

**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**

**How our audit addressed the 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.

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**

**How our audit addressed the 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.

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 underneath.

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.*

	<u>2018</u>	<u>2017</u> <u>(Restated)</u>	<u>2016</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	(12,252,497)	10,401,629	6,752,359
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>97,342,558</u>	<u>77,712,489</u>	<u>428,733,044</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)

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	<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 interests	-	-	-	-	-	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)

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	<b>2018</b>	<b>2017</b>	<b>2016</b>
		<b>(Restated)</b>	<b>(Restated)</b>
	<u>                    </u>	<u>                    </u>	<u>                    </u>
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	32,382,087	(671,532)	75,486,238
	<u>53,768,852</u>	<u>109,971,201</u>	<u>101,306,597</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	(39,534,335)	(35,045,000)	(35,162,080)
	<u>53,768,852</u>	<u>109,971,201</u>	<u>101,306,597</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	9,851,869	5,734,135	2,562,159
	<u>3,590,726</u>	<u>(15,212,704)</u>	<u>(43,728,726)</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>78,483,263</u>	<u>67,237,901</u>	<u>42,266,944</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.

**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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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.

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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)).

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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.

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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>
<b>Equity</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>
<b>Equity</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:

	<b>As of December 31, 2016 as they were presented</b>	<b>Effects of IFRS 9 and IFRS 15</b>	<b>As of December 31, 2016 (restated)</b>
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:

	<b>As of December 31, 2016 as they were presented</b>	<b>Effects of IFRS 9 and IFRS 15</b>	<b>As of December 31, 2016 (restated)</b>
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:

	<b>As of December 31, 2017 as they were presented</b>	<b>Effects of IFRS 15</b>	<b>Effects of IFRS 9</b>	<b>as of December 31, 2017 (restated)</b>
<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
<b>Total current assets</b>	<b>183,152,514</b>	<b>(17,839,251)</b>	<b>11,635,153</b>	<b>176,948,416</b>
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:

	<b>As of December 31, 2017 as they were presented</b>	<b>Effects of IFRS 9 and IFRS 15</b>	<b>As of December 31, 2017 (restated)</b>
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

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- 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.

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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 par amount, 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.

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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:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
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	<u>13,812,362</u>	<u>10,795,106</u>	<u>11,188,347</u>
	<u>\$ 21,089,549</u>	<u>\$ 15,576,521</u>	<u>\$ 15,279,243</u>

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:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
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	<u>\$ 27,684,340</u>	<u>\$ 24,342,578</u>	<u>\$ 25,271,368</u>

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.

<b>As of December 31, 2018</b>			
	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>

<b>As of December 31, 2017</b>			
	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>

<b>As of December 31, 2016</b>			
	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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	<u>As of December 31, 2018</u>	<u>Level 1 As of December 31, 2017</u>	<u>As of December 31, 2016</u>
<b>Available-for-sale financial assets</b>			
Temporary investments	\$ 14,666,617	\$ 25,232,468	\$ 19,127,508
Total	\$ 14,666,617	\$ 25,232,468	\$ 19,127,508

**Fair value measurement as of December 31, 2018**

	Level 1	Level 2	Level 3	Total
<b>Assets:</b>				
Plan assets	-	195,389,375	-	195,389,375
Derivative financial instruments	-	17,783,141	-	17,783,141
Total	-	213,172,516	-	213,172,516
<b>Liabilities:</b>				
Debt	177,457,151	-	351,602,029	529,059,180
Total	177,457,151	-	351,602,029	529,059,180

**Fair value measurement as of December 31, 2017**

	Level 1	Level 2	Level 3	Total
<b>Assets:</b>				
Plan assets	-	167,467,661	-	167,467,661
Derivative financial instruments	-	16,084,937	-	16,084,937
Total	-	183,552,598	-	183,552,598
<b>Liabilities:</b>				
Debt	196,023,229	-	350,499,432	546,522,661
Total	196,023,229	-	350,499,432	546,522,661

**Fair value measurement as of December 31, 2016**

	Level 1	Level 2	Level 3	Total
<b>Assets:</b>				
Plan assets	-	166,665,713	-	166,665,713
Derivative financial instruments	-	15,646,025	-	15,646,025
Total	-	182,311,738	-	182,311,738
<b>Liabilities:</b>				
Debt	155,249,023	-	418,017,345	573,266,368
Total	155,249,023	-	418,017,345	573,266,368

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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:

	<u>2018</u>		<u>2017</u>		<u>2016</u>
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	<u>8,821</u>		<u>8,821</u>		<u>8,821</u>
Total	<u>\$ 78,483,263</u>	\$	<u>67,237,901</u>	\$	<u>42,266,944</u>

## 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:

	<u>2018</u>		<u>2017</u>		<u>2016</u>
Public consumers (*)	\$ 57,453,309	\$	60,335,248	\$	54,888,689
Government agency consumers (*)	<u>22,060,633</u>		<u>20,887,093</u>		<u>18,559,103</u>
	79,513,942		81,222,341		73,447,792
Impairment of receivables	<u>(28,446,893)</u>		<u>(25,049,197)</u>		<u>(26,557,269)</u>
	<u>51,067,049</u>		<u>56,173,144</u>		<u>46,890,524</u>
Other accounts receivable	<u>37,205,453</u>		<u>33,512,184</u>		<u>14,149,041</u>
Value added tax	<u>10,903,393</u>		<u>5,382,194</u>		<u>2,196,623</u>
<b>Total</b>	<u>\$ 99,175,895</u>	\$	<u>95,067,522</u>	\$	<u>63,236,187</u>

(\*) 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)
<b>Total</b>	<b>\$1,252,938,487</b>	<b>\$46,114,216</b>	<b>\$ ( 1,008,377)</b>	<b>(\$57,535,932)</b>	<b>\$ 3,017,598</b>	<b>\$1,243,525,992</b>

  

	<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)
<b>Total</b>	<b>\$1,287,172,274</b>	<b>\$69,787,540</b>	<b>\$( 19,676,856)</b>	<b>\$ ( 55,663,221)</b>	<b>\$ ( 28,681,250)</b>	<b>\$1,252,938,487</b>

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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	<u>10,912,877</u>		<u>( 56,162)</u>		<u>10,856,715</u>
Subtotal	1,823,361,858	293,157,884	( 40,146,527)		2,076,373,215
Accumulated depreciation	<u>(761,499,929)</u>		<u>29,291,391</u>	<u>(56,992,402)</u>	<u>(789,200,940)</u>
Total	<u>\$1,061,861,929</u>	<u>\$293,157,884</u>	<u>\$ ( 10,855,136)</u>	<u>(\$56,992,402)</u>	<u>\$1,287,172,275</u>

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.

	As of December 31, 2018	As of December 31, 2017
Impairment of property, plant and equipment	\$ 2,074,000	\$(28,681,250)
Accumulated depreciation or impairment	943,598	
Impairment reversal	<u>\$ 3,017,598</u>	<u>\$(28,681,250)</u>

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
	_____	_____	_____
Total	\$ 32,189,380	\$ 19,907,935	\$ 18,433,272

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.

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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.

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**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:

	<b>2018</b>	<b>2017</b>	<b>2016</b>
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
				110000074 to				
CCS	Exchange rate and interest rate	Cash flow	2021	76	100%	237,481	339,264	478,920
				110000077 to				
CCS	Exchange rate and interest rate	Cash flow	2022	79	100%	71,531	93,469	-
CCS	Exchange rate and interest rate	Cash flow	2023	110000080	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)	-
				1200000551				
CCS	Exchange rate and interest rate	Cash flow	2036	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)
				1100003807, 1200001251 and				
IRS	Interest rate	Cash flow	2020	1200001451	100%	84,118	114,720	102,355
Subtotal						<b>17,758,178</b>	<b>16,523,052</b>	<b>16,140,801</b>
				Line of credit in				
CCS	Exchange rate JPY/USD	Trading		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:

<b>Counterparty</b>	<b>Fair value MTM subject to CVA</b>	<b>Adjusted fair value MTM</b>	<b>Adjustment amount</b>
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.

As of December 31, 2018	Amounts in millions of Mexican pesos		
	Less than one year	More than 1 year and less than 5 years	Total
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>

  

As of December 31, 2017	Amounts in millions of Mexican pesos		
	Less than one year	More than 1 year and less than 5 years	Total
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>

  

As of December 31, 2016	Amounts in millions of Mexican pesos		
	Less than one year	More than 1 year and less than 5 years	Total
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:

<u>2018</u>	<u>+ 100 basis points</u>	<u>- 100 basis points</u>
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:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
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>
<b>Total short-term debt</b>	<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>
<b>Total long-term debt</b>	<b>422,225,594</b>	<b>401,156,627</b>	<b>413,981,607</b>
<b>Total debt</b>	<b>\$ <u>470,631,734</u></b>	<b>\$ <u>457,776,357</u></b>	<b>\$ <u>455,709,823</u></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 Internacional 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
<b>Total</b>	<b>\$ 457,776,356</b>	<b>\$ 85,312,285</b>	<b>\$ ( 78,934,168)</b>	<b>\$ ( 1,017,453)</b>	<b>\$ 463,137,019</b>

**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)**

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
<b>Total</b>	<b>\$ 455,709,823</b>	<b>\$ 61,201,355</b>	<b>\$ ( 46,789,232)</b>	<b>( 12,345,590)</b>	<b>\$ 457,776,356</b>

  

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
<b>Total</b>	<b>\$ 391,305,786</b>	<b>\$ 71,478,386</b>	<b>\$ ( 61,663,047)</b>	<b>\$ 54,588,698</b>	<b>\$ 455,709,823</b>

**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)**

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:

Foreign debt	Type of credit	Weighted interest rate	Maturities	2018		2017		2016	
				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

**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**  
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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>	

**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**  
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Domestic debt	Type of credit	Weighted interest rate	Maturities	2018		2017		2016	
				Local currency	Foreign currency (thousand)	Local currency	Foreign currency (thousand)	Local currency	Foreign 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	<u>70,987,330</u>		<u>79,000,000</u>		<u>66,500,000</u>	
TOTAL MEXICAN PESOS:				<u>78,487,330</u>		<u>86,600,000</u>		<u>85,200,000</u>	
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	<u>20,054,478</u>		<u>11,141,672</u>		<u>5,196,355</u>	
TOTAL UDIS				<u>20,054,478</u>		<u>11,141,672</u>		<u>5,196,355</u>	
		TOTAL DOMESTIC DEBT		<u>98,541,808</u>		<u>97,741,672</u>		<u>90,396,355</u>	
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				<u>(2,338,310)</u>		<u>(2,338,310)</u>		<u>(2,320,543)</u>	
Total documented debt				<u>216,045,238</u>		<u>206,921,929</u>		<u>209,613,471</u>	
Short-term debt				12,951,500		23,442,173		14,437,280	
Short-term interest payable				<u>2,602,680</u>		<u>2,476,343</u>		<u>1,936,494</u>	
Total short-term				15,554,180		25,918,516		16,373,774	
Long-term debt				202,829,368		183,341,723		195,560,240	
Unamortized debt expenses				<u>(2,338,310)</u>		<u>(2,338,310)</u>		<u>(2,320,543)</u>	
Total long-term				<u>200,491,058</u>		<u>181,003,413</u>		<u>193,239,697</u>	
Total short- and long-term				<u>216,045,238</u>		<u>206,921,929</u>		<u>209,613,471</u>	

**COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries**  
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The short-term and long-term documented debt liabilities mature as follows:

<u>31/12/2018</u>	<u>Amount</u>
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.

**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**  
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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%.

**COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries**  
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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.

**COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries**  
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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	\$ <u>114,304,656</u>	\$ <u>107,429,880</u>	\$ <u>221,734,535</u>	\$ <u>220,153,214</u>	\$ <u>220,741,910</u>
Total	\$ 131,085,031	\$ 116,006,750	\$ 247,091,780	\$ 249,420,976	\$ 246,096,352

**COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries**  
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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
<b>Foreign debt</b>													
- 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	-	-	-	-	-	-	-	-
<b>Total foreign debt</b>		<b>5,415,642</b>	<b>68,406,142</b>	<b>275,144</b>	<b>3,475,410</b>	<b>5,138,773</b>	<b>55,268,711</b>	<b>259,708</b>	<b>2,793,225</b>	<b>3,722,634</b>	<b>35,953,974</b>	<b>179,564</b>	<b>1,734,275</b>

**COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries**  
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<u>Domestic debt</u>									
- 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>	

**COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries**  
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- a. As of December 31, 2018, 2017 and 2016, minimum payment commitments on PIDIREGAS are as follows:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
PIDIREGAS	190,029,498	176,974,622	144,741,265
less:			
Unaccrued interest	<u>60,415,497</u>	<u>49,788,133</u>	<u>34,577,085</u>
Present value of obligations	129,614,001	127,186,489	110,164,180
less:			
Current portion of obligations	<u>15,318,165</u>	<u>21,145,914</u>	<u>14,726,488</u>
Long-term portion of PIDIREGAS	114,295,836	106,040,575	95,437,692
CEBURES	<u>8,821</u>	<u>8,821</u>	<u>8,821</u>
Total CEBURES and PIDIREGAS	<u><u>114,304,657</u></u>	<u><u>106,049,396</u></u>	<u><u>95,446,513</u></u>

**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	<u>\$199,778,962</u>	<u>\$205,705,879</u>	<u>\$269,708,622</u>	<u>\$116,006,750</u>	<u>\$122,225,666</u>	<u>\$135,923,352</u>

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			<u>308,673</u>	<u>5,458,030</u>	<u>6,075,551</u>	<u>107,429,880</u>

(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>\$ <u>109,234,092</u></b>	<b>\$ <u>107,798,040</u></b>	<b>\$ <u>61,873,453</u></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**

	<b>2018</b>	<b>2017</b>	<b>2016</b>
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
<b>Subtotal</b>	<b>2,928,667</b>	<b>1,537,748</b>	<b>2,226,988</b>

**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
	<b>681,880</b>	<b>939,508</b>	<b>884,869</b>

**Total Taxes and Duties**

	<b>\$ 3,610,547</b>	<b>\$ 2,477,256</b>	<b>\$ 3,111,857</b>
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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:

	<b>2018</b>	<b>2017</b>	<b>2016</b>
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:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
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:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
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:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
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>

**COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries**  
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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>	<u>\$ -</u>	<u>\$ -</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:

	<b>As of December 31,</b>		
	<u>2018</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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2017						
Name	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

  

2016						
Name	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 CF Energía, 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**

Operating lease commitments	Amount
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>a. Electric energy consumers who are beneficiaries of the services rendered by the Trust fund.</p> <p>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	<b>Primary beneficiary:</b> Contract winners <b>Second beneficiary:</b> <b>CFE</b>	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.	<p><b>Primary beneficiary:</b> The foreign bank that is the common representative of the creditors;</p> <p><b>Second beneficiary:</b> Compañía Samalayuca II, S.A. de C.V.</p> <p><b>Third beneficiary:</b> CFE</p>	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.	<p><b>Primary beneficiary:</b> Carbonser, S.A. de C.V</p> <p><b>Second beneficiary:</b> CFE</p>	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.

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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></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.