:

Financial liabilities are classified as measured at amortized cost or fair value through profit or loss. A financial liability is classified as at fair value through profit or loss if it is classified as held-for-trading, it is a derivative, or it is designated as such on initial recognition. Financial liabilities at fair value through profit or loss are measured at fair value and net gains and losses, including any interest expense, are recognized in profit or loss. Other financial liabilities are subsequently measured at amortized cost using the effective interest rate (EIR) method. Interest income and foreign exchange gains and losses are recognized in profit or loss. Any gain or loss on derecognition is also recognized in profit or loss.

## **ii. Derecognition**

### **Financial assets**

The Entity derecognizes a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Entity neither transfers nor retains substantially all of the risks and rewards of ownership and does not retain control of the financial asset.

### **Financial liabilities**

The Entity derecognizes a financial liability when the contractual rights are paid or cancelled or expire. The Entity also derecognizes a financial liability when its terms are modified and the cash flows of the modified liability are substantially different. In this case, a new financial liability based on the modified terms is recognized at fair value.

Upon derecognition of a financial liability, the difference between the carrying amount of the financial liability extinguished and consideration paid (including assets other than transferred cash or assumed liabilities) is recognized in profit or loss.

## **iii. Compensation**

Financial assets and financial liabilities are offset and the net amount is reported in the statement of financial position when there is a legally enforceable right to offset the recognized amounts and the intention is to settle them on a net basis or to realize the asset and settle the liability simultaneously.

## **iv). Derivative financial instruments and hedge accounting**

Derivative financial instruments are recognized at fair value in the statement of financial position. The fair value of derivative financial instruments is determined based on generally accepted valuation techniques. Consistent with the risk strategy, the Entity enters into derivative financial instruments contracts to mitigate foreign exchange and interest rate risks, through interest-rate swaps, Cross Currency Swaps and foreign exchange Forwards.

The policies include the formal documentation of all hedging relationships between the hedging instrument and the hedged position, the objectives for risk management and the strategies for conducting hedging transactions.

The effectiveness of the hedge derivatives is assessed prior to their designation as hedges, as well as during the hedging period, which is performed at least quarterly. When it is determined that a derivative is not highly effective as a hedge, the Entity discontinues hedge accounting prospectively.

The Entity suspends cash flow hedge accounting when the derivative expires, has been cancelled or executed, is not effective enough to offset the changes in the fair value or cash flows of the hedged item, or when the Entity decides to cancel the hedging designation. The gains or losses recognized in Other comprehensive income and accumulated in Equity, remain in Equity and are recognized when the forecast transaction is ultimately recognized in profit or loss.

The effective portion of the changes in the fair value of the derivative financial instruments designated as cash-flow hedges is recognized in Equity in the Other comprehensive income caption, while the ineffective portion is recognized in profit or loss. The effective portion recognized in Equity is recycled in the income statement in the periods when the hedged item affects profit or loss and is presented in the same caption of such statement where the corresponding primary position is presented.

The hedging policies establish that derivative financial instruments that do not qualify as hedges are classified as held-for-trading; therefore, the changes in the fair value are recognized immediately in profit or loss.

a) Fair value of financial instruments.

The Entity uses derivative financial instruments to hedge its exposure to foreign exchange and interest rate risks. Embedded derivatives are separated from the host contract and accounted for separately if the host contract is not a financial asset and certain conditions are met.

Derivatives are initially measured at fair value. Upon initial recognition, derivative financial instruments are valued at fair value, and changes are generally recognized through profit or loss.

The Entity designates certain derivatives as hedge instruments when hedging the exposure to variability in cash flows attributable to a highly probable transaction derived from changes in exchange rates and interest rates and certain derivative and non-derivative financial liabilities as hedge of the foreign currency risks arising from a net investment in a foreign operation.

At the inception of the designated hedge relationships, the Entity documents the risk management objective and strategy for undertaking the hedge. The Entity also documents the economic relationship between the hedged item and the hedging instrument, including if it expects that the changes in the cash flows of the hedged item and the hedging instrument will almost fully offset.

The hedged portion of derivative financial instruments is documented in the Hedge File, which includes assessments of economic relationship criteria designed to identify the relationship between the notional amount of the hedging instrument and the notional amount of the hedged item.

b) Cash-flow hedges

When a derivative instrument is designated as a cash flow hedging instrument, the effective portion of changes in the fair value of the derivative is recognized in other comprehensive income and accumulated in the hedging reserve. The effective portion of changes in the fair value of the derivative that is recognized in other comprehensive income is limited to the cumulative change in fair value of the hedged item, determined on a present value basis, from the inception of the hedge. Any ineffective portion of changes in the fair value of the derivative is recognized immediately in profit or loss.

The Entity designates only the change in fair value of the spot element of forward exchange contracts as the hedging instrument in cash flow hedging relationships. The change in fair value of the forward element of forward exchange contracts ('forward points') is separately accounted for as a cost of hedging and recognized in a costs of hedging reserve within equity.

When the hedged forecast transaction subsequently results in the recognition of a non-financial item such as inventory, the amount accumulated in the hedging reserve and the cost of hedging reserve is included directly in the initial cost of the non-financial item when it is recognized.

For all other hedged forecast transactions, the amount accumulated in the hedging reserve and the cost of hedging reserve is reclassified to profit or loss in the same period or periods during which the hedged expected future cash flows affect profit or loss.

If the hedge no longer meets the criteria for hedge accounting or the hedging instrument is sold, expires, is terminated or is exercised, then hedge accounting is discontinued prospectively. When hedge accounting for cash flow hedges is discontinued, the amount that has been accumulated in the hedging reserve remains in equity until, for a hedge of a transaction resulting in the recognition of a non-financial item, it is included in the non-financial item's cost on its initial recognition or, for other cash flow hedges, it is reclassified to profit or loss in the same period or periods as the hedged expected future cash flows affect profit or loss.

If the hedged future cash flows are no longer expected to occur, then the amounts that have been accumulated in the hedging reserve and the cost of hedging reserve are immediately reclassified to profit or loss.

c) Derivative financial instruments and hedge accounting

For all cash flow hedges, including hedges of transactions resulting in the recognition of non-financial items, the amounts accumulated in the cash flow hedge reserve were reclassified to profit or loss in the same period or periods during which the hedged expected future cash flows affected profit or loss.

d) Impairment – Financial assets and contract assets

i. Non-derivative financial assets

Financial instruments and contract assets

IFRS 9 replaces the incurred loss model in IAS 39 with an expected credit loss (ECL) model. This will require considerable judgment as to how changes in macroeconomic factors will affect ECLs, which is determined on a weighted average basis.

IFRS 9 recognizes loss allowances for expected credit losses for:

- financial assets measure at amortized cost;

The Entity measures loss allowances at an amount equal to lifetime expected credit losses, except for the following, which are measured at 12-month expected credit losses:

- debt securities that are determined to have low credit risk at the reporting date; and

- other debt securities and bank balances for which credit risk (i.e. the risk of default occurring over the expected life of the financial instrument) has not increased significantly since initial recognition.

Loss allowances for trade receivables and contract assets and contract assets are always measured at an amount equal to lifetime expected credit losses.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating expected credit losses, the Entity considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Entity's historical experience and informed credit assessment and including forward-looking information.

Measurement of lifetime ECLs is applied if the credit risk of the financial asset at the reporting date has increased significantly since initial recognition and measurement of 12-month ECLs is applied if the credit risk has not increased. The entity may determine that the credit risk of a financial asset has not increased significantly if the asset has a low credit risk at the reporting date. However, the measurement of lifetime expected credit losses is always applicable for trade receivables or contract assets that do not contain a significant financing component. The Entity has decided to apply this policy for trade receivables and contract assets with a significant financing component.

The Entity always measures loss allowances for trade receivables and contract assets and contract assets at an amount equal to lifetime expected credit losses. Also, the Entity considers reasonable and sustainable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Entity's historical experience and informed credit assessment and including forward-looking information.

#### Measurement of expected credit losses

Expected credit losses are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the entity in accordance with the contract and the cash flows that the Entity expects to receive).

Expected credit losses are discounted at the effective interest rate of the financial asset.

#### Credit-impaired financial assets

At each reporting date, the Entity assesses whether financial assets carried at amortized cost and debt securities at fair value through other comprehensive income are credit impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

#### Write-off

The Entity considers the following observable data as objective evidence that a financial asset is impaired:

- significant financial difficulty of the issuer or borrower;
- restructuring of a loan or advance by the Entity on terms that the Entity would not consider otherwise;
- indications that a borrower would enter bankruptcy or financial reorganization; or
- the disappearance of an active market for the financial asset because of financial difficulties.

#### Presentation of the expected credit losses allowance in the statement of financial position

The expected credit loss allowance measured at amortized cost is deducted from the gross carrying amount of the assets. Whereas, in the case of debt instruments at fair value through other comprehensive income, the loss allowance is accounted for in the income statement and recognized in other comprehensive income.

#### Non-derivative financial assets

The financial assets not classified at fair value through profit or loss were assessed at each reporting date to determine if there was objective evidence of impairment losses.

Objective evidence that the financial assets were impaired included:

- default or delinquency by a debtor;
- restructuring of an amount due to the Entity on terms that the Entity would not consider otherwise;
- indications that a debtor or issuer would enter bankruptcy;
- adverse changes in the payment status of borrowers or issuers;
- the disappearance of an active market for a security because of financial difficulties; or
- observable data indicating that there was a measurable decrease in the expected cash flows from a group of financial assets

#### ii. Non-financial assets

At each reporting date, the Entity reviews the carrying amounts of its financial assets (other than operating materials and deferred tax assets) to determine whether there is any indication that those assets are impaired. If any such indication exists, the Entity determines the recoverable amount of the asset. Goodwill is tested for impairment annually.



For impairment testing purposes, assets are grouped into the smallest group of assets that generate cash inflows from their continued use that are largely independent of the cash inflows from other assets or cash-generating units.

The recoverable amount of an asset or cash generating unit is the higher of either its value in use or fair value less its sales cost. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or cash-generating unit.

An impairment loss is recognized if the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. Impairment losses are recognized in profit or loss. Impairment losses recognized in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the units and then to reduce the carrying amount of the other assets in the unit (groups of units) on a pro rata basis.

An impairment loss in respect of goodwill is not reversed. In respect of other assets, an impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

#### **g) Finance income and finance costs**

Finance income and finance costs. The Entity's finance income and finance costs include:

- interest income;
- interest expense;
- the foreign currency gain or loss on financial assets and financial liabilities;
- impairment losses (and reversals) on investments in debt securities carried at amortized cost or fair value through other comprehensive income;
- hedge ineffectiveness recognized in profit or loss; and
- the reclassification of net gains and losses previously recognized in other comprehensive income on cash flow hedges of interest rate risk and foreign currency risk for borrowings (see Note 10)

Interest income or expense is recognized using the effective interest method. Dividend income is recognized in profit or loss on the date on which the Entity's right to receive payment is established.

The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument to:

- the gross carrying amount of the financial asset; or
- the amortized cost of the financial liability.

In calculating interest income and expense, the effective interest rate is applied to the gross carrying amount of the asset (when the asset is not credit-impaired) or to the amortized cost of the liability. However, for financial assets that have become credit-impaired subsequent to initial recognition, interest income is calculated by applying the effective interest rate to the amortized cost of the



financial asset. If the asset is no longer credit-impaired, then the calculation of interest income reverts to the gross basis.

#### **h) Inventory of operating materials**

The inventory of operating materials is recognized at the lower of their acquisition cost or net realizable value. Operating materials inventory unit costs are calculated using the average cost method.

When required, the Entity records provisions to recognize write downs in the value of its inventories due to impairment, obsolescence, low turnover and other circumstances that indicate that the recovery values of the inventories are less than their carrying amounts.

#### **i) Plants, facilities and equipment**

Plants, facilities and equipment are initially measured at cost.

##### **I. Plants, facilities and equipment in operation (electrical infrastructure)**

Plants, facilities and equipment in operation, used for the generation, transmission and/or distribution of electricity, are recognized in the statement of financial position at their revalued amounts, calculating the fair value at the date of the revaluation, less any accumulated depreciation or accumulated impairment losses. CFE performs periodic reviews of the fair values of plants, facilities and equipment in operation, and every 5 years it evaluates the need to revalue its assets to ensure that the carrying amount does not differ significantly from the amount that would have been calculated using fair values at the end of the reporting period.

Any increase in the revaluation of plants, facilities and equipment is recognized as a surplus in other comprehensive income, except when such increase reverses a revaluation decrease for the same asset that had been previously recognized in profit or loss, in which case the revaluation gain is recognized in profit or loss to the extent of the previous loss. A decrease in the carrying amount resulting from the revaluation of such plants, facilities and operating equipment is recognized in profit or loss to the extent that it exceeds the revaluation surplus, if any.

Borrowing costs incurred in direct and general financing of constructions in progress for a period greater than 6 months are capitalized as part of the cost of such asset.

In addition to the purchase price and costs directly attributable to preparing an asset in terms of its physical location and condition for use as intended by our technicians, the cost also includes the estimated costs for the decommissioning and removal of the asset and for restoration of the site where it is located, if such obligation exists.

Depreciation of plants, facilities and equipment in operation is calculated over the fair value or acquisition cost of the asset, as the case may be, on a straight-line basis, starting the month after the assets are available for use. In the event of a subsequent sale or retirement of the revalued properties, the revaluation surplus attributable to the remaining property revaluation reserve is transferred directly to retained earnings.

**COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries**  
**Notes to the consolidated financial statements for the three years ended 31 December 2018, 2017 and 2016**  
**(Amounts expressed in thousands of Mexican pesos, unless explicitly indicated otherwise)**

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Depreciation of plants, facilities and operating equipment is recognized in profit or loss. In the event of a subsequent sale or retirement of the revalued properties, the revaluation surplus attributable to the remaining property revaluation reserve is transferred directly to retained earnings.

The depreciation rates based on the useful lives of the assets, determined by the Entity's technicians are as follows.

	<b>Useful life (years)</b>
Geothermal power plants	27 to 50
Steam power plants	34 to 75
Hydroelectric power plants	40 to 80
Internal combustion power plants	34 to 75
Turbo gas and combined cycle power plants	34 to 75
Nuclear power plants	40
Substations	39 to 75
Transmission lines	34 to 75
Networks	30 to 59

The Entity periodically evaluates the useful lives, depreciation method, and residual values of the its plants, facilities and equipment. In the event of changes in the estimates used, the related effects are recognized prospectively.

When the plants, facilities and equipment items are comprised of various components, and their useful lives are different, the significant individual components are depreciated throughout their estimated useful lives. Maintenance and minor repair costs and expenses are recognized as incurred.

The carrying amount of plant, facilities and equipment is reviewed annually for indicators of impairment in the value of such assets. As of December 31, 2017, CFE recognized impairment losses of \$28,681,250, which were deducted from the revaluation surplus.

In 2018, CFE did not recognize impairment losses on plants, facilities and operating equipment; however, it recognized the partial reversal of the impairment recognized in 2017 in the amount of \$2,074,323, which was determined as of December 31, 2018.

## II. Property and assets for offices and general services.

Property and assets for offices and general services are depreciated in accordance with the following rates:

	<b><u>Useful life (in years)</u></b>
Buildings	20
Office furniture and equipment	10
Computer equipment	4
Transportation equipment	4
Other assets	10

Land is not subject to depreciation.

An item of plants, facilities and equipment is derecognized upon disposal or when no future economic benefits are expected from its use. Any gain or loss arising from derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is recognized in the consolidated income statement.

#### Leased plants, facilities and equipment

As a result of the Electricity Public Utility Law, starting in 2000, independent electricity producers were provided access, with these independent electricity producers required to sell the power they produce exclusively to the CFE. The Entity determined that 23 of its existing contracts with independent power producers have characteristics of a lease of the power plant, in accordance with IFRIC 12 Service Concession Arrangements, and that these leases also qualify as financial leases in accordance with IAS 17 Leases. As a result of this assessment, the Entity recorded these contracts in a fixed asset account called Independent producers and recorded the total amount of the liability corresponding to the value of the asset.

#### Leased assets

Leases of property, plant and equipment that transfer to the Entity substantially all of the risks and rewards of ownership are classified as finance leases. The leased assets are measured initially at an amount equal to the lower of their fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the assets are accounted for in accordance with the accounting policy applicable to that asset.

Assets held under other leases are classified as operating leases and are not recognized in the Entity's statement of financial position.

#### Subsequent expenditure

Subsequent expenditure is capitalized only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure, including expenditure on internally generated goodwill and brands, is recognized in profit or loss as incurred.

### **j) Intangible assets and other assets**

Intangible assets acquired separately are recognized at cost and CFE estimates the useful life of each intangible asset. Intangibles with an indefinite useful life are classified as intangible assets with indefinite useful lives, mainly rights of way.

The Other assets line item is largely comprised of security deposits provided under real estate leases, as well as guarantees provided to third parties under agreements for goods and/or services provided.

**k) Short-term employee benefits**

The Entity provides various employee benefits to its employees that for purposes of the financial statements, are classified as direct employee benefits and pension benefits, seniority premiums and termination benefits

Direct employee benefits

Direct employee benefits are determined based on services rendered and considering the current salaries of employees. The related liability is recorded as the benefits accrue. Direct employee benefits are mostly comprised of productivity incentives, vacation days, vacations premiums, bonuses and seniority awards granted to the Entity's temporary, contingent and permanent staff.

Pension benefits and other benefits

The Entity provides retirement pensions to its employees.

The Entity has a defined benefit pension plan in place for employees who began working for the Entity on or before August 18, 2008 and a defined contribution pension plan for employees who began working for the Entity on or after August 19, 2008.

Obligations for contributions to defined contribution plans are expensed as the related service is provided. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in future payments is available.

Additionally, there are defined contribution pension plans mandated by the Federal government to which the Entity is required to make contributions on behalf of its employees. The Entity's contributions to these defined contribution plans are calculated by applying the percentages indicated in the related regulations to the amounts of eligible wages and salaries. The contributions are remitted to the retirement fund administrators (AFORE) selected by each employee and to the Mexican Social Security Institute.

In accordance with the Federal Labor Law, the Entity is required to pay a seniority premium and to make certain payments to personnel who leave the Entity under certain circumstances.

The Entity recognizes annually the cost of pensions, seniority premiums and termination benefits based on independent actuarial computations applying the projected unit credit method using assumptions net of inflation.

The cost of the defined contribution pension plans is recognized in profit or loss as they are incurred.

The Entity's net obligation in respect of defined benefit plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in the current and prior periods, discounting that amount and deducting the fair value of any plan assets.

### Defined benefit plans

The calculation of defined benefit obligations is performed annually by a qualified actuary using the projected unit credit method. When the calculation results in a potential asset for the Entity, the recognized asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. To calculate the present value of economic benefits, consideration is given to any applicable minimum funding requirements.

Remeasurements of the net defined benefit liability, which comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest), are recognized immediately in OCI. The Entity determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the net defined benefit liability (asset), taking into account any changes in the net defined benefit liability (asset) during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognized in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognized immediately in profit or loss. The Entity recognizes gains and losses on the settlement of a defined benefit plan when the settlement occurs.

### Termination benefits

Termination benefits are expensed at the earlier of when the Entity can no longer withdraw the offer of those benefits and when the Entity recognizes costs for a restructuring. If benefits are not expected to be settled wholly within 12 months of the reporting date, then they are discounted.

## **I) Income tax**

Income tax expense comprises current and deferred tax.

Current-year income tax is recognized as a short-term liability, net of prepayments made during the year.

Deferred tax is recognized using the asset and liability method, based on temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes at the date of the consolidated statement of financial position.

Deferred tax is measured at the tax rates that are expected to be in force when the assets materialize or the liabilities are settled using tax rates enacted or substantively enacted at the reporting date.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be used. Unrecognized deferred tax assets are reassessed at each reporting date and recognized to the extent that it has become probable that future taxable profits will be available against which they can be used.

Deferred taxes are recognized in profit or loss except for the items related to Other Comprehensive Income (OCI).

#### **m) Provisions and contingent liabilities**

Provisions are recognized when the Entity has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and there is uncertainty about the timing or amount, but a reliable estimate can be made of the amount of the obligation.

If the effect of the time value of money is material, based on the best estimate of the disbursements that would be required to settle the related obligation. The provisions are discounted using a pre-tax rate that reflects the current market conditions at the date of the statement of financial position and, when appropriate, the risks specific to the liability. In this case, the increase in the provision is recognized as a finance cost.

Contingent liabilities are recognized only when it is probable they will give rise to a future cash disbursement for their settlement.

#### **n) Revenue recognition**

The Entity's revenue recognition policies are as follows:

**Electricity supply service revenue** - is recognized when the electricity is delivered to the customers, which is considered to be the point in time at which the customer accepts the electricity and the risks and benefits related to the transfer of ownership. Other criteria applied for revenue recognition include that both the revenue and costs can be measured reliably by the entity, it is probable that the economic benefits associated with the transaction will flow to the entity and the entity does not retain continuing involvement over the goods sold.

Under IFRS 15, revenue is recognized when a customer obtains control of a good or service, and the first step is the identification of a contract. Among other requirements, IFRS 15 requires that the collectability of a contract be reasonably assured to be able to recognize it as revenue. The Entity identified that certain divisions have problems related to regularization of rates and social resistance and the customers no longer have the capacity to pay or are not willing to pay the amount owed. In view of the above, the Entity performed a new assessment of these contracts, and has preliminarily determined that they do not meet the revenue recognition requirements and therefore, it does not recognize revenue on the electricity delivered to these customers since it does not expect to collect them.

Prior to the entry into force of IFRS 15, revenue from the sale of electricity was fully recognized, including the revenue from conflict areas.

**Sale of fuel:** revenue is recognized at a point in time, in the period in which the fuels are delivered to customers.

**Freight revenue** - revenue is recognized over time, as the public electricity transmission services are provided.

**Third-party contributions** - revenue from the contributions received from customers to connect them to the national transmission and distribution network is recorded in the statement of comprehensive income after the Entity has completed the customer's connection to the network. Customers have the option to choose their electricity provider between either the Entity or another company. The revenues are presented as part of the Other revenue caption.

Through 31 December 2016, the contributions received from customers to provide electricity connection and supply services were recorded as deferred income and recognized in profit or loss on a systematic basis over the useful lives of the fixed assets financed by said contributions. Since the electricity supply services contracts entered into with such customers were for an indefinite term, they were recognized in profit or loss based on the useful lives of the asset that funded the contributions.

Contributions received from the State and Municipal Governments to electrify rural villages and poor neighborhoods, to expand the distribution network, as well as other contributions, were recorded as deferred revenue and recognized in profit or loss as Other income over the useful lives of the fixed assets financed by said contributions.

As a result of the legal separation of the Entity into several legal entities and the changes in the laws that allow for the existence of other qualified suppliers besides the Entity, as of 1 January 2017 contributions received from customers and the State and Municipal Governments to provide electricity connection and supply services are recorded as income in the statement of comprehensive income after the Entity has completed the customer's connection to the network, since customers now have the option to choose their electricity provider between either the Entity or another company.

In view of the above, the deferred income liability recognized as Third party contributions in the "Other Long-Term Liabilities" as of December 31, 2016, in the amount of \$33,701,253, has been recognized in the income statement as other income from 2017. As of December 31, 2018 and 2017, revenue from third party contributions amounted to \$1,798,471 and \$1,735,011, respectively.

**Revenue from subsidies:** revenue from subsidies received from the Ministry of Finance and Public Credit is recognized at a point in time, when the subsidies are received by the Entity.

#### **o) Measurement of fair values**

A number of the Entity's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities

the Entity has an established control framework with respect to the measurement of fair values. This includes a valuation team that has overall responsibility for overseeing all significant fair value measurements, including Level 3 fair values, and reports directly to the Chief Financial Officer.



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The valuation team regularly reviews significant unobservable inputs and valuation adjustments. If third party information, such as broker quotes or pricing services, is used to measure fair values, then the valuation team assesses the evidence obtained from the third parties to support the conclusion that these valuations meet the requirements of IFRS, including the level in the fair value hierarchy in which the valuations should be classified.

#### **4. Financial Instruments – Fair Value and Risk Management**

##### **Fair values**

An analysis of the carrying amounts and fair values of the financial instruments recognized as of December 31, 2018, 2017 and 2016 is as follows:

##### **Objectives of financial risk management**

		<u>2018</u>		<u>2017</u>		<u>2016</u>
Financial assets:						
Cash and cash equivalents (2)	\$	78,483,263	\$	67,237,901	\$	42,266,944
Accounts receivable (2)		99,175,895		95,067,522		63,236,187
Loans to employees (2)		12,367,878		12,339,193		11,193,712
Derivative financial instruments (1)		<u>17,783,141</u>		<u>16,084,937</u>		<u>15,646,025</u>
Financial liabilities:						
Short- and long-term debt (2)	\$	470,631,734	\$	457,776,357	\$	455,709,823
Short- and long-term debt (1)		529,058,782		546,522,661		573,266,368
Suppliers and contractors (2)		60,196,912		59,849,154		17,888,728
Deposits from customers and contractors (2)		25,619,843		22,974,717		21,103,369
Accounts payable MEM (1)		-		-		2,011,804

(1) Fair value

(2) Amortized cost

The Entity's Financial Officer's functions include, among others, implementing strategies, coordinating access to domestic and international financial markets, and supervising and managing financial risks related to the Entity's operations through internal and market risk reports that analyze the degree and magnitude of the Entity's exposure to financial risks. These risks include market risk (including foreign exchange risk and interest rate risk), credit risk and liquidity risk.

To mitigate the effects of its debt related risks, the Entity uses hedging derivatives.



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The Treasury Department is bound by the Ministry of Finance and Public Credit cash management policies that hold that investments must be made in low-risk short-term instruments. Monthly status reports are issued to the Treasury Investment Committee.

**Credit risk**

Credit risk is the risk of financial loss to the Entity if a counterparty to a financial instrument fails to meet its contractual obligations. The Entity is subject to credit risk mostly in respect of its financial instruments comprising cash and short-term investments, loans and accounts receivable, and derivative financial instruments. In order to mitigate the credit risk in its cash, short-term investments and derivative financial instruments, the Entity conducts transactions exclusively with counterparties that are financially solvent and that have a good reputation and high credit quality. The Entity also obtains sufficient guarantees, when appropriate, to mitigate the risk of financial losses due to non-performance.

The carrying amount of the Entity's financial assets represents the maximum exposure to credit risk.

For credit risk management purposes, the Entity considers that the credit risk on loans and accounts receivable from consumers is limited. The Entity determines the allowance for doubtful accounts based on the incurred loss model.

An aging analysis of the past due receivables, for which an allowance has not been deemed necessary as of December 31, 2018, 2017 and 2016, is as follows:

	<b>2018</b>	<b>2017</b>	<b>2016</b>
Less than 90 days	\$ 3,778,989	\$ 2,431,134	\$ 2,170,503
From 90 to 180 days	3,498,198	2,350,281	1,920,393
More than 180 days	13,812,362	10,795,106	11,188,347
	<b>\$ 21,089,549</b>	<b>\$ 15,576,521</b>	<b>\$ 15,279,243</b>

The Entity's maximum exposure to credit risk for its trade debtors by item as of December 31, 2018, 2017 and 2016, is as follows:

	<b>2018</b>	<b>2017</b>	<b>2016</b>
Register	\$ 16,283,615	\$ 12,403,078	\$ 12,560,936
Uncollectible	\$ 2,418,777	\$ 2,452,983	\$ 1,556,789
Agreement	\$ 2,129,269	\$ 3,233,455	\$ 5,119,998
Government	\$ 6,852,679	\$ 6,253,062	\$ 6,033,645
Total	<b>\$ 27,684,340</b>	<b>\$ 24,342,578</b>	<b>\$ 25,271,368</b>

An analysis of the Entity's exposure to credit risk from its trade debtors and contract assets is as follows:

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	2018		2017	
	Without credit impairment	With credit impairment	Without credit impairment	With credit impairment
Other customers:				
History of transactions with the Entity	\$ 47,269,908	\$ 22,512,787	\$ 5,691,092	\$ 22,512,787
Total				
Allowance for credit losses	\$ 5,691,092	\$ 21,993,247	\$ 723,061	\$ 21,993,247

**Comparative information under IAS 39**

An analysis of the credit quality of the trade debtors that were neither past nor impaired, and the aging of the trade debtors that were past, but not impaired as of December 31, 2018, 2017 and 2016 is as follows:

	2018	2017	2016
Current, but not impaired	\$ 37,292,423	\$ 41,844,177	\$ 42,138,502
Past, but not impaired			
Past due between 1 and 30 days	\$ 2,276,899	\$ 1,488,668	\$ 1,392,358
Past due between 31 and 60 days	\$ 1,502,090	\$ 942,465	\$ 898,018
Past due between 61 and 90 days	\$ 1,172,461	\$ 748,433	\$ 657,714
Past due between 91 and 120 days	\$ 927,051	\$ 608,564	\$ 532,250
Past due between 121 and 150 days	\$ 749,160	\$ 527,013	\$ 454,515
Past due between 151 and 180 days	\$ 649,526	\$ 466,272	\$ 401,771
Past due between 181 and 210 days	\$ 549,533	\$ 431,419	\$ 373,583
Past due between 211 and 240 days	\$ 500,011	\$ 372,830	\$ 329,361
Past due between 241 and 270 days	\$ 467,930	\$ 334,327	\$ 290,288
Past due between 271 and 300 days	\$ 431,567	\$ 293,870	\$ 283,762
Past due between 301 and 330 days	\$ 360,649	\$ 280,744	\$ 268,346
Past due between 331 and 360 days	\$ 390,608	\$ 289,287	\$ 327,982
Total, trade debtors not impaired	\$ 47,269,908	\$ 48,628,069	\$ 48,348,450

Impaired trade debtors as of December 31, 2017 amounted to a gross carrying amount of \$20,732,129. The Entity's impairment loss recorded as of December 31, 2017 is comprised of trade receivable balances that are more than 330 days past due. Uncollectible balances, regularization note receivables, and state and Federal government consumer accounts that are more than 730 days past due were reserved at 100% of the impaired balance. In addition, only 10% of the full balance of regular notes receivable is reserved. It is important to highlight that such methodology corresponds to an incurred credit loss model in accordance with IAS 39.

**Liquidity risk**

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Liquidity risk is defined as the risk that an entity will encounter difficulty in meeting its obligations associated with financial liabilities that are settled by delivering cash or another financial asset.

The financing obtained by the Entity is mainly through contracted debt, the leasing of plants, facilities, and equipment and PIDIREGAS. To manage liquidity risk, the Entity periodically performs cash flow analyses and maintains open lines of credit with financial institutions and suppliers.

In addition, the Entity's budget is controlled by the Federal Government, consequently, the net debt ceiling authorized on an annual basis by the Federal Congress based on the Entity's budgeted revenues, cannot be exceeded.

The following table shows the contractual maturities of the Entity's financial liabilities based on the payment terms:

<b>As of December 31, 2018</b>	<b>Less than one year</b>	<b>More than 1 year and less than 3 years</b>	<b>More than 3 years and less than 5 years</b>	<b>More than 5 years</b>	<b>Total</b>
Documented debt	\$ 15,554,180	\$ 47,006,781	\$ 21,496,201	\$ 131,988,076	\$ 216,045,238
Interest payable on documented debt	12,751,923	22,239,932	17,887,246	56,627,971	109,507,072
PIDIREGAS debt and capital lease obligations	25,357,245	14,816,690	20,261,002	186,656,844	247,091,781
Interest payable on PIDIREGAS debt	7,979,683	12,824,805	9,391,087	30,219,922	60,415,497
Suppliers and contractors	60,196,912	-	-	-	60,196,912
Other liabilities	18,007,260	-	-	-	18,007,260
<b>Total</b>	<b>\$ 139,847,203</b>	<b>\$ 96,888,208</b>	<b>\$ 69,035,536</b>	<b>\$ 405,492,813</b>	<b>\$ 711,263,760</b>

<b>As of December 31, 2017</b>	<b>Less than one year</b>	<b>More than 1 year and less than 3 years</b>	<b>More than 3 years and less than 5 years</b>	<b>More than 5 years</b>	<b>Total</b>
Documented debt	\$ 25,918,516	\$ 29,320,404	\$ 20,473,272	\$ 131,209,737	\$ 206,921,929
Interest payable on documented debt	12,101,655	21,733,041	16,630,583	61,325,343	111,790,622
PIDIREGAS debt and capital lease obligations	29,267,762	15,312,426	19,880,773	184,960,015	249,420,976
Interest payable on PIDIREGAS debt	7,854,887	11,743,205	8,363,221	23,300,233	51,261,546
Suppliers and contractors	59,849,154	-	-	-	59,849,154
<b>Total</b>	<b>\$ 134,991,974</b>	<b>\$ 78,109,076</b>	<b>\$ 65,347,849</b>	<b>\$ 400,795,328</b>	<b>\$ 679,244,227</b>

<b>As of December 31, 2016</b>	<b>Less than one year</b>	<b>More than 1 year and less than 3 years</b>	<b>More than 3 years and less than 5 years</b>	<b>More than 5 years</b>	<b>Total</b>
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Documented debt	16,373,774	29,963,324	40,316,209	122,960,164	209,613,471
Interest payable on documented debt	11,649,717	20,990,298	17,517,821	64,302,533	114,460,369
PIDIREGAS debt and capital lease obligations	25,354,442	15,335,882	21,394,210	184,011,818	246,096,352
Interest payable on PIDIREGAS debt	5,806,029	8,897,601	5,976,378	14,915,297	35,595,305
Suppliers and contractors	17,888,728	-	-	-	17,888,728
Accounts payable MEM	2,011,804	-	-	-	2,011,804
Other liabilities	17,103,987	-	-	-	17,103,987
<b>Total</b>	<b>96,188,481</b>	<b>75,187,105</b>	<b>85,204,618</b>	<b>386,189,812</b>	<b>642,770,016</b>

**Market risk**

Due to its activities, the Entity has exposure to foreign currency and interest rate risks.

**Foreign currency exchange risk management**

To fund its working capital requirements and public works financing, the Entity contracts debt and carries out foreign currency-denominated transactions, consequently, it is exposed to exchange rate risk.

	<b>Total debt as of December 31, 2018 (amounts in millions of pesos)</b>	<b>Total debt as of December 31, 2017 (amounts in millions of pesos)</b>	<b>Total debt as of December 31, 2016 (amounts in millions of pesos)</b>
Local currency	154,334	169,449	159,278
Foreign currency	191,061	163,047	159,866

The Entity primarily uses interest rate and foreign currency swaps and foreign currency forward contracts to manage its exposure to interest rate and foreign currency fluctuations in accordance with its internal policies.

The carrying amounts of the Entity's foreign currency denominated monetary assets and monetary liabilities at the end of the period are discussed in Note 18.

**Foreign currency sensitivity analysis**

The Entity is mainly exposed to exchange rate differences between the Mexican peso, the US dollar and the Japanese yen.

The Entity's sensitivity analysis considers a 5% increase and decrease in the Mexican peso exchange rate against the other relevant foreign currencies. This 5% is the sensitivity rate used internally when the exchange risk is reported to key management personnel and represents Management's assessment of a reasonably possible change in exchange rates.

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The sensitivity analysis only includes open items denominated in foreign currency and adjusts their translation for a 5% change in foreign currency exchange rates at period end. The sensitivity analysis includes foreign loans as well as loans from the foreign operations within the Entity, where the loan is denominated in a currency other than the loaner's or borrower's currency. A positive number (as observed in the table below) indicates an increase in profit where the Mexican peso strengthens 5% against the relevant currency. For a 5% weakening of the Mexican peso against the relevant currency, there would be a comparable impact on the profit, and the balances below would be negative.

**As of December  
31, 2018**

	Documented	Pidiregas	Total
EUR	1,323	-	1,323
MXP	1,088,341	97,156	1,185,497
UDIS	-	-	-
USD	5,537,034	3,155,278	8,692,312
CHF	16,394	-	16,394
JPY	18,093	-	18,093
<b>Total</b>	<b>6,661,185</b>	<b>3,252,434</b>	<b>9,913,619</b>

**As of December  
31, 2017**

	Documented	Pidiregas	Total
EUR	2,181	-	2,181
MXP	(12,044)	( 7,577)	( 19,621)
UDIS	-	-	-
USD	6,509,112	3,434,535	9,943,647
CHF	40,864	-	40,864
JPY	29,285	-	29,285
<b>Total</b>	<b>6,569,398</b>	<b>3,426,958</b>	<b>9,996,356</b>

**As of December  
31, 2016**

	Documented	Pidiregas	Total
EUR	2,788	-	2,788
MXP	(13,692)	( 10,230)	( 23,922)
UDIS	-	-	-
USD	7,441,224	2,189,965	9,631,189
CHF	74,958	-	74,958
JPY	51,572	-	51,572
<b>Total</b>	<b>7,556,850</b>	<b>2,179,735</b>	<b>9,736,585</b>

The sensitivity analysis was estimated based on the fair value of the loans denominated in foreign currency.

Management believes that the impact of the inherent exchange risk is reflected in the electricity rates in the long-term through inflation adjustments and the peso to dollar exchange rate.

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**Interest rate risk management**

The Entity is exposed to interest rate risks for loans borrowed at variable interest rates. The Entity manages this risk by maintaining an appropriate mix of fixed and variable rate loans and by contracting derivative financial instruments designated as interest rate hedges:

	<b>Total debt as of December 31, 2018 (amounts in millions of pesos)</b>	<b>Total debt as of December 31, 2017 (amounts in millions of pesos)</b>	<b>Total debt as of December 31, 2016 (amounts in millions of pesos)</b>
Fixed rate	242,971	169,449	159,278
Variable rate	102,423	163,047	159,866

**Interest rate sensitivity analysis**

The sensitivity analysis below has been determined based on the exposure to interest rates for derivative and non-derivative financial instruments at the end of the reporting period.

For variable rate liabilities, an analysis is prepared assuming that the amount of the liability reported at the end of the period was the amount in effect throughout the whole year. When reporting interest rate risk internally to key management personnel, a 0.50-point increase or decrease is used for the Mexican Equilibrium Interbank Interest Rate (EIIR or TIIE, Spanish acronym) and a 0.01-point increase or decrease for the LIBOR. These changes represent Management's assessment of reasonably possible change in interest rates.

<b>As of December 31, 2018</b>	<b>Documented</b>	<b>Pidiregas</b>	<b>Total</b>
Fixed rate	54,246,845	20,982,217	<b>75,229,062</b>
Variable rate	6,905,058	9,814,947	<b>16,720,005</b>
	<b>61,151,903</b>	<b>30,797,164</b>	<b>91,949,067</b>
<b>As of December 31, 2017</b>	<b>Documented</b>	<b>Pidiregas</b>	<b>Total</b>
Fixed rate	92,505,411	29,479,408	<b>121,984,819</b>
Variable rate	5,051,063	19,077,222	<b>24,128,285</b>
	<b>97,556,474</b>	<b>48,556,630</b>	<b>146,113,104</b>
<b>As of December 31, 2016</b>	<b>Documented</b>	<b>Pidiregas</b>	<b>Total</b>
Fixed rate	135,798,870	16,317,238	<b>152,116,108</b>
Variable rate	7,258,703	21,117,105	<b>28,375,808</b>
	<b>143,057,573</b>	<b>37,434,343</b>	<b>180,491,916</b>

The sensitivity analysis of the debt without considering the derivative financial instruments was estimated based on the fair value of the loans.

The sensitivity analysis of the derivative financial instruments is described in Note 10.

Therefore, the hierarchy level of the Entity's Mark-to-Market for derivative financial instruments as of December 31, 2018 is level 2 due to the following:

- a) Inputs are other than quoted prices and include inputs within Level 1 that are observable, either directly or indirectly.
- b) Quoted prices for similar assets or liabilities in active markets.
- c) Inputs other than quoted prices that are observable for the assets or liabilities.

### **Fair value of financial instruments**

#### **Measurement of fair values**

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date in the principal or, in its absence, the most advantageous market to which the Group has access at that date. The fair value of a liability reflects its non-performance risk.

When one is available, the Entity measures the fair value of an instrument using the quoted price in an active market for that instrument. A market is regarded as 'active' if transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis.

If there is no quoted price in an active market, then the Entity uses valuation techniques that maximize the use of relevant observable inputs and minimize the use of unobservable inputs. The chosen valuation technique incorporates all of the factors that market participants would take into account in pricing a transaction.

If an asset or a liability measured at fair value has a bid price and an ask price, then the Entity measures assets and long positions at a bid price and liabilities and short positions at an ask price.

The best evidence of the fair value of a financial instrument on initial recognition is normally the transaction price – i.e. the fair value of the consideration given or received. If the Entity determines that the fair value on initial recognition differs from the transaction price and the fair value is evidenced neither by a quoted price in an active market for an identical asset or liability nor based on a valuation technique for which any unobservable inputs are judged to be insignificant in relation to the measurement, then the financial instrument is initially measured at fair value, adjusted to defer the difference between the fair value on initial recognition and the transaction price. Subsequently, that difference is recognized in profit or loss on an appropriate basis over the life of the instrument but no later than when the valuation is wholly supported by observable market data or the transaction is closed out.

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Fair value of financial instruments recognized at amortized cost

Management believes that the carrying amount of the financial assets and liabilities recognized at amortized cost in the Entity's condensed consolidated financial information approximates fair value, including the following:

Valuation techniques and assumptions used in determining fair value

	As of December 31, 2018		As of December 31, 2017		As of December 31, 2016	
	Carrying amount	Fair value	Carrying amount	Fair value	Carrying amount	Fair value
Cash and cash equivalents	\$ 78,483,263	\$78,483,263	\$ 67,237,901	\$ 67,237,901	\$ 42,266,944	\$ 42,266,944
Accounts receivable	99,175,895	99,175,895	95,067,522	95,067,522	63,236,187	63,236,187
Loans to workers	12,367,878	12,367,878	12,339,193	12,339,193	11,193,712	11,193,712
Suppliers and contractors	60,196,912	60,196,912	59,849,154	59,849,154	17,888,728	17,888,728
Documented debt	216,045,238	270,631,391	206,921,929	223,791,475	209,613,471	229,502,194
PIDIREGAS debt and capital lease obligations	247,091,781	258,427,789	249,420,976	322,731,186	246,096,352	343,764,174

The fair value of the Entity's financial assets and liabilities is determined as follows:

- The fair values of financial assets and financial liabilities with standard terms and conditions that are traded on active liquid markets are determined by references to quoted market prices.
- The fair value of other financial assets and liabilities (excluding derivative financial instruments) is determined in accordance with generally accepted pricing models, which are based on an analysis of discounted cash flows using current transaction prices observable in active markets and quoted prices for similar instruments.
- In conformity with the terms under which the ISDA (International Swaps and Derivatives Association) contracts were entered into, the counterparties or banking institutions are the appraisers who calculate and send the Mark-to-Market (which is the monetary valuation of the agreed upon transaction at a given time) on a monthly basis. CFE monitors this value and if there is any doubt or abnormal variance in the market value, CFE requests that the counterparty provide a new valuation.

Valuations at fair value recognized in the statement of financial position

The following table provides an analysis of the financial instruments valued at fair value after their initial recognition, except for the financial instruments whose carrying amount is reasonably equivalent to their fair value, grouped in levels from 1 to 2, based on the degree to which their fair value is observable:



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	<b>As of December 31, 2018</b>	<b>Level 1 As of December 31, 2017</b>	<b>As of December 31, 2016</b>
<b>Available-for-sale financial assets</b>			
Temporary investments	\$ 14,666,617	\$ 25,232,468	\$ 19,127,508
<b>Total</b>	<b>\$ 14,666,617</b>	<b>\$ 25,232,468</b>	<b>\$ 19,127,508</b>

**Fair value measurement as of December 31, 2018**

	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
<b>Assets:</b>				
Plan assets	-	195,389,375	-	195,389,375
Derivative financial instruments	-	17,783,141	-	17,783,141
<b>Total</b>	<b>-</b>	<b>213,172,516</b>	<b>-</b>	<b>213,172,516</b>
<b>Liabilities:</b>				
Debt	177,457,151	-	351,602,029	529,059,180
<b>Total</b>	<b>177,457,151</b>	<b>-</b>	<b>351,602,029</b>	<b>529,059,180</b>

**Fair value measurement as of December 31, 2017**

	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
<b>Assets:</b>				
Plan assets	-	167,467,661	-	167,467,661
Derivative financial instruments	-	16,084,937	-	16,084,937
<b>Total</b>	<b>-</b>	<b>183,552,598</b>	<b>-</b>	<b>183,552,598</b>
<b>Liabilities:</b>				
Debt	196,023,229	-	350,499,432	546,522,661
<b>Total</b>	<b>196,023,229</b>	<b>-</b>	<b>350,499,432</b>	<b>546,522,661</b>

**Fair value measurement as of December 31, 2016**

	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
<b>Assets:</b>				
Plan assets	-	166,665,713	-	166,665,713
Derivative financial instruments	-	15,646,025	-	15,646,025
<b>Total</b>	<b>-</b>	<b>182,311,738</b>	<b>-</b>	<b>182,311,738</b>
<b>Liabilities:</b>				
Debt	155,249,023	-	418,017,345	573,266,368
<b>Total</b>	<b>155,249,023</b>	<b>-</b>	<b>418,017,345</b>	<b>573,266,368</b>

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An analysis of the fair value of the derivative financial assets grouped in level 2, based on the degree to which their fair value is observable, is included in Note 10.

The levels referred to above are considered as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2: inputs other than quoted market prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices);
- Level 3: inputs are unobservable inputs for the asset or liability.

## **5. Cash and cash equivalents**

An analysis of Cash and cash equivalents as of December 31, 2018, 2017 and 2016 is as follows:

	<b>2018</b>	<b>2017</b>	<b>2016</b>
Cash on hand and cash in banks	\$ 63,807,825	\$ 41,996,612	\$ 23,130,615
Temporary investments	14,666,617	25,232,468	19,127,508
Stock certificates	8,821	8,821	8,821
<b>Total</b>	<b>\$ 78,483,263</b>	<b>\$ 67,237,901</b>	<b>\$ 42,266,944</b>

## **6. Accounts receivable, net**

An analysis of the accounts receivable affected by the effects of the adoption of IFRS 9 and IFRS 15 as of December 31, 2018, 2017 and 2016 is as follows:

	<b>2018</b>	<b>2017</b>	<b>2016</b>
Public consumers (*)	\$ 57,453,309	\$ 60,335,248	\$ 54,888,689
Government agency consumers (*)	22,060,633	20,887,093	18,559,103
	79,513,942	81,222,341	73,447,792
Impairment of receivables	(28,446,893)	(25,049,197)	(26,557,269)
	51,067,049	56,173,144	46,890,524
Other accounts receivable	37,205,453	33,512,184	14,149,041
Value added tax	10,903,393	5,382,194	2,196,623
<b>Total</b>	<b>\$ 99,175,895</b>	<b>\$ 95,067,522</b>	<b>\$ 63,236,187</b>

(\*) Includes estimates of revenue for electricity supply services that are in the process of being billed.

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An analysis of the impairment of receivables as of December 2018, 2017 and 2016 is as follows:

	2018	2017	2016
Beginning balance			\$ ( 18,032,595)
Adjustment due to the adoption of IFRS 9			( 14,029,829)
Adjusted beginning balance	\$ ( 25,049,197)	\$ ( 26,557,269)	( 32,062,424)
Increase	( 5,149,559)	( 5,229,270)	( 28,646,865)
IFRS 9 adjustment		4,559,551	21,105,431
Adjusted increase	( 5,149,559)	( 669,719)	( 7,541,434)
Charges	1,751,863	2,177,791	13,046,588
Ending balance	\$ ( 28,446,893)	\$ ( 25,049,197)	\$ ( 26,557,269)

## **7. Inventory of operating materials**

An analysis of inventory of operating materials as of December 31, 2018, 2017 and 2016 is as follows:

	2018	2017	2016
Spare parts and equipment	\$ 1,974,821	\$ 2,570,001	\$ 3,097,062
Fuel and lubricants	13,607,510	11,481,771	8,229,058
Nuclear fuel	4,160,798	3,994,473	3,226,186
	19,743,129	18,046,245	14,552,306
Allowance for obsolescence	(4,205,664)	(3,403,252)	(526,541)
Total	\$ 15,537,465	\$ 14,642,993	\$ 14,025,765

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**8. Plants, facilities and equipment, net**

An analysis of Plants, facilities and equipment, net as of December 31, 2018, 2017 and 2016 is as follows:

	<b>Plants, facilities and equipment, net</b>					
	<b>As of December 31, 2017</b>	<b>Additions</b>	<b>Retirements</b>	<b>Depreciation for the period</b>	<b>Reversal of impairment of assets</b>	<b>As of December 31, 2018</b>
Plants, facilities and equipment	\$2,087,721,243	\$31,335,858	\$ ( 9,596,057)		943,598	\$2,110,404,642
Capitalized spare parts	7,233,445	73,468	0			7,306,913
Construction-in progress	19,907,935	12,281,445	0			32,189,380
Advances and materials for construction	11,621,276	2,423,445				14,044,721
Subtotal	2,126,483,899	46,114,216	( 9,596,057)	-	943,598	2,163,945,656
Accumulated depreciation	(844,864,162)		8,587,680	(57,535,932)		( 893,812,414)
Impairment	(28,681,250)				2,074,000	( 26,607,250)
Total	\$1,252,938,487	\$46,114,216	\$ ( 1,008,377)	(\$57,535,932)	\$ 3,017,598	\$1,243,525,992

	<b>As of December 31, 2016</b>	<b>Additions</b>	<b>Retirements</b>	<b>Depreciation for the year</b>	<b>Impairment of assets</b>	<b>As of December 31, 2017</b>
Plants, facilities and equipment	2,040,715,940	\$66,682,159	\$( 19,676,856)	-	-	\$2,087,721,243
Capitalized spare parts	6,367,288	866,157	-	-	-	7,233,445
Construction in progress	18,433,272	1,474,663	-	-	-	19,907,935
Advances and materials for construction	10,856,715	764,561	-	-	-	11,621,276
Subtotal	2,076,373,215	69,787,540	( 19,676,856)	-	-	2,126,483,899
Accumulated depreciation	(789,200,941)	-	-	(55,663,221)	-	(844,864,162)
Impairment	-	-	-	-	(28,681,250)	(28,681,250)
Total	\$1,287,172,274	\$69,787,540	\$( 19,676,856)	\$ ( 55,663,221)	\$ ( 28,681,250)	\$1,252,938,487

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	<b>Plants, facilities and equipment, net</b>				
	<b>As of December 31, 2015</b>	<b>Additions</b>	<b>Retirements</b>	<b>Depreciation for the year</b>	<b>As of December 31, 2016</b>
Plants, facilities and equipment	\$1,782,810,425	293,157,884	\$ ( 35,252,369)		\$2,040,715,940
Capitalized spare parts	7,420,410		( 1,053,122)		6,367,288
Construction in progress	22,218,146		( 3,784,874)		18,433,272
Advances and materials for construction	10,912,877		( 56,162)		10,856,715
Subtotal	1,823,361,858	293,157,884	( 40,146,527)		2,076,373,215
Accumulated depreciation	(761,499,929)		29,291,391	(56,992,402)	(789,200,940)
Total	\$1,061,861,929	\$293,157,884	\$ ( 10,855,136)	(\$56,992,402)	\$1,287,172,275

Based on the periodic review of the fair values of plants, facilities and equipment in operation, CFE revalues its assets to ensure that the carrying amount does not differ significantly from the amount that would have been calculated using fair values at the end of the reporting period.

	<b>As of December 31, 2018</b>	<b>As of December 31, 2017</b>
Impairment of property, plant and equipment	\$ 2,074,000	\$(28,681,250)
Accumulated depreciation or impairment	943,598	
Impairment reversal	\$ 3,017,598	\$(28,681,250)

In addition to the impairment reversal, there were retirements of assets of \$ 943,275. Had the Entity valued plants and operating equipment, in their subsequent valuation, at cost, minus depreciation, minus impairment, their net carrying amount at 31 December 2018, 2017 and 2016 would have been \$1,034,032, \$1,016,496 and \$1,043,009, respectively.

Therefore, an analysis of fixed assets must be carried out to revalue the assets and review the useful life assigned to such, as well as to their useful life.

The impairment loss and subsequent partial reversal related to the plants and equipment of CFE Generation VI EPS power plants were included in the "Other comprehensive income items" caption in the amount of \$ 28,681,250 and \$ (2,074,323), respectively.

The impairment loss recognized in the year ended 31 December 2017 arises from the assessment of the negative figures reported in operating loss, and because the Management of the subsidiary CFE Generación VI identified indicators of impairment and conducted a study to verify this situation. Based on the results of this testing, the Entity opted to reduce the projections of its estimated future cash flows to consider the impact on plant factor variables, electricity payments, immediate and short-term plant closures, and the conditions imposed by the market for the application of the legacy contract.

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Specifically, the Salamanca Cogeneration Plant was impaired during fiscal year 2017 and was eventually written down to zero because there was no agreement with the PEMEX Salamanca refinery for the plant to deliver steam to the refinery and because the cost of the natural gas supplied by the LNG regasification plant in Manzanillo was not offset by the sales of the electricity generated by the Salamanca Cogeneration Plant.

As of December 31, 2018, CFE Generación VI recognized a net recovery of previously recorded impairment losses of \$ 2,074,323 due mainly to: (i) the introduction of new conditions in the CFE's steam supply contract with PEMEX and the contribution by PEMEX of a portion of the natural gas required for the operation of the plant; (ii) the impact of the significant reduction in the rate considered for calculating the payments for electricity, which is now \$ 117,486/MW-year, representing a rate decrease of 83% compared to the rate of prior years and causing a considerable impact on the fair values of the fixed assets of CFE Generación VI.

Based on the projections carried out, it was deemed appropriate to calculate the fair value of the Salamanca Cogeneration plant considering an annual nominal discount rate of 8.68% and a tax rate of 30%.

**Construction in progress** - the construction in progress balances as of December 31, 2018, 2017 and 2016 are as follows:

<b>Plant:</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
Steam	\$ 24,587	\$ 326	\$ 9,569
Hydroelectric	1,180,110	1,248,917	2,040,347
Nuclear power	589,870	1,316,029	1,273,489
Turbo gas and combined cycle	11,171,320	416,051	326,893
Geothermal	870,738	1,220,462	1,147,109
Internal combustion	682	682	107,694
Transmission lines, networks and substations	16,698,221	14,594,645	12,673,648
Offices and general facilities	1,653,852	1,110,823	854,523
<b>Total</b>	<b>\$ 32,189,380</b>	<b>\$ 19,907,935</b>	<b>\$ 18,433,272</b>

**Fair value measurement**

As mentioned in Note 1, a valuation of plants, facilities and equipment was made as of December 31, 2016. As a result of this process, the net increase in the value of these assets of \$ 210,725,169 was recognized in comprehensive income.

i. Fair value hierarchy

The fair value of plants, facilities and equipment in operation was determined by independent external appraisers with a recognized professional capacity and experience in terms of the property, plant and equipment that underwent the appraisal. The independent external appraisers provided the fair value of the plants, facilities and equipment as of December 31, 2016.

ii. Valuation technique and relevant unobservable inputs

The following table shows the valuation technique used to measure the fair value of investment properties, as well as the significant unobservable inputs used.

Valuation technique	Significant unobservable inputs	Interrelationship between the key unobservable inputs and the measurement of fair value
Discounted cash flows: The valuation model used the present value of the net cash flows that will be generated by the plants, facilities and equipment, considering the expected income growth rate. Net expected cash flows are discounted using risk-adjusted discount rates.	<p>Generation Useful life of the assets (30-60 years) Discount rate 7.67%-8.68%</p> <p>Transmission Useful life of the assets (30 years) Discount rate 7.67%</p> <p>Distribution Useful life of the assets (30 years) Discount rate 7.67%</p>	<p>The estimated fair value would increase (decrease) if:</p> <ul style="list-style-type: none"> <li>- Income growth is higher (lower)</li> <li>- The useful life is higher (lower)</li> <li>- The risk-adjusted discount rate is lower (higher)</li> </ul>

As mentioned in Note 2d) and Note 3i), CFE conducts impairment tests on the value of its long-term assets if circumstances indicate that the assets might be impaired. The impairment analysis for long-lived assets requires the Entity to estimate the recoverable amount of each asset, which is the greater of its fair value (minus any disposal costs) and its value in use.

As of December 31, 2017, the Entity recognized an impairment of \$ 28,681,250 since the value in use of some generation plants did not recover the investment's carrying amount. In 2018, the Entity detected that impairment indicators were not present at some of these plants, which resulted in a partial reversal of \$3,017,598.

## **9. Intangible assets and other assets**

An analysis of intangible assets and other assets as of December 31, 2018, 2017 and 2016 is as follows:

	2018	2017	2016
	<u>                    </u>	<u>                    </u>	<u>                    </u>
Rights of way (1)	\$ 30,444,834	\$ 29,979,671	\$ 29,903,611
Other assets	<u>3,843,963</u>	<u>2,857,315</u>	<u>2,740,209</u>
Total	\$ <u>34,288,797</u>	\$ <u>32,836,986</u>	<u>32,643,820</u>

(1) Includes rights of way in the amount of \$24,064,610 that are part of the assets contributed by the Federal Government to the Entity through INDAABIN.

## **10. Derivative Financial Instruments**

### **a. Accounting classifications and fair values**

CFE is exposed to interest rate and foreign currency risks which it tries to mitigate through a hedging program that includes the use of derivative financial instruments. The Entity mainly uses foreign exchange "Cross Currency Swaps" and "Forwards" to mitigate its foreign currency risk. To reduce its interest rate risk exposure, the Entity uses interest rate swaps.

Also, for the years ended 31 December 2017 and 2018, the derivative financial instruments have been designated as and qualify mainly as cash flow hedges since they are referenced to contracted debt. The effective portion of gains or losses on cash flow derivatives is recognized in equity under the concept of "Effects on the fair value of derivatives", and the ineffective portion is charged to profit or loss of the period.

The fair value of the Entity's financial instrument position as of December 31, 2018 amounted to \$17,783,141. As of December 31, 2017 and 2016, it amounted to \$16,084,937 and \$15,646,025, respectively.

### **Derivative Financial Instruments Held for Trading**

As of December 31, 2018, 2017 and 2016, the CFE had derivatives designated as held for trading whose fair value represented an asset of \$24,963 as of December 31, 2018, a liability of \$438,115 as of December 31, 2017, and a liability of \$494,776 as of December 31, 2016.

This transaction consists of a series of currency forwards that allow the Entity to lock in a JPY/USD exchange rate of 54.0157 JPY per USD over the established term of the transaction. As part of this transaction, CFE pays annual interest in U.S. dollars at a rate of 8.42%. These instruments have not been designated as hedges as required by the financial reporting standard, consequently, the valuation effect of these instruments is recognized in financial cost; a gain (loss) in said value offsets a loss (gain) in the underlying liability.



In addition to the series of forwards, the derivative includes two options: a long call through which the CFE has the right to buy Japanese yen in the spot market at maturity if the JPY/USD exchange rate falls to below 118.75 JPY per USD and a short call with an exercise price of 27.80 JPY per USD if the prevailing exchange rate on the settlement date is higher than the above-mentioned rate.

The Entity suspends cash flow hedge accounting when the derivative has matured, the hedge is not effective enough to offset the changes in the cash flows of the hedged item, or the Entity decides to revoke the hedge designation. The gains or losses recognized in Other comprehensive income and accumulated in Equity, remain in Equity and are recognized when the forecast transaction is ultimately recognized in profit or loss.

If the CFE decides to cancel the financial instrument classified as held for trading, it will need to recognize an estimated extraordinary loss as of December 31, 2018 and 2017 and January 1, 2017, as shown below:

### **Hedging instruments**

As of December 31, 2018, 2017 and 2016, CFE maintains its hedging derivative position on exchange rates and interest rates, as shown below:

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Instrument	Underlying	Type of hedge	Maturity	Primary position (Lines/Bonds)	Hedge Ratio	2018	2017	2016
CCS	Exchange rate and interest rate	Cash flow	2021	1100000074 to 76	100%	237,481	339,264	478,920
CCS	Exchange rate and interest rate	Cash flow	2022	1100000077 to 79	100%	71,531	93,469	-
CCS	Exchange rate and interest rate	Cash flow	2023	1100000080	100%	1,815,259	3,971,843	4,970,623
CCS	Exchange rate and interest rate	Cash flow	2024	1100002956	100%	3,835,201	5,081,946	5,623,271
CCS	Exchange rate and interest rate	Cash flow	2027	1100003606	100%	2,585,145	2,589,860	-
CCS	Exchange rate and interest rate	Cash flow	2032	1200002801	100%	387,053	(427,998)	-
CCS	Exchange rate and interest rate	Cash flow	2036	1200000551 Pidiregas Line	100%	4,718,366	4,763,554	4,927,132
CCS	Exchange rate and interest rate	Cash flow	2042	Bond 2042	55.3%	1,015,880	-	-
CCS	Exchange rate and interest rate	Cash flow	2047	Formosa 1 Bond	100%	1,210,485	-	-
CCS	Exchange rate and interest rate	Cash flow	2048	Formosa 2 Bond	100%	1,714,359	-	-
Participating								
Swap	Exchange rate and interest rate	Cash flow	2027	Bond 2027	100%	83,185	(108,664)	-
Forwards	Exchange rate	Cash flow	>1 year	Sale of energy	100%	115	105,058	41,352
IRS	Interest rate	Cash flow	2017	1200000751	100%	-	-	( 1,805)
IRS	Interest rate	Cash flow	2018	1200000851	100%	-	-	( 1,047)
IRS	Interest rate	Cash flow	2020	1100003807, 1200001251 and 1200001451	100%	84,118	114,720	102,355
Subtotal						<b>17,758,178</b>	<b>16,523,052</b>	<b>16,140,801</b>
CCS	Exchange rate JPY/USD	Trading		Line of credit in yens	N/A	<b>24,963</b>	<b>(438,115)</b>	<b>( 494,776)</b>
<b>Total in thousands of Mexican pesos</b>						<b>17,783,141</b>	<b>16,084,937</b>	<b>15,646,025</b>

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<b>Instrument</b>	<b>Underlying</b>	<b>Maturity</b>	<b>As of December 31, 2018</b>	<b>As December 31, 2017</b>	<b>1 January 2017</b>
FWD JPY/USD	Exchange rate and interest rate	2036	24,963	(438,115)	(494,776)
Total			<b>24,963</b>	<b>(438,115)</b>	<b>(494,776)</b>

The table above includes the Mark to Market of the hedging derivatives. As of December 31, 2018 the total Mark to Market corresponding to the hedging and trading derivatives was \$17,783,141 based on their carrying amount.

The results of the effectiveness tests for these hedging instruments showed that the relationships are highly effective. CFE estimated that the amount of ineffectiveness is minimum. The economic relationship criteria is documented in the Hedge File and included in the hedging instrument, mainly the lines of credit and bonds included in the hedge ratio.

Fair value (Mark to Market - MTM) is determined using valuation techniques at present value to discount future cash flows, which are estimated using observable market data. The carrying amount of OCI includes the fair value (mark to market) and the reclassifications to profit and loss correspond to accrued interest and currency hedging (gain or loss).

As of December 31, 2018, the effects of OCI in the upcoming years (current portfolio) is as follows:  
Amounts in millions of Mexican pesos

<b>Year</b>	<b>MTM</b>	<b>OCI</b>	<b>Results (Interest and exchange rate)</b>
2019	15,719	15,124	595
2020	18,064	15,143	2,921
2021	20,806	15,111	5,695
2022	23,607	15,101	8,506
2023	23,854	15,100	8,754

#### **b. Fair value measurement**

The valuation techniques for estimating the fair value of derivative instruments are described in the accounting policy mentioned above, depending on the derivative instrument for which the fair value is estimated. CFE uses the corresponding technique to estimate such value.

#### **Adjustment of fair value or Mark to Market by credit risk**

IFRS 13 requires derivative instruments to include an adjustment for the risk that the financial counterparties will have difficulty meeting their obligations and accordingly, the fair values of derivatives are adjusted for this risk. This is known as a Credit Value Adjustment.

To reflect counterparty risk, the valuation is adjusted based on the probability of default and the recovery rate with the counterparties of the derivative positions.

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The net of the fair value of derivative financial instruments (MTM) effective as of December 31, 2018, before considering credit risk, amounts to \$ 18,027,897 which is included in the balance sheet and represents the amount in favor of the Entity with the counterparties.

The net of the fair value of derivative financial instruments (MTM) effective as of December 31, 2017, before considering credit risk, amounts to \$ 17,112,665 which is included in the balance sheet and represents the amount in favor of the Entity with the counterparties.

The net of the fair value of derivative financial instruments (MTM) effective as of December 31, 2016, before considering credit risk, amounts to \$ 15,842,227 which is included in the balance sheet and represents the amount in favor of the Entity with the counterparties.

CFE applies a credit valuation adjustment (CVA) to reflect the creditworthiness of the counterparty of the derivative financial instrument. The CVA is the market value of the counterparty credit risk and reflects the estimated fair value of the hedging required to cover the counterparty credit risk included in such instruments

**Methodology to adjust fair value or Mark to Market by credit risk**

This mechanism was approved by the Interinstitutional Delegate Committee for Financial Risk Management associated to the financial position and price of fossil fuels (CDIGR), as the methodology for adjusting derivative financial instruments to fair value.

As of December 31, 2018, the adjustments to fair values based on the CVA are shown below:

Counterparty	Fair value MTM subject to CVA	Adjusted fair value MTM	Adjustment amount
BBVA BANCOMER	227,559	225,761	1,798
BNP PARIBAS	3,051,653	2,977,803	73,850
CITIBANAMEX	2,232,949	2,146,936	86,013
CREDIT AGRICOLE	1,687,633	1,679,195	8,438
CREDIT SUISSE	771,993	767,593	4,400
DEUTSCHE BANK	1,081,491	1,074,569	6,922
GOLDMAN SACHS	5,035,369	4,976,669	58,700
HSBC	1,088,699	1,082,711	5,988
JP MORGAN	7,694	7,650	44
MORGAN STANLEY	7,793	7,763	30
SANTANDER	392,195	390,156	2,039
BARCLAYS BANK	2,442,869	2,421,372	21,497
GOLDMAN SACHS (Trading)	-	24,963	-24,963
	<b>18,027,897</b>	<b>17,783,141</b>	<b>244,756</b>

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As of December 31, 2017, the adjustments to fair values based on the CVA are shown below:

Counterparty	Fair value MTM subject to CVA	Adjusted fair value MTM	Adjustment amount
CREDIT SUISSE	233,994	233,994	0
DEUTSCHE BANK	3,102,561	3,102,561	0
MORGAN STANLEY	2,811,977	2,663,721	148,256
SANTANDER	3,133,420	3,133,420	0
BNP PARIBAS	1,409,163	1,408,675	488
BBVA BANCOMER	2,270,034	2,270,034	0
GOLDMAN SACHS	2,234,522	2,234,522	0
CITIBANAMEX	128,596	128,426	170
CREDIT AGRICOLE	14,663	14,663	0
HSBC	15,476	4,875	10,601
JP MORGAN	5,915	-424,143	430,058
BARCLAYS BANK	1,752,344	1,752,304	(40)
J Aron (Trading)	0	-438,115	438,115
	<b>17,112,665</b>	<b>16,084,937</b>	<b>1,027,648</b>

As of December 31, 2016, the adjustments to fair values based on the CVA are shown below:

Counterparty	Fair value MTM	Adjusted fair value MTM	Adjustment amount
CREDIT SUISSE	63,702	62,991	711
DEUTSCHE BANK	3,680,308	3,616,013	64,295
MORGAN STANLEY	2,514,752	2,507,685	7,067
SANTANDER	3,416,469	3,363,103	53,366
BNP PARIBAS	1,715,731	1,696,583	19,148
BBVA BANCOMER	2,278,255	2,235,287	42,968
GOLDMAN SACHS	2,567,647	2,559,533	8,114
CITIBANAMEX	52,299	52,117	182
CREDIT AGRICOLE	20,013	19,818	195
HSBC	20,149	20,019	130
JP MORGAN	7,678	7,653	25
J Aron (Trading)	-494,776	-494,777	1
	<b>15,842,227</b>	<b>15,646,025</b>	<b>196,202</b>

### Fair Value hierarchy or Mark-to-Market

To increase consistency and comparability of fair value measurements and related disclosures, IFRS established a fair value hierarchy that categorizes into three levels the inputs to valuation techniques. This hierarchy grants the highest priority to quoted prices (unadjusted) in active markets for assets and liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3).

The availability of relevant inputs and their relative subjectivity might affect the selection of appropriate valuation techniques. However, the fair value hierarchy prioritizes the inputs to valuation techniques.

### **Level 2 inputs**

As explained above, and according to the terms under which the ISDA contracts were entered into, the counterparties or banking institutions are the appraisers who calculate and send the Mark-to-Market calculation monthly.

Therefore, the hierarchy level of the Entity's Mark-to-Market for derivative financial instruments as of December 31, 2018 is level 2 due to the following:

- a) Inputs are other than quoted prices and include inputs within Level 1 that are observable, either directly or indirectly.
- b) Quoted prices for similar assets or liabilities in active markets.
- c) Inputs other than quoted prices that are observable for the assets or liabilities

### **c. Financial risk management**

CFE is exposed to the following financial risks for maintaining and using derivative financial instruments:

- Credit risk
- Liquidity risk
- Market risk

### **Credit risk**

Credit risk associated with financial derivative instruments is the risk of experiencing a financial loss if a counterparty to these financial instruments fails to meet its financial obligations. To mitigate its credit risk, the Entity follows a policy of maintaining a significant portion of its positions with investment grade counterparties and substantially limiting its positions with counterparties below investment grade.

To manage credit risk, the Entity monitors the credit rating and the probability of default of the counterparty, which is applied to the market value of the derivative.

The carrying amount of the derivative financial assets represents the maximum exposure to credit risk. As of December 31, 2018, 31 December 2017, and 31 December 2016, this amount amounted to \$17,783,141, \$16,084,937 and \$15,646,025, respectively.

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**Liquidity risk**

The liquidity risk associated with financial derivative instruments is the risk that CFE may encounter difficulties in meeting the financial obligations arising from these instruments.

To manage credit risk, the Entity monitors the market value of the derivative and the use by the operating lines (threshold).

Exposure to liquidity risk for holding derivative financial instruments arises from the carrying amount of the financial liabilities corresponding to these instruments. As of December 31, 2018, 2017 and 2016, this amount amounted to \$72,615, \$589,533 and \$497,640, respectively.

The table below lists the contractual maturities of the derivative financial instruments based on payments terms.

	Amounts in millions of Mexican pesos		
	Less than one year	More than 1 year and less than 5 years	Total
<b>As of December 31, 2018</b>			
IRS	266	105	371
CCS	9,818	51,020	60,838
<b>Total payable</b>	<b>10,084</b>	<b>51,125</b>	<b>61,209</b>
IRS	334	128	462
CCS	6,675	45,868	52,543
<b>Total receivable</b>	<b>7,009</b>	<b>45,996</b>	<b>53,005</b>
	Amounts in millions of Mexican pesos		
	Less than one year	More than 1 year and less than 5 years	Total
<b>As of December 31, 2017</b>			
IRS	1,425	1,431	2,856
CCS	5,676	22,395	28,071
Forwards	6,070	.	6,070
<b>Total payable</b>	<b>13,171</b>	<b>23,826</b>	<b>36,997</b>
IRS	1,013	1,762	2,775
CCS	5,210	23,865	29,075
<b>Total receivable</b>	<b>6,223</b>	<b>25,627</b>	<b>31,850</b>
	Amounts in millions of Mexican pesos		
	Less than one year	More than 1 year and less than 5 years	Total
<b>As of December 31, 2016</b>			
IRS	216	2,972	3,188
CCS	5,452	17,466	22,918
Forwards	3,456	.	3,456
<b>Total payable</b>	<b>9,124</b>	<b>20,438</b>	<b>29,562</b>

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IRS	256	2,913	3,169
CCS	3,738	18,110	21,848
Forwards	1,600		1,600
<b>Total receivable</b>	<b>5,594</b>	<b>21,023</b>	<b>26,617</b>

### **Market risk**

The market risk associated with derivative financial instruments is the risk that changes in market prices, such as exchange rates and interest rates, will affect CFE's income for holding derivative financial instruments.

CFE uses financial derivative instruments to manage market risk, generally seeking access to hedge accounting to control or immunize the volatility that could arise in the results.

#### *a) Currency exchange risk*

55.3% of CFE's debt is denominated in foreign currency, mainly in US dollars, whereas most of CFE's assets and revenues are denominated in pesos. As a result, CFE is exposed to devaluation risks of the peso against the dollar. In conformity with its risk management policy, CFE has contracted currency swaps to reduce the impact of currency fluctuations. The effect of this instrument is to replace the obligation to pay fixed interest rates in dollars for an obligation to pay a fixed rate in pesos. As of December 31, 2018, 2017 and 2016, CFE maintains foreign exchange swaps as a hedge of its debt in foreign currency of \$108,837, \$72,135 and \$53,663 million pesos, respectively.

To hedge the exchange risks of the \$32 billion debt in yens, CFE uses a series of exchange rate forwards under which it purchases Japanese yens. The market value of this transaction as of December 31, 2018, 31 December 2017 and 31 December 2016 was \$24,973 \$(438,115) and \$(494,776), respectively. These derivative instruments were not designated as hedges.

#### Sensitivity analysis for exchange rate effects

A possible and reasonable strengthening (weakening) of the MXN/USD and JPY/USD exchange rate as of December 31, 2018 would have affected the fair value of the total position of the derivative financial instruments in foreign currency, and thus, profit and loss of the period and other comprehensive income (since some of them are designated as hedges), as shown in the following table:

<b>Instrument</b>	<b>+100 pips</b>	<b>-100 pips</b>
Cross Currency	55,295	(55,295)
JPY/USD	2,694	(2,694)
FWD	5	(5)
<b>Total</b>	<b>57,994</b>	<b>(57,994)</b>

This analysis assumes that the other variables, in particular interest rates, remain constant (amounts in thousands of pesos).



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*b) Interest rate risk*

29.7% of CFE's debt accrues interest at variable rates, which is calculated at the TIIE rate in the case of debt denominated in pesos. As of December 31, 2018, 2017 and 2016, CFE hedged \$3,912, \$4,833 and \$3,390, respectively, of its peso-denominated debt bearing variable interest rates.

Interest rate sensitivity analysis

A potential and reasonable strengthening (weakening) of interest rates as of December 31, 2018 would have affected the fair value of the total position of derivative financial instruments associated with variable interest rates, and thus, profit and loss of the period and other comprehensive income (since some of them are designated as hedges), as shown in the following table:

<b>2018</b>	<b>+ 100 basis points</b>	<b>- 100 basis points</b>
Interest rate swaps	39,125	(39,125)

This analysis assumes that the other variables, in particular interest rates, remain constant.

**11. Short- and long-term debt**

An analysis of the Entity's debt as of December 31, 2018, 2017 and 2016 is as follows:

	<b>2018</b>	<b>2017</b>	<b>2016</b>
Bank loans	\$ 7,494,715	1,433,452	-
Documented debt	15,554,180	\$ 25,918,516	\$ 16,373,774
PIDIREGAS debt and capital lease obligations	<u>25,357,245</u>	<u>29,267,762</u>	<u>25,354,442</u>
Total short-term debt	<b>48,406,140</b>	<b>56,619,730</b>	<b>41,728,216</b>
Documented debt	200,491,058	181,003,413	193,239,697
PIDIREGAS debt and capital lease obligations	<u>221,734,536</u>	<u>220,153,214</u>	<u>220,741,910</u>
Total long-term debt	<b>422,225,594</b>	<b>401,156,627</b>	<b>413,981,607</b>
Total debt	<b>\$ 470,631,734</b>	<b>\$ 457,776,357</b>	<b>\$ 455,709,823</b>

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An analysis of the debt and each its concepts is as follows:

As of December 31, 2018 and 2017, the following affiliated entities have bank loans with third parties:

	2018	2017	2016
CFE Internacional LLC	\$ 394,273	\$ -	\$ -
CFEnergía	7,100,442	1,433,452	-
<b>Total bank loans</b>	<b>\$ 7,494,715</b>	<b>\$ 1,433,452</b>	<b>\$ -</b>

**a) CFE Internacional LLC**

In December 2018 CFE International LLC acquired a short-term loan from JPMorgan Chase Bank NA that is repayable in a term of 30 days, with repayment due by January 17, 2019, and which bears interest at a rate equal to the LIBOR plus a margin of 1.25%.

**b) CFEnergía**

- i. On December 22, 2017, CFEnergía contracted a revolving line of credit with Grupo Financiero Banorte of USD\$ 85 million, which can be withdrawn in dollars and/or local currency for up to the aforementioned amount. Drawdowns in Mexican pesos bear interest equal to the 28-day Mexican weighted interbank rate (TIIE) + 95 and drawdowns in U.S. dollars bear interest equal to the one-month London Interbank Offered Rate (LIBOR) + 195.

On August 17, 2018, CFEnergía entered into an agreement with Banorte to amend the current account loan agreement entered into on December 22, 2017 in order to increase the available line of credit to USD\$250,000.

- ii. On December 20, 2018, CFEnergía contracted a revolving line of credit with Monex for up to USD\$ 25 million, which may be drawn down in U.S. dollars or Mexican pesos. Drawdowns in Mexican pesos bear interest equal to the Mexican weighted interbank rate (TIIE) + 2 percentage points and drawdowns in U.S. dollars bear interest equal to the LIBOR + 1.75 percentage points, as indicated on the corresponding promissory notes.
- iii. An analysis of bank loans at 31 December 2018 is as follows:
  - Drawdowns made against the line of credit with BANORTE on December 27 in the amounts of \$4,450 and \$150, which will mature on January 28, 2019. Interest accrued on the drawdowns mentioned above amounted to \$4,860, which was recognized as part of comprehensive financing cost. The Entity repaid the principal plus accrued interest on this loan on January 22, 2019.
  - As of December 31, CFEnergía obtained a one-time special line of credit from BANORTE in the amount of \$2,000,000, which will mature on February 4, 2019. This drawdown will bear

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interest at a rate equal to the Mexican weighted interbank rate (TIIE) plus 1 percentage point. The Entity repaid the principal plus accrued interest on this loan on January 28, 2019.

- On December 27, 2018, the Entity drew down \$495,000 against its line of credit with MONEX. This drawdown will mature on January 28, 2019. Accrued interest on the drawdown amounted to \$582, which was recognized as part of comprehensive financing cost. The Entity repaid the principal plus accrued interest on this loan on January 22, 2019.
- iv. As of December 31, 2017, bank loans are comprised of the drawdowns made on December 27, 2017 in the amount of USD\$ 65 million and USD\$ 150 million, both of which mature on January 22, 2018.
- v. CF Energía repaid the drawdowns in due time and form in January 2018.
- vi. CF Energía repaid the drawdowns referred to in the preceding points in January 2019.
- vii. The loan agreement stipulates affirmative and positive loan covenants that the Entity must adhere to. These loan covenants require the Entity to refrain from doing the following until the loan has been repaid in full:
  - a) Modify its corporate purpose, except for adding complementary or secondary activities to its main activity;
  - b) Modify its line of business and the nature of its principal activities or cease engaging in them altogether;
  - c) Initiate its dissolution or liquidation;
  - d) Merge into another company or carry out a corporate transformation or spin-off, etc;

The Entity agrees that its non-compliance with any of these obligations would be sufficient cause for the Bank to demand the immediate settlement of the loan, plus all accrued interest and related accessory charges.

Debt movements for the years ended 31 December 2018, 2017 and 2016, are as follows:

Type of debt	Balance as of December 31, 2017	Drawdowns	Payments	Foreign currency exchange and interest rate differences	Balance as of December 31, 2018
Documented debt					
	\$ 208,355,380	\$ 61,988,412	\$ ( 53,994,736)	\$ ( 303,818)	\$ 216,045,238
Pidiregas debt	127,195,310	23,323,873	( 19,919,622)	485,470	131,085,031
Conditioned investment debt (PEEs)	122,225,666	-	( 5,019,811)	( 1,199,105)	116,006,750
Total	\$ 457,776,356	\$ 85,312,285	\$ ( 78,934,168)	\$ ( 1,017,453)	\$ 463,137,019

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Type of debt	Balance as of December 31, 2016	Drawdowns	Payments	Foreign currency exchange and interest rate differences	Balance as of December 31, 2017
Documented debt	\$ 209,613,471	\$ 30,530,644	\$ ( 28,143,335)	\$ ( 3,645,400)	\$ 208,355,380
Pidiregas debt	110,173,004	30,670,710	( 14,115,711)	( 467,310)	127,195,310
Conditioned investment debt (PEEs)	135,923,352	-	( 4,530,187)	( 9,167,499)	122,225,666
Total	\$ 455,709,823	\$ 61,201,355	\$ ( 46,789,232)	( 12,345,590)	\$ 457,776,356

Type of debt	Balance as of December 31, 2015	Drawdowns	Payments	Foreign currency exchange and interest rate differences	Balance as of December 31, 2016
Documented debt	\$ 182,989,179	48,456,548	\$ ( 42,617,845)	\$ 20,785,590	\$ 209,613,471
Pidiregas debt	96,190,756	23,021,838	( 16,396,768)	7,357,173	110,173,000
Conditioned investment debt (PEEs)	112,125,851	-	( 2,648,434)	26,445,935	135,923,352
Total	\$ 391,305,786	\$ 71,478,386	\$ ( 61,663,047)	\$ 54,588,698	\$ 455,709,823

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An analysis of the debt and each its concepts is as follows:

**Documented debt**

An analysis of the documented debt as of December 31, 2018, 2017 and 2016 is as follows:

				2018		2017		2016	
Foreign debt	Type of credit	Weighted interest rate	Maturities	Local currency	Foreign currency (thousand)	Local currency	Foreign currency (thousand)	Local currency	Foreign currency (thousand)
IN US DOLLARS: at an exchange rate									
of \$19.6829 per U.S. dollar at December 2018	BILATERAL	Fixed and variable – 2.32%	Various through 2023	1,892,101	96,129	1,720,686	86,962	2,696,259	130,057
and of \$19.7867 at December 2017	BONDS	Fixed and variable – 5.25%	Various through 2045	96,020,078	4,878,350	97,696,627	5,206,964	107,124,453	5,436,730
	REVOLVING	Fixed and variable – 3.43%	Various through 2020	1,459,081	74,129	2,660,378	134,453	1,529,348	73,770
	SYNDICATED	Fixed and variable – 3.3%	2023	11,809,740	600,000	-	-	-	-
TOTAL IN U.S. DOLLARS				111,181,000	5,648,608	102,077,691	5,428,379	111,350,060	5,640,557
IN EUROS: at an exchange rate of									
\$22.4691 per euro at 31 December 2018 and	BILATERAL	Fixed and variable – 2%	Various through 2024	24,710	1,100	41,741	1,768	44,622	2,051
of \$23.6062 at December 2017	REVOLVING	Fixed and variable – 1.8%	Various through 2020	2,307	103	4,946	210	9,859	78,080
TOTAL EUROS				27,017	1,203	46,687	1,978	54,481	80,131
IN SWISS FRANCS: at an exchange rate of									
\$19.944 per Swiss franc at December 2018									
and of \$20.1721 at December 2017	REVOLVING	Fixed and variable – 0.93%	Various through 2021	338,458	16,970	909,359	45,080	1,575,319	77,626
TOTAL SWISS FRANCS				338,458	16,970	909,359	45,080	1,575,319	77,626
IN JAPANESE YENS: at an exchange rate of									
\$0.179 per Japanese yen at December 2018									
And of \$0.1746 at December 2017	BILATERAL	Fixed and variable – 1.43%	Various through 2021	388,555	2,170,700	676,485	3,874,487	1,034,732	5,852,554
Bond		Fixed - 3.83%	2032	388,555	2,170,700	676,485	3,874,487	1,034,732	5,852,554
Assets received for financial instruments,				5,728,000	32,000,000	5,587,200	32,000,000	5,657,600	32,000,000
net (Note 10b)				(423,970)		(255,199)		(71,027)	
				5,304,030	32,000,000	5,332,001	32,000,000	5,586,573	32,000,000

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TOTAL JAPANESE YENS		<u>5,692,585</u>	<u>34,170,700</u>	<u>6,008,487</u>	<u>35,874,487</u>	<u>6,621,305</u>	<u>37,852,554</u>
	TOTAL FOREIGN DEBT	<u>117,239,060</u>		<u>109,042,224</u>		<u>119,601,165</u>	

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				2018		2017		2016	
				Local	Foreign	Local	Foreign	Local	Foreign
Domestic debt	Type of credit	Weighted interest rate	Maturities	currency	currency (thousand)	currency	currency (thousand)	currency	currency (thousand)
LOCAL CURRENCY	BANKING	Fixed and variable – 9.03%	Various through 2023	7,500,000		7,600,000		18,700,000	
	STOCK MARKET	Fixed and variable – 7.94%	Various through 2027	70,987,330		79,000,000		66,500,000	
TOTAL MEXICAN PESOS:				78,487,330		86,600,000		85,200,000	
IN UDIS: at an exchange rate of of \$6.2266 per UDI at December 2018 and of \$5.269 at December 2017									
	STOCK MARKET	Fixed - 4.49%	2032	20,054,478		11,141,672		5,196,355	
TOTAL UDIS				20,054,478		11,141,672		5,196,355	
		TOTAL DOMESTIC DEBT		98,541,808		97,741,672		90,396,355	
Summary									
Total foreign debt				117,239,060		109,042,224		119,601,165	
Total domestic debt				98,541,808		97,741,672		90,396,355	
Interest payable				2,602,680		2,476,342		1,936,494	
Unamortized debt expenses				(2,338,310)		(2,338,310)		(2,320,543)	
Total documented debt				216,045,238		206,921,929		209,613,471	
Short-term debt									
Short-term interest payable				12,951,500		23,442,173		14,437,280	
				2,602,680		2,476,343		1,936,494	
Total short-term				15,554,180		25,918,516		16,373,774	
Long-term debt									
Unamortized debt expenses				202,829,368		183,341,723		195,560,240	
				(2,338,310)		(2,338,310)		(2,320,543)	
Total long-term				200,491,058		181,003,413		193,239,697	
Total short- and long-term				216,045,238		206,921,929		209,613,471	

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The short-term and long-term documented debt liabilities mature as follows:	
31/12/2018	Amount
2019	15,554,180
2020	21,938,674
2021	25,068,107
2022	246,420
2023	21,249,781
2024	24,787,945
2025	21,183,937
SUBSEQUENT YEARS	<u>86,016,194</u>
TOTAL	<u><u>216,045,238</u></u>



## **Documented debt**

An analysis of drawdowns from January 1 to December 31, 2018 is as follows:

### **Domestic debt**

In February 2018, CFE drew down \$2,500 (billions) against its revolving line of credit with BBVA Bancomer, S.A., and in March it drew down \$2,500 (billion) of such line of credit, that bears monthly interest at the 28-day TIIE rate plus 0.48%.

In May 2018, CFE drew down \$5,000 million pesos against its revolving line of credit with Banco Santander, S.A., that bears monthly interest at the 28-day TIIE rate plus 0.20%.

In June 2018, CFE placed three Stock Certificate issuances in the domestic market for a total amount of \$15,290 million pesos.

1. Second reopening of the CFE 17 series for an amount of \$2,550 million pesos that bears semi-annual interest at a fixed rate of 8.18% and matures in December 2027.
2. First reopening of the CFE 17 series for an amount of 1,342,321,400 UDIS, equal to \$8,053 (billion pesos), that bears semiannual interest at a fixed rate of 4.54% and matures in September 2032.
3. Of the CFE 18 series, Stock Certificates were auctioned in the amount of \$4,687 million pesos that bear variable interest at the 28-day TIIE rate plus 0.30% and mature in June 2021.

In July 2018, CFE drew down \$4,000 million pesos against its revolving line of credit with Banco Santander, S.A., that bears monthly interest at the 28-day TIIE rate plus 0.20% and \$3,000 million pesos against its revolving line of credit with BBVA Bancomer, S.A., that bear monthly interest at the 28-day TIIE rate plus 0.30%, both with monthly interest payments.

In October, CFE drew down \$4,000 million pesos against its revolving line of credit with Banco Santander, S.A., that bears monthly interest at the 28-day TIIE rate plus 0.20% and \$3,000 million pesos against its revolving line of credit with BBVA Bancomer, S.A., that bear monthly interest at the 28-day TIIE rate plus 0.30%, both with monthly interest payments.

In April 2017, CFE drew down \$2,500 million pesos against its revolving line of credit with Banco Santander (México), S.A., and in July 2017 it drew down an additional \$2,500 million pesos, that bear monthly interest at the 28-day TIIE rate plus 0.1%. These amounts were repaid in October 2017.

In July 2017, CFE placed two Stock Certificate issues:

1. Of the CFE 17 series, Stock Certificates were auctioned in the amount of \$7,000 million pesos at a fixed interest of 8.2% and mature in December 2027.
2. Of the CFE 17-2 series, Stock Certificates were auctioned in the amount of \$1,000 million pesos that bears variable interest at the 28-day TIIE rate plus 0.4% and matures in July 2020.

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In August 2017, CFE drew down \$2,500 million pesos against its revolving line of credit with BBVA Bancomer, S. A. that bears monthly interest at the 28-day TIIE rate plus 0.48%. This amount was repaid in November 2017.

In October 2017, CFE placed three Stock Certificate issuances:

1. First reopening of the CFE 17 series in the amount of \$3,000 million pesos that bears monthly interest at a fixed rate of 8.2% and matures in December 2027.
2. First reopening of the CFE 17-2 series in the amount of \$1,500 million pesos that bears monthly variable interest at the 28-day TIIE rate plus 0.4% and matures in July 2020.
3. Base placement of the CFE 17U series in the amount of 944,092,800 UDIS that bears interest at a fixed rate of 4.5%, and matures in September 2032.

In November 2017, CFE drew down \$2,500 million pesos against its revolving line of credit with Banco Santander (México), S.A., that bears monthly interest at the 28-day TIIE rate plus 0.1%. This amount was repaid in December 2017.

### **Foreign debt**

In July 2018, CFE drew down \$21 million US dollars against its line of credit with Banamex, S.A. to finance enriched uranium for the Laguna Verde Central, for a term of three years and semiannual payments and interest payments, at the 6-month USD LIBOR rate + 0.90%.

In July 2018, CFE drew down \$300 million US dollars against the syndicated loan (BBVA Bancomer, S.A. is the Administrative Agent), at the USD LIBOR rate plus 1.15%, This amount was repaid in August 2018.

In August, CFE drew down \$900 million US dollars against the syndicated revolving loan signed in July 2018 for a total of \$ 1,260 million US dollars with Mizuho Bank, LTD., as the administrative agent, at the USD LIBOR rate plus 0.95%, for a term of 5 years.

In September, CFE drew down \$ 5 million US dollars against the line of credit with BBVA, S.A. Madrid, to finance Spanish goods and services guaranteed by Compañía Española de Seguros de Crédito a la Exportación (the Spanish Export Credit Agency).

In November, CFE drew down \$212 million US dollars against its line of credit with Banamex, S.A. to finance enriched uranium for the Laguna Verde Central, for a term of three years and semiannual payments and interest payments, at the 6-month USD LIBOR rate + 0.90%.

In January, CFE drew down \$126.3 million dollars against its line of credit with Banco Santander, (Mexico), S. A. to finance enriched uranium for the Laguna Verde Central, for a term of three years and semiannual payments and interest payments, at the 6-month USD LIBOR rate + 1.5%.

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In February, CFE drew down \$200 million US dollars against the syndicated loan (BBVA Bancomer, S.A. is the Administrative Agent), at the USD LIBOR rate plus 1.2%. This amount was repaid in November 2017.

In addition, to finance various payments of Financed Public Work (OPF, Spanish acronym) projects, \$ 750 million dollars were placed through the issue of an international bond. Such bond bears a fixed interest rate of 5.2%, and the last payment will be in September 2047.

Lastly, to finance imports from Japan, Canada and Switzerland, CFE drew down \$115,488,810 JPY (equal to \$1 million dollars) against its line of credit with Japan Bank for International Cooperation (JBIC), \$2 million dollars against its line of credit with Export Development of Canada (EDC), as well as \$ 218,050 CHF (equal to \$229,745 million dollars) against its line of credit with UBS Switzerland AG (UBS).

In January 2016, CFE drew down \$1,250 million US dollars against the syndicated loan (BBVA Bancomer, S.A. is the Administrative Agent), at the USD LIBOR rate plus 1.15%. This amount was repaid on November 14.

On September 29, 2016, the Entity successfully completed a private bond placement of USD\$300 million with Morgan Stanley & Co. acting as the placement agent. This 20-year private placement bears interest at a fixed rate of 4.39% and matures in September 2036.

On October 18, 2016, the Entity placed a fixed-rate bond in a tranche of USD \$1,000 million with Deutsche Bank Trust Company Americas. The bond bears a fixed coupon rate of 4.75% and is for a term of 10 years and four months, with final maturity in February 2027.

On October 19, the Entity placed a fixed-rate bond under Regulation S of USD\$375 with Deutsche Bank Trust Company Americas. The bond bears a fixed coupon rate of 5.00% and is for a term of 20 years, with final maturity in September 2036.

In the first quarter of 2016, the Entity drew down USD\$17 million (in its equivalent amount in JPY) against its line of credit with Japan Bank for International Cooperation (JBIC).

In the second quarter of 2016, the Entity drew down USD\$24 million (in its equivalent amount in JPY and CHF) against its line of credit with JBIC, Banco Bilbao Vizcaya (BBVA), UBS, and Export Development Canada (EDC).

In the third quarter of 2016, the Entity drew down USD\$8 million (in its equivalent amount in JPY and CHF) against its line of credit with JBIC and UBS.

In the fourth quarter of 2016, the Entity drew down USD\$4 million (in its equivalent amount in JPY) against its line of credit with JBIC EDC.

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**i) Debt for long-term Productive Infrastructure Projects (PIDIREGAS, Spanish acronym) and capital lease obligations**

An analysis of the balances and maturities of the PIDIREGAS (direct investment) debt and capital lease obligations as of December 31, 2018, 2017 and 2016 is as follows:

	Direct investment PIDIREGAS	Conditioned investment PEE's	Total 2018	Total 2017	Total 2016
<u>Short term</u>	\$ 16,780,375	\$ 8,576,870	\$ 25,357,245	\$ 29,267,762	\$ 25,354,442
<u>Long term</u>					
2019	-	6,774,975	6,774,975	6,795,755	5,780,384
2020	479,951	7,561,762	8,041,713	8,516,672	9,555,498
2021	171,891	8,447,531	8,619,422	7,895,360	9,460,320
2022	2,196,057	9,445,522	11,641,579	11,985,413	11,933,890
2023	1,577,996	10,570,839	12,148,835	11,650,024	9,373,246
2024	4,520,686	11,243,258	15,763,944	16,374,707	16,702,876
Subsequent years	105,358,075	53,385,993	158,744,067	156,935,283	157,935,696
Total long-term	\$ 114,304,656	\$ 107,429,880	\$ 221,734,535	\$ 220,153,214	\$ 220,741,910
Total	\$ 131,085,031	\$ 116,006,750	\$ 247,091,780	\$ 249,420,976	\$ 246,096,352

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**-Direct investment (PIDIREGAS):**

As of December 31, 2018, 2017 and 2016, the debt corresponding to the acquisition of plants, facilities and equipment through PIDIREGAS was recognized in accordance with International Financial Reporting Standards, an analysis is as follows:

Credit amount	Term of the agreement	2018 (thousands of units)				2017 (thousands of units)				2016 (thousands of units)			
		Local currency		Foreign currency		Local currency		Foreign currency		Local currency		Foreign currency	
		Short term	Long term	Short term	Long term	Short term	Long term	Short term	Long term	Short term	Long term	Short term	Long term
Foreign debt													
- million dollars	2018									44,787	-	2,160	-
7.4 million dollars	2019	144,872	-	7,360	-	539,009	145,636	27,241	7,360	498,499	717,332	24,046	34,601
41 million dollars	2020	537,369	268,684	27,301	13,651	540,203	810,304	27,301	40,952	565,994	1,414,985	27,301	68,253
36.2 million dollars	2026	89,070	623,492	4,525	31,677	89,540	716,320	4,525	36,202	-	-	-	-
293.1 million dollars	2029	537,603	5,232,168	27,313	265,823	540,438	5,800,198	27,313	293,136	566,240	6,643,364	27,313	320,449
431.6 million dollars	2032	1,185,703	7,310,297	60,240	371,403	1,191,956	8,540,805	60,240	431,644	1,248,865	10,197,445	60,240	491,884
823.8 million dollars	2036	865,091	15,350,493	43,951	779,890	869,654	16,301,098	43,951	823,841	798,249	16,980,848	38,504	819,088
698.5 million dollars	2047	983,500	12,765,641	49,967	648,565	1,367,973	22,954,350	69,137	1,160,090	-	-	-	-
1,418.90 million dollars	2048	1,072,434	26,855,367	54,487	1,364,401	-	-	-	-	-	-	-	-
Total foreign debt		5,415,642	68,406,142	275,144	3,475,410	5,138,773	55,268,711	259,708	2,793,225	3,722,634	35,953,974	179,564	1,734,275

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<b>Domestic debt</b>									
- million pesos	2016							-	36,598
- million pesos	2017							88,611	-
- million pesos	2018	-	-	1,915,888	-	669,445	3,156,305		
554.6 million pesos	2019	554,554	-	1,011,552	542,528	778,024	1,607,113		
867.9 million pesos	2020	656,653	211,268	1,143,268	895,664	910,344	2,554,330		
293.7 million pesos	2021	121,828	171,891	181,999	293,720	121,828	475,719		
3,494.90 million pesos	2022	1,298,802	2,196,057	2,265,874	3,493,333	1,702,554	6,754,195		
2,154.70 million pesos	2023	576,694	1,577,996	792,720	2,154,690	486,945	2,336,413		
5,823.50 million pesos	2024	1,302,860	4,520,686	1,578,043	5,748,122	1,099,555	5,826,698		
2,477.30 million pesos	2025	491,312	1,985,983	644,745	2,736,176	670,430	4,035,698		
11,617.70 million pesos	2026	2,051,277	9,566,386	2,550,125	12,027,493	2,120,550	16,085,716		
8,697.00 million pesos	2027	1,332,149	7,364,884	1,612,159	9,360,896	-	-		
1,976.20 million pesos	2028	261,525	1,714,698	-	-	-	-		
4,315.50 million pesos	2033	444,262	3,871,210	-	-	526,735	2,258,328		
1,506.00 million pesos	2036	83,664	1,422,294	83,664	1,505,959	83,664	1,589,623		
12,013.30 million pesos	2042	726,944	11,286,341	753,692	12,013,283	726,948	12,766,982		
<b>Total domestic debt</b>		<u>9,902,524</u>	<u>45,889,694</u>	<u>14,533,729</u>	<u>50,771,864</u>	<u>9,985,633</u>	<u>59,483,718</u>		
		9,902,524	45,889,694	14,533,729	50,771,864	9,985,633	59,483,718		
Interest payable		1,462,209		1,473,412		1,018,221			
<b>CEBURES</b>			8,821		8,821		8,821		
<b>Total PIDIREGAS debt</b>		<u>16,780,375</u>	<u>114,304,657</u>	<u>21,145,914</u>	<u>106,049,396</u>	<u>14,726,488</u>	<u>95,446,513</u>		

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- a. As of December 31, 2018, 2017 and 2016, minimum payment commitments on PIDIREGAS are as follows:

	2018	2017	2016
PIDIREGAS	190,029,498	176,974,622	144,741,265
less:			
Unaccrued interest	60,415,497	49,788,133	34,577,085
Present value of obligations	129,614,001	127,186,489	110,164,180
less:			
Current portion of obligations	15,318,165	21,145,914	14,726,488
Long-term portion of PIDIREGAS	114,295,836	106,040,575	95,437,692
CEBURES	8,821	8,821	8,821
Total CEBURES and PIDIREGAS	114,304,657	106,049,396	95,446,513

**Capital lease obligations (conditioned investment)**

As of December 31, 2018, CFE has entered into 26 contracts with private investors, called independent energy producers (PIE, Spanish acronym). Such contracts establish an obligation for CFE to pay various considerations to the PIEs in exchange for the PIEs to guarantee the provision of electricity supply services, based on a previously agreed-upon generation capacity through power generation plants financed and built by said investors.

The future payments obligation includes: a) rules for quantifying the acquisition amount of the power generating plants whenever a contingent event occurs that, under the terms of each contract, is considered an event of force majeure, applicable from the construction stage of each project until the termination of the contracts; and b) fixed charges for power generation capacity, as well as variable charges for the operation and maintenance of the generation plants, which are determined in accordance with the variable terms set forth in the contracts, applicable from the start-up testing stage until the termination of the contracts.

**a) Classification as leases**

The Entity has assessed that 23 of the contracts with independent producers have an embedded lease on the power generation plant in accordance with IFRIC 4 Determining Whether an Arrangement Contains a Lease, and IFRIC 12 Service Concession Agreements, and such leases, also qualify as financial leases in accordance with IAS 17 Leases.

The lease agreements are for 25-year terms. The average annual interest rate on these lease agreements is 11.19%.

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	Present value of minimum					
	<u>Minimum lease payments</u>			<u>lease payments</u>		
	As of December 31, 2018	As of December 31, 2017	As of December 31, 2016	As of December 31, 2018	As of December 31, 2017	As of December 31, 2016
Short-term	\$18,103,949	\$15,631,775	\$22,473,286	\$8,576,870	\$8,121,848	\$10,627,954
From one to five years	83,338,889	86,151,051	102,490,749	42,800,629	38,507,349	36,140,956
More than five years	98,336,124	103,923,053	144,744,587	64,629,251	75,596,469	89,154,442
Total accumulated equity	\$199,778,962	\$205,705,879	\$269,708,622	\$116,006,750	\$122,225,666	\$135,923,352

An analysis of the capital lease obligation as of December 31, 2018 is as follows:

Name	Lease beginning date	Original amount of the obligation	Foreign currency		Local currency	
			Short term	Long term	Short term	Long term
CT MERIDA III	JUN-00	242,685	14,908	122,588	293,427	2,412,896
CC HERMOSILLO	OCT-01	156,144	8,193	97,523	161,267	1,919,534
CC SALTILLO	NOV-01	152,383	7,777	88,716	153,078	1,746,192
TUXPAN II	DEC-01	283,133	14,091	180,237	277,347	3,547,578
EL SAUZ BAJIO	MAR-02	399,773	18,713	275,973	368,318	5,431,951
CC MONTERREY	MAR-02	330,440	16,229	169,685	319,425	3,339,895
CC ALTAMIRA II	MAY-02	233,234	10,278	169,717	202,297	3,340,524
CC RIO BRAVO II	MAY-02	232,108	11,265	135,880	221,733	2,674,515
CC CAMPECHE	MAY-03	196,554	8,759	125,811	172,396	2,476,317
CC TUXPAN III AND IV	MAY-03	587,064	25,427	398,756	500,477	7,848,680
CC MEXICALI	JUL-03	569,345	25,667	325,718	505,201	6,411,072
CC CHIHUAHUA III	SEP-03	275,327	12,267	157,589	241,452	3,101,806
CC NACO NOGALES	OCT-03	238,016	10,363	108,188	203,973	2,129,449
CC ALTAMIRA III AND IV	DEC-03	600,897	25,774	370,223	507,299	7,287,069
RIO BRAVO III	APR-04	312,602	12,263	218,685	241,364	4,304,364
CC LA LAGUNA II	MAR-05	367,578	13,180	268,210	259,421	5,279,161
CC RIO BRAVO IV	APR-05	270,697	9,189	205,069	180,869	4,036,347
CC VALLADOLID III	JUN-06	288,160	9,694	211,310	190,813	4,159,188
CC TUXPAN V	SEP-06	284,997	7,752	233,698	152,586	4,599,845
CC ALTAMIRA V	OCT-06	532,113	12,366	458,157	243,402	9,017,867
CC TAMAZUNCHALE	JUN-07	482,562	12,973	393,329	255,344	7,741,863
CCC NORTE	AUG-10	450,097	12,521	360,756	246,452	7,100,733
CCC NORTE II	JAN-14	427,733	9,024	382,212	177,610	7,523,034
Total			308,673	5,458,030	6,075,551	107,429,880

- (1) The short-term balance does not include interest in the amount of \$2,941,850 and \$2,639,798 as of June 31, 2018 and December 31, 2017, respectively.



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**a) Other contracts with independent power producers**

Currently, the CFE has three contracts in operation with wind farm private investors under which, as opposed to the contracts mentioned in the note above, the obligation established for CFE is to only pay for the wind energy that was generated and delivered; therefore, these contracts are not considered capital leases. The contracts are as follows:

CE Oaxaca I  
CE Oaxaca II, III and IV  
CE La Venta III  
CE Sureste I

**b) Service provider contracts**

Pemex-Valladolid gas pipeline  
Coal terminal

These service provider contracts are not considered financial leases since they do not meet the requirements of IFRS for such specific treatment.

**12. Other Accounts Payable and Accrued Liabilities**

An analysis of other accounts payable and accrued liabilities as of December 31, 2018, 2017 and 2016 is as follows:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Suppliers and contractors	\$ 60,196,912	\$ 59,849,154	\$ 17,888,728
Accounts payable MEM	-	-	2,011,804
Employees	4,680,424	4,213,117	3,765,564
Deposits from users and contractors	25,619,843	22,974,717	21,103,369
Other liabilities	18,736,913	20,761,052	17,103,988
<b>Total</b>	<b>\$ 109,234,092</b>	<b>\$ 107,798,040</b>	<b>\$ 61,873,453</b>

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**13. Other Taxes and Duties**

An analysis of Taxes and duties payable as of December 31, 2018, 2017 and 2016 is as follows:

**Payable by CFE**

	2018	2017	2016
Income tax payable on behalf of third parties	\$ 389,296	\$ 411,290	\$ 270,792
Mexican Social Security Institute (IMSS) contributions	755,693	698,046	680,038
Rights for the use and utilization of national waters	813,342	370,375	224,741
Payroll tax	61,492	45,556	54,574
Federal Housing Financing Agency (INFONAVIT) contributions	10,760	12,481	10,895
Special tax on production and services (IEPS)	50,002	-	-
VAT payable	848,082	-	985,948
Subtotal	2,928,667	1,537,748	2,226,988

**Withholdings**

Income tax withheld from employees	571,327	738,923	693,591
Withheld value added tax	40,056	68,441	67,946
Income tax on interest paid abroad	35,342	27,993	26,846
Income tax on foreign residents	31	45,677	57,698
0.5% to contractors	29,303	50,404	18,010
Income tax on professional fees and rent to individuals	2,932	7,101	6,302
0.2% to contractors	517	547	342
Other	2,372	422	14,134
	681,880	939,508	884,869

**Total Taxes and Duties**

\$ 3,610,547	\$ 2,477,256	\$ 3,111,857
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**14. Other Long-term Liabilities**

An analysis of other long-term liabilities as of December 31, 2018, 2017 and 2016 is as follows:

	2018	2017	2016
Third-party contributions	\$ 5,839,143	\$ 8,039,903	\$ 33,707,331
Asset retirement obligation (a)	8,610,763	11,101,187	12,888,114
Other provisions (b)	6,001,289	4,283,577	3,561,400
<b>Total</b>	<b>\$ 20,451,195</b>	<b>\$ 23,424,667</b>	<b>\$ 50,156,845</b>

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**(a) Asset retirement obligation**

	Beginning balance	Increase	Charges	Ending balance per the financial statements
2016	9,013,006	4,507,459	632,351	12,888,114
2017	12,888,114	576,840	2,363,767	11,101,187
2018	11,101,187	508,347	2,998,771	8,610,763

As of December 31, 2018, 2017 and 2016, other long-term liabilities include decommissioning provisions, which are required to demonstrate the availability of resources for the Entity to decommission radioactive elements in accordance with the Nuclear Regulatory Commission (NRC) standard. Decommissioning provisions are measured at present value using a discount rate of 3% and they also cover likely losses arising from the Entity's obligations related to the remediation of environmental contamination.

**(b) Other provisions**

	Beginning balance	Increase	Charges	Ending balance per the financial statements
2016	1,137,652	2,561,399	137,651	3,561,400
2017	3,561,400	3,033,598	2,311,421	4,283,577
2018	4,283,577	1,717,712	-	6,001,289

**15. Employee Benefits.**

CFE has employee benefits plans for terminations of employee relationships and for retirements for reasons other than a restructuring event. The retirement benefits plan considers the number of years of service completed by the employee and the employee's compensation at the retirement date. The retirement benefits plan includes the seniority bonus that employees are entitled to receive upon termination of the employee relationship, as well as other defined benefits.

The actuarial valuations of the plan assets and the present value of the defined benefit obligation are performed by independent actuaries using the projected unit credit method.

- a. The economic assumptions in nominal and real terms used in the years ended 31 December 2018, 2017 and 2016 are as follows:

	2018	2017	2016
Discount rate	9.00%	7.75%	8.00%
Expected return rate on plan assets	9.00%	7.75%	8.00%
Salary increase rate	4.02%	4.02%	4.02%

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- b. An analysis of the net cost for the period of each of the three years ended 31 December 2018, 2017 and 2016 is as follows:

	<b>2018</b>	<b>2017</b>	<b>2016</b>
Service cost	\$ 7,698,916	\$ 7,463,000	\$ 11,174,000
Interest cost	40,475,082	40,348,000	43,202,000
Interest on the Plan Assets	(28,178,282)	-	-
Recognition of previous service	544,062	92,316	461,713
Adjustments due to changes to plan	-	-	(166,665,713)
Net periodic expense	<u>\$ 20,539,778</u>	<u>\$ 47,903,316</u>	<u>\$ (111,828,000)</u>

The net actuarial gains or losses derive from the variations in the assumptions used by the actuary to calculate the labor liabilities, as a result of the average wage increase rate and the increase in pensions. The net gains and losses recognized in the years ended 31 December 2018, 2017 and 2016 are disclosed in paragraph d. below.

The amount included as a liability in the Statement of Financial Position for each one of the years ended 31 December 2018, 2017 and 2016 with respect to the one the Entity has regarding its defined benefit plan is as follows:

	<b>2018</b>	<b>2017</b>	<b>2016</b>
Defined benefit obligation	\$ 522,841,964	\$ 529,248,000	\$ 527,780,000
Fair value of the plan assets and promissory notes received from the Ministry of Finance and Public Credit (SHCP, Spanish acronym).	195,389,375	167,467,661	166,665,713
Net projected obligation	<u>\$ 327,452,589</u>	<u>\$ 361,780,339</u>	<u>\$ 361,114,287</u>

- c. A reconciliation between the beginning and ending balances of the fair value of the defined benefits obligation for the three years ended 31 December 2018, 2017 and 2016 is as follows:

	<b>2018</b>	<b>2017</b>	<b>2016</b>
Beginning balance (nominal amount)	\$ 529,248,000	\$ 527,784,000	\$ 630,371,000
Current service cost	7,698,916	7,463,000	11,174,000
Interest cost	40,475,082	40,348,000	43,505,000
Past service cost	544,062	92,316	1,341,000
Actuarial gains and losses	(15,588,861)	(12,192,264)	44,064,000
Benefits paid	(39,534,335)	(35,045,000)	(35,162,080)
Adjustments due to changes to plan	-	-	(166,665,713)
Other	(900)	797,948	(843,207)
Defined benefit obligation	<u>\$ 522,841,964</u>	<u>\$ 529,248,000</u>	<u>\$ 527,784,000</u>

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- d. A reconciliation between the beginning and ending balances of the fair value of the plan assets for the three years ended 31 December 2018, 2017 and 2016 is as follows:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Beginning balance (nominal amount)	\$ 167,467,661	\$ 166,665,713	\$ 5,287,428
Return on plan assets	(63,916)	(32,000)	(122,509)
Expected returns	27,985,630	883,948	420,081
Plan assets (promissory notes received from SHCP)	-	-	161,080,713
	<u>\$ 195,389,375</u>	<u>\$ 167,467,661</u>	<u>\$ 166,665,713</u>

Trust to manage the Pension and Retirement Reserve funds.

On October 31, 2018, CFE received from the Ministry of Finance and Public Credit the first promissory note of \$892,729,928, which generated a return of \$116,252,404.

CFE created the Scotiabank Inverlat S.A. FID 11040961 Trust that manages the Pension and Retirement Reserve funds, as of December 31, 2018 the trust balance amounts to \$5,939,719.

- e. The most important assumptions used in determining the net cost for the period of the pension plans, for each of the three years ended December 31, 2018, 2017 and 2016, are as follows:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Discount rate	9.00%	7.75%	8.00%
Expected return rate on plan assets	9.00%	7.75%	8.00%
Salary increase rate	4.02%	4.02%	4.02%

As a result of this review, various clauses that mainly affect the retirements caption were amended, and an estimate of the effect of these changes was recognized as a reduction in the Entity's labor obligations and consequently, a positive effect in profit or loss.

Employees who as of the effective date of this Contract and throughout 2016 meet the age and/or seniority requirements for retirement, may elect to exercise their right to retirement under the terms set forth in the Collective Labor Agreement for 2014-2016.

As of 1 January 2017, any employee may request and obtain, through the SUTERM, his or her retirement with 100% of the average salary of the last four years worked for the CFE, according to the following criteria: men will be candidates provided, a) they have completed 30 years of service and are at least 65 years old, or b) they have completed 40 years of service without age limit; women will be candidates provided, a) they have completed 30 years of service and are at least 60 years old, or b) they have completed 35 years of service without age limit

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f. Sensitivity analysis

In order to carry out the sensitivity analysis, a +/- .5 points change in the discount rate was considered, as such, the considered scenarios considered the following financial assumptions:

Concept	Scenario		
	Lower discount rate	Base	Higher discount rate
Long-term inflation	3.5% annual	3.5% annual	3.5% annual
Discount rate	8.5% annual	9.0% annual	9.5% annual
Salary increase rate	4.2% annual	4.2% annual	4.2% annual
Minimum wage increase rate	3.5% annual	3.5% annual	3.5% annual

Based on these assumptions, the following liabilities were determined (amounts in millions of pesos):

Defined Benefit Obligation	Scenario		
	Lower discount rate	Base	Higher discount rate
Seniority premium	\$ 24,532	\$ 23,421	\$ 22,401
Severance pay and compensations	2,193	2,134	2,076
Pensions and retirements	517,815	493,132	470,471
Seniority bonus	4,307	4,155	4,012
<b>Total</b>	<b>\$ 548,847</b>	<b>\$ 522,842</b>	<b>\$ 498,960</b>

The percentage difference between the liabilities determined in the two additional scenarios, with respect to the base scenario, are shown in the following tables:

Concept	Scenario		
	Base	Lower discount rate	Variance
Seniority premium	\$ 23,421	\$ 24,532	4.74%
Severance pay and compensations	2,134	2,193	2.79%
Pensions and retirements	493,132	517,815	5.01%
Seniority bonus	4,155	4,307	3.66%
<b>Total</b>	<b>\$ 522,842</b>	<b>\$ 548,847</b>	<b>4.05%</b>

Concept	Scenario		
	Base	Higher discount rate	Variance
Seniority premium	\$ 23,421	\$ 22,401	-4.36%
Severance pay and compensations	2,134	2,076	-2.72%
Pensions and retirements	493,132	470,471	-4.60%
Seniority bonus	4,155	4,012	-3.44%
<b>Total</b>	<b>\$ 522,842</b>	<b>\$ 498,960</b>	<b>-3.78%</b>

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**16. Income Tax**

Since 2015, CFE was transformed into a Productive State Enterprise and is no longer a Decentralized Public Company; consequently, it no longer is eligible for the tax regime set out in Title III of the Income Tax Law (Non-Profit Legal Entities) but rather applies the provisions set out in Title II of the aforementioned Law (general regime for Corporations and Legal Entities).

An analysis of the income tax (benefit) expense recognized in the years ended 31 December 2018m 2017 and 2016 is as follows:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Current income tax	\$ 7,824,886	\$ 3,528,959	\$ -
Deferred income tax	(60,188,123)	(76,867,662)	-
Income tax	<u>\$ (52,363,237)</u>	<u>\$ (73,338,703)</u>	<u>\$ -</u>

The deferred tax related to items recognized in comprehensive income in the years ended 31 December 2018, 2017 and 2016 is as follows:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Labor obligations	\$ <u>(20,505,785)</u>	\$ -	\$ -

An analysis of deferred taxes recognized in the statement of financial position as of December 31, 2018 and 2017 is comprised of the following items:

	<u>2018</u>	<u>2017</u>
<b>Deferred income tax assets:</b>		
Labor obligations	\$ 128,495,379	\$ 81,960,603
Provisions	1,167,952	1,932,596
Tax losses from prior years	6,500,850	-
Allowance for doubtful accounts	351,718	10,900
Asset retirement obligation	3,057,014	406,018
Trade advances	-	-
Allowance for obsolete	60,827	-
Deposits	39,702	-
Inventories	-	117,647
Fixed assets	13,880,982	-
Benefit for the deduction of intangible asset for tax purposes	89,725,979	-
Deferred revenue	1,698,475	-
	<u>\$ 244,978,878</u>	<u>\$ 84,427,764</u>
<b>Total deferred tax assets</b>	<u><b>\$ 244,978,878</b></u>	<u><b>\$ 84,427,764</b></u>

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	<u>2018</u>	<u>2017</u>
<b>Deferred income tax liabilities</b>		
Fixed assets	\$ 86,534,271	\$ -
Accounts receivable	804,423	-
Distributions receivable	10,225	-
Deposits and advances	68,389	7,560,102
<b>Total deferred tax liabilities</b>	<u>87,417,308</u>	<u>7,560,102</u>
<b>Total deferred income tax asset</b>		
	<u>\$ 157,561,570</u>	<u>\$ 76,867,662</u>

The changes in the deferred tax amounts for the years ended 31 December 2018 and 2017 are as follows:

	<u>2018</u>	<u>2017</u>
Balance at beginning of year	\$ 76,867,662	\$ -
Benefit on deferred taxes	80,693,908	76,867,662
Balance at end of year	<u>\$ 157,561,570</u>	<u>\$ 76,867,662</u>

An analysis of the items that comprise unrecognized deferred tax assets is as follows:

	<u>2018</u>	<u>As of December 31,</u> <u>2017</u>	<u>2016</u>
Labor obligations	\$ 22,508,363	\$ 41,353,810	\$ 158,334,086
Provisions	68,815	1,578,617	4,024,396
Tax losses from prior years	62,025,419	45,363,420	22,947,625
Allowance for doubtful accounts	8,306,765	11,152,450	10,089,862
Asset retirement obligation	617,251	3,838,253	-
Customer advances	2,094,092	8,368,235	6,326,532
Allowance for obsolete inventories	13,237	790,380	157,962
Fixed assets	10,424,087	(2,740,482)	
Other		39,124	10,064,658
Unrealized revenue		1,255,905	
<b>Total deferred tax assets</b>	<u>\$ 106,058,030</u>	<u>\$ 110,999,712</u>	<u>\$ 211,945,121</u>



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Deferred Assets	As of December 31, 2018	As of December 31, 2017
Statutory rate	\$ (1,727,087)	\$ 10,453,701
Annual inflation adjustment	8,245,149	4,254,966
Non-deductible expenses	4,701,597	736,779
Subsidy income	(24,421,590)	(19,774,440)
Effect of deferred taxes not recognized from prior periods	(39,267,666)	(69,009,709)
<b>TOTAL</b>	<b>\$ (52,161,306)</b>	<b>\$ (73,338,703)</b>

## 17. Other comprehensive income

Other comprehensive income as of December 31, 2018, 2017 and 2016 is as follows:

	Revaluation of plants, facilities and equipment	Remeasurement of employee benefit liabilities	Recognition of the assumption by the Federal Government of the benefits and retirement payment obligations	Cash flow hedging	Deferred tax in other comprehensive income	Total other comprehensive income
Balance as of December 31, 2015	\$ 177,883,816	\$ (67,522,852)	\$ -	\$ (2,397,640)	\$ -	\$ 112,758,604
Comprehensive income (loss) for the period	210,725,169	(44,064,000)	161,080,204	6,752,359	-	334,493,732
Balance as of December 31, 2016	\$ 388,608,985	\$ (111,586,852)	\$ 161,080,204	\$ 9,149,999	\$ -	\$ 447,252,336
Comprehensive income (loss) for the period	(28,681,250)	(12,192,264)		10,401,629	-	(30,471,885)
Balance as of December 31, 2017	\$ 359,927,735	\$ (123,779,116)	\$ 161,080,204	\$ 19,551,628	\$ -	\$ 416,780,451
Comprehensive income (loss) for the period	1,580,651	39,591,661		(12,252,497)	20,505,785	49,425,600
Balance as of December 31, 2018	\$ 361,508,386	\$ (84,187,455)	\$ 161,080,204	\$ 7,299,131	\$ 20,505,785	\$ 466,206,051

## 18. Foreign Currency Position

As of December 31, 2018. 2017 and 2016, CFE had the following foreign currency denominated assets and liabilities:

Name	2018					
	Assets			Liabilities		
	Cash and cash equivalents	Suppliers	Domestic debt	Foreign debt	Capital lease obligations and PIDIREGAS	Foreign Currency Position
U.S. dollars	127,920	234,417	-	5,918,083	9,517,257	15,541,837
Euros	-	-	-	1,202	-	1,202
Japanese yens	-	-	-	2,170,700	-	2,170,700
Swiss francs	-	-	-	16,970	-	16,970

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Name	2017					
	Assets			Liabilities		
	Cash and cash equivalents	Suppliers	Domestic debt	Foreign debt	Capital lease obligations and PIDIREGAS	Foreign Currency Position
U.S. dollars	1,215,536	21,659	-	5,428,378	9,096,684	13,331,185
Euros	505	-	-	2,360	-	1,855
Japanese yens	1,335,513	-	-	3,874,487	-	5,210,000
Swiss francs	31,644	-	-	45,080	-	13,436

Name	2016					
	Assets			Liabilities		
	Cash and cash equivalents	Suppliers	Domestic debt	Foreign debt	Capital lease obligations and PIDIREGAS	Foreign Currency Position
U.S. dollars	248,696	139,595	-	5,640,557	8,206,499	13,737,955
Euros	-	-	-	2,628	-	2,628
Japanese yens	102,217	-	-	5,852,554	-	5,750,337
Swiss francs	-	-	-	77,626	-	77,626

*Note: The JPY foreign debt includes the \$ 32 billion bond in yens.*

*Note: The PIDIREGAS debt in dollars includes \$ 5,766,703 million dollars of the financial lease debt with External Producers (as per IFRS).*

The foreign currency denominated assets and liabilities were translated to local currency at the exchange rate published in the Official Gazette by Banco de Mexico as of December 31, 2018, 2017 and 2016, as shown below:

	2018	2017	2016
U.S. dollar	19.6829	19.7867	20.7314
Japanese yen	0.1790	0.1746	0.1768
Swiss francs	19.9440	20.1721	20.2936
Euro	22.4691	23.6062	21.7534

## 19. Transactions with PEMEX

As of December 2018, Mr. Manuel Bartlett Diaz, CEO of CFE, was appointed member of the Board of Directors of Petróleos Mexicanos.

As of December 31, 2018, CFE through its affiliated entity CFEnnergía, S.A. de C.V. carried out transactions with Pemex for the acquisition of fuel in the following amounts:

**Account receivable (thousands of pesos):**

PEMEX Transformación Industrial \$3,338,542

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**Income (thousands of pesos):**

PEMEX Transformación Industrial \$2,878,053

**Account payable (thousands of pesos):**

PEMEX Transformación Industrial \$ 5,510,007

**Purchases (thousands of pesos):**

PEMEX Transformación Industrial \$60,415,053

PMI Trading México 833,335

PMI Trading Limited 7,419,842

**20. Contingencies and Commitments**

**Contingencies**

CFE is party to several lawsuits and claims filed against it in the normal course of its business. The amounts of such lawsuits are deemed immaterial with respect to the Entity's current financial position and its expected financial performance in the following years.

**Commitments**

<b>Operating lease commitments</b>	<b>Amount</b>
Less than one year	143,853,965
1 to 5 years	692,031,187
More than 5 years	142,495,026

**a. Natural gas supply contracts**

The Entity has entered into contracts for services related to the reception, storage, transportation, regasification and supply of liquefied natural gas. The contractual commitments consist of acquiring, during the supply period, daily base amounts of natural gas as set forth in the respective contracts.

**b. Financed public work contracts**

As of December 31, 2018, CFE has entered into several financed public work contracts and the payment commitments will begin on the dates when the private investors complete the construction of each of the investment projects and deliver the related the assets to CFE for their operation. The estimated amounts of such financed public work contracts and the estimated dates of construction completion and startup of operations are shown in the table included on the next page.

**Transmission lines and substations:**

Capacity Kmc	MVA	Estimated amount of the contract expressed in millions of:	
		Dollars	Pesos
1,585.61	5,267.51	695.16	13,682.45

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**Generation:**

MCA capacity	Estimated amount of the contract expressed in millions of:	
	Dollars	Pesos
5,766.30	3,630.69	71,462.60

**Renovation and/or modernization**

Estimated amount of the contract expressed in millions of:	
Dollars	Pesos
620.5	12,213.0

These projects are registered under the PIDIREGAS scheme (long-term productive infrastructure projects).

**c. Trusts**

**1 Area of competence**

1.1. CFE currently participates as Trustor or Beneficiary in 10 (ten) Trust Funds, of which 1 (one) is in the process of termination.

1.2. In conformity with its purpose and operating characteristics, the trust funds can be classified in the following groups:

- a. Energy saving
- b. Prepaid expenses
- c. Construction contract management
- d. Indirect participation trust funds

**i. Energy saving**

Trust funds to promote energy saving programs.

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Trust fund	Role of CFE		
	Trustor	Trustee	Trust Beneficiary
Trust fund for Energy Savings (FIDE), created on August 14, 1990	Creation of the Trust: Confederación de Cámaras Industriales (CONCAMIN), Cámara Nacional de la Industria de Transformación (CANACINTRA), Cámara Nacional de Manufacturas Eléctricas (CANAME), Cámara Nacional de la Industria de la Construcción (CNIC), Cámara Nacional de Empresas de Consultoría (CNEC) and Sindicato Único de Trabajadores Electricistas de la República Mexicana (SUTERM)	Nacional Financiera, S.N.C.	<p><b>a.</b> Electric energy consumers who are beneficiaries of the services rendered by the Trust fund.</p> <p><b>b.</b> CFE, only for the materials that will form part of the public energy services infrastructure.</p>
Mexicali Housing Thermal Isolation Trust (FIPATERM), created on October 19, 1990	CFE	Banco Nacional de Obras y Servicios Públicos, S.N.C.	CFE

As of December 31, 2018, 2017 and 2016, the Housing Thermal Isolation Program (FIPATERM) Trust has assets of \$ 1,532,366, \$ 1,487,051, \$ 1,395,711 and liabilities of \$ 56,188, \$ 70,634, \$ 34,044, respectively.

## ii. Prepaid expenses

Prepaid expenses finance and cover expenses prior to the execution of projects, and are subsequently recoverable and charged to whom incurs them to comply with the regulations applicable to the type of project.

Trust fund	Role of CFE			Type of project
	Trustor	Trust Beneficiary	Trustee	
CPTT prepaid expense management, created on August 11, 2003	CFE	CFE	Banco Nacional de Comercio Exterior, S.N.C.	Direct investment
Management and transfer of ownership 2030, created on September 30, 2000	CFE	<p><b>Primary beneficiary:</b> Contract winners</p> <p><b>Second beneficiary:</b> CFE</p>	Banobras, S.N.C.	Conditioned investment

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As of December 31, 2018, 2017 and 2016 the Administration of Prior Expenses has assets of \$ 3,533,406 \$3,763,171 and \$4,656,953, and liabilities of \$3,104,881, \$3,356,828 and \$4,321,908, respectively.

The Domain Transfer and Administration Trust 2030 has assets of \$439,084.

### **iii) Construction contract management**

At the beginning of the '90s, the Federal Government implemented several off-budget schemes to continue to invest in infrastructure projects. The schemes were designed under two modalities:

- Turnkey Projects (1990)
- Build, Lease and Transfer Projects (1996)

Turnkey Projects. - Under this scheme, works were carried out for the construction of power generation plants and installation of transmission lines, through an irrevocable management and transfer of ownership trust, linked to a lease agreement. Under this modality, the trustee is responsible for the following:

Contracting credits, managing the trust property (assets), receiving the lease payments from CFE, and transferring the asset at no cost to CFE after the leases have been paid in an amount sufficient to pay the contracted credits.

CFE participates in the payment of the leases to the trustee, based on the credits contracted by the trust, instructing the trustee to pay the contractors receiving, in exchange, invoices approved by the construction area, payment of taxes and other charges, including trustee fees.

The trusts for managing and transferring ownership were carried out in accordance with the Guidelines for the performance of thermoelectric projects with off-budget funds, as well as with the Guidelines for the performance of transmission lines and substations with off-budget funds issued by the Ministry of Public Administration (formerly known as the Ministry of Comptrollership and Administrative Development).

The Trust shown below has completed its payment commitments; therefore, it is in process of termination by the General Counsel.

Trust fund	Role of CFE		Trustee
	Trustor	Trust Beneficiary	
Topolobampo II (Electrolyser, S. A. de C. V.), created on November 14, 1991	Bufete Industrial Construcciones, S. A. de C. V. and Electrolyser, S. A. de C. V., with respect to its contribution to the Trust	<b>Primary beneficiary:</b> Electrolyser, S. A. de C. V., with respect to its contribution to the Trust and <b>Second beneficiary:</b> CFE	Banco Santander, S.A.

Build, Lease and Transfer Projects ("CAT", Spanish acronym).- The transition stage to carry out the CAT trusts began in 1996, whereby the trustee manages the trust property (assets) and transfers it

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to CFE after the lease payments have been covered. Credits are contracted directly with a consortium that is a special purpose entity, for which there is an irrevocable management and transfer of ownership trust contract.

In these types of trusts, CFE participates in making the lease payments based on quarterly amortization tables presented by the consortiums in their bids. Most of these tables include forty quarterly payments.

The only project under this modality that is still in force is the one related to the CT Samalayuca II trust fund:

Trust fund	Role of CFE		Trustee
	Trustor	Trust Beneficiary	
C.T. Samalayuca II, created on May 2, 1996	Compañía Samalayuca II, S.A. de C.V.	<b>Primary beneficiary:</b> The foreign bank that is the common representative of the creditors; <b>Second beneficiary:</b> Compañía Samalayuca II, S.A. de C.V. <b>Third beneficiary:</b> CFE	Banco Nacional de México, S.A.

As of December 31, 2018, 2017 and 2016, the trusts have fixed assets of \$21,706,678, \$21,255,499 and \$20,865,448 and liabilities of \$144,871, \$684,644 and \$1,215,831, respectively, corresponding to the total annual costs of the aforementioned trusts.

**Coal Terminal of the Thermoelectric Power Station Presidente Plutarco Elias Calles**

Trust fund	Role of CFE		Trustee
	Trustor	Trust Beneficiary	
Coal Terminal of the Thermoelectric Power Station Presidente Plutarco Elias Calles (Petacalco) was created on November 22, 1996	Techint, S. A., Grupo Mexicano de Desarrollo, S.A. de C.V. and TechintCompagnia Tecnica Internazionale S.P.A.	<b>Primary beneficiary:</b> Carbonser, S.A. de C.V. <b>Second beneficiary:</b> CFE	Banco Nacional de México, S. A. (Banamex)

The irrevocable management, guarantee, and transfer of ownership trust agreement number 968001 was entered into 1996 which, among other considerations, sets forth that the trustee will enter into a service contract with CFE.

Upon the entry into force of the coal management service contract between CFE and Banco Nacional de México, S. A. (Banamex) as trustee of the Petacalco Trust, comprised of Techint Compagnia Tecnica Internazionale S.P.A., Grupo Mexicano de Desarrollo, S. A. de C. V., and Techint, S. A. that was entered into on November 22, 1996, in accordance with clause 8.1, CFE will pay the invoice amounts related to the fixed charge for capacity.

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Facility	Fixed charge for capacity for Jan-Dec 2018
Petacalco Coal	\$130,571

**iv). Indirect participation trust funds**

Additionally, CFE maintains an indirect relationship since it is not a Trustor, but it participates as a beneficiary in four guarantee and loan payment Trusts, created by Financial Institutions as Trustors and Trust Beneficiaries for the issue of securities linked to credits granted to CFE. CFE is named as Second Beneficiary of the Trust, due to the specific possibility that it may acquire some of the certificates issued and it maintains representation in its Technical Committees in conformity with the contractual provisions. (See Note 11).

CFE is required to reimburse to the Trust in the terms of the Indemnity Contract that forms part of the Trust Contract, the expenses incurred by the Trust for the issue of securities and their management.

Trust fund	Role OF CFE		Trustee
	Trustor	Trust Beneficiary	
Trust No. 232246 created on November 3, 2006	Banco Nacional de Mexico, S.A., a member entity of Grupo Financiero Banamex	<b>Primary beneficiary:</b> Each of the preferred holders of each issue <b>Second beneficiary:</b> CFE	HSBC México, S.A., Grupo Financiero HSBC
Trust No. 411 created on August 6, 2009	Banco Nacional de Mexico, S.A., a member entity of Grupo Financiero Banamex	<b>Primary beneficiary:</b> Each of the preferred holders of each issue. <b>Second beneficiary:</b> CFE	Banamex

Regarding Trust N° 194, created on May 3, 2004 by ING (México), S.A. de C.V. Casa de Bolsa, ING Grupo Financiero and Deutsche Securities S.A. de C.V. Casa de Bolsa, first and second Trustors, respectively, with the participation of CFE as Second Beneficiary, on January 10, 2018, the parties, CFE as Secondary Trustor and Acciones y Valores Banamex, S.A. de C.V., Casa de Bolsa, Member of the Banamex Financial Group, as alternate trustor of Bank of America, S.A., Institución de Banca Múltiple, alternate trustor of The Royal Bank of Scotland México, S.A., Institución de Banca Múltiple, formerly ABN Amro Bank (México), S.A., Institución de Banca Múltiple, alternate trustor of Bank of America México, S.A., Institución de Banca Múltiple, universal successor-in-title of Bankboston, S.A., Institución de Banca Múltiple y Banco Monex, S.A., Institución de Banca Múltiple, Monex Grupo Financiero as agent under the Management Agreement, (as assignee of ING Bank (México), S.A., Institución de Banca Múltiple, ING Grupo Financiero (currently Corporación General de Servicios Especializados, S.A., en Liquidación), entered into a Termination and Extinguishment Agreement of the Trust in view of the fact that the Preferred Stock Certificates issued were issued fully paid in and the purpose for which it was created was met. In the Termination and Extinguishment Agreement referred to above, the Trustee was instructed to transfer the remaining cash of the Trust Property to the Second Trust Beneficiary, as well as the ownership of credit rights, if any, in the Common Fund and, any remaining Trust Property, which occurred on October 4, 2018.



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As of December 31, 2018, available funds in trust No. 232246 amounts to \$8,821.

## 2 Legal nature

2.1 In conformity with the Federal Public Administration Act, none of the trusts are considered Public Trusts with the status of "entity", pursuant to the following:

- a. In six of the Trusts, CFE is not a Trustor in their creation.
- b. The four remaining trusts do not have an organic structure similar to the state-owned entities that comprise them as "entities" in terms of the Law.

2.2 The SHCP has maintained a record for purposes of the Federal Budget and Financial Responsibility Law, of 4 (four) of the Trusts, due to the allocation of federal funds or the contribution of land owned by CFE where the works will be carried out.

Registration of Trusts with SHCP		
No.	Trusts	Record
1	Mexicali Housing Thermal Isolation Trust (FIPATERM)	700018TOQ058
2	Prior Expense Trust	200318TOQ01345
3	Trust Management and Transfer of Ownership 2030	200318TOQ01050
4	Trust for Power Savings (FIDE)	700018TOQ149

### Long-term auctions

In 2017, the Entity participated as a buyer in the long-term auction announced by CENACE for the month of November 2017, acquiring through the auction a commitment to purchase energy of 539.8 (MW / year) for 15 years, purchase of energy of 5,003,133.78 (MWh / year) for 15 years and to purchase CELs of 5,422,143.18 for 20 years. On April 13, 2018, CFE entered into the agreement with the Chamber of Compensation (who acts as the counterparty).

## 21. Segment Information

### Information regarding the operating segments

The information presented to the Board of Administration to seek approval of budgets, investments and measure compliance with respect to the business objectives set out by the Board is consolidated financial information and not by each operating activity of the Entity.

**COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries**  
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Information by type of services

INCOME	For the year ended 31 December 2018	For the year ended 31 December 2017	For the year ended 31 December 2016
Domestic service	\$ 64,341,733	\$ 63,038,771	\$ 63,345,377
Commercial service	49,248,017	50,632,378	41,696,428
Services	14,673,174	22,397,891	22,170,355
Agricultural service	6,311,891	6,955,262	6,055,920
Industrial services	242,019,269	205,771,593	161,972,897
Total sales	<u>376,594,084</u>	<u>348,795,895</u>	<u>295,240,977</u>
Block for resale	<u>964,853</u>		<u>779,971</u>
Total electricity supply revenue	<u>377,558,937</u>	<u>348,795,895</u>	<u>296,020,948</u>
Other programs			
Consumption in the process of being billed	(6,383,586)	8,899,082	10,046,415
Illegal uses	1,406,756	4,629,406	4,608,745
Measurement failure	2,262,148	1,156,938	1,033,935
Billing error	863,369	1,877,566	1,380,077
Total income obtained from other programs	<u>(1,851,313)</u>	<u>16,562,992</u>	<u>17,069,172</u>
<b>Total revenue from the sale of electricity</b>	<b>\$ <u>375,707,624</u></b>	<b>\$ <u>365,358,888</u></b>	<b>\$ <u>313,090,120</u></b>

## 22. New Accounting Pronouncements

### IFRS 16 Leases

The Entity is required to adopt IFRS 16 Leases as of 1 January 2019. The Entity has evaluated the impact that the initial application of IFRS 16 will have on its consolidated financial statements, as described below: The actual impacts of the adoption of the standard as of January 1, 2019 can change due to the following:

- The Entity has not completed the tests on the controls of its new IT systems; and
- the new accounting policies are subject to change until the Entity presents its first set of financial statements that includes the date of initial application.

IFRS 16 introduces a lease accounting model only for lessees.

A lessee is required to recognize a right-of-use asset representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments. The standard includes two recognition exemptions for lessees – leases of “low-value” assets and short-term leases. Lessor accounting is substantially unchanged from today's accounting (i.e., lessors will continue to classify all leases as either operating or finance leases).

IFRS 16 replaces the current guidance on leases, including IAS 17 Leases; IFRIC 4 Determining whether an Arrangement contains a Lease; SIC-15 Operating Leases-Incentives; and SIC 27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease.

The Entity will adopt IFRS 16 using the full retrospective approach.

Leases in which the Entity is the lessor

The Entity will recognize new assets and liabilities for its operating leases mainly derived from gas pipelines and PEEs. The nature of the expenses related to those leases will now change because the Entity will recognize a depreciation expense for assets by right of use and an interest expense on lease liabilities.

Previously, the Entity recognized the operating lease expenses on a linear basis during the term of the lease, and recognized assets and liabilities only to the extent that there was a temporary difference between the actual lease payments and recognized expense.

The Entity is in the process of determining the potential effects on the financial statements due to the adoption of this standard.

## **23. Standards Issued Not Yet Effective.**

### **A. Other standards**

The Entity does not expect the following standards and interpretations to have a significant impact on its financial statements:

- IFRIC 23 Uncertainty over Income Tax Treatments
- Prepayment features with negative compensation (Amendments to the IFRS 9 Standard.
- Amendment, curtailment or settlement of a Plan (Amendments to IAS 19).
- Annual enhancements to the IFRS Standards, 2015-2017 Cycle - various standards.
- Amendments to the References to the Conceptual Framework of IFRS Standards.

"Except for IFRS 9 and IFRS 15 (see Note 2 (f), other accounting pronouncements are effective as of 1 January 2018; however, such pronouncements had no significant impact on the consolidated financial statements."

## **24. Subsequent Events**

On March 25, 2019, the Ministry of Energy issued the agreement amending the terms for the strict legal separation of Comisión Federal de Electricidad which were published in the Official Gazette on January 11, 2016.

As of the date of publication of this Agreement in the Official Gazette, CFE will have 60 calendar days to present to the Ministry of Energy its proposal for the reallocation of assets and power generation contracts in the EPS and Affiliated Entities that it considers better contribute to efficiency.

Once the allocation of the assets and power generation contracts are published in the Official Gazette, the CENACE will carry out within 30 calendar days the reallocation of the assets registered in the Market Information System according to the new structure.

## **25. Issuance of the Consolidated Financial Information**

The consolidated financial statements and notes thereto were approved by Management on May 29, 2019. The financial information will be approved by the Board of Directors at a later date. The Board of Directors has the power to modify the accompanying consolidated financial information. Subsequent events were considered through such date.

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