

INFRAESTRUCTURA ENERGETICA NOVA, S. A. B. DE C. V. Financial Derivatives Questionnaire

For the twelve month ended December 31, 2017 and 2016

- I. QUALITATIVE INFORMATION.
- A. Discussion of policies with respect to the use of financial instruments derivatives
- 1. Explain if and, as the case may be, under what circumstances do the issuer's policies permit the use of derivative financial instruments for hedging and/or trading purposes, and whether there are any procedures or manuals in place with respect thereto.

Infraestructura Energética Nova, S. A. B. de C.V. and subsidiaries ("IEnova") (collectively, the "Company") follows Sempra's Energy (parent and ultimate holding company in the United States of America) Financial Instruments Derivatives ("FIDs") policies for trading and hedging purpose.

As of this date, IEnova management has policies, procedures and manuals related to the Financial Risk Management, which contemplate the use of Derivative Financial Instruments ("FIDs") and Non-Derivatives.

By means of policies, the Company management, identifies, assesses, monitors and centrally manages the financial risks of its operating subsidiaries through written policies that establish limits associated with specific risks:

- Permissible losses from each FIDs
- The appropriate use of certain FIDs.
- Specific cases in which instruments can be designated as hedges,
- Specific cases in which derivative instruments do not qualify for hedge accounting but can qualify as held-for-trading

On September 26, 2016, GdC's acquisition was completed through IEnova Gasoductos Holding, S. de R. L. de C. V., ("IGH") a subsidiary of IEnova; therefore, the Company now holds 100 percent of GdC's shares.

On September 2, 2016, IEnova agreed to acquire Fisterra Energy Netherlands III, B. V., Fisterra Energy Netherlands, IV B. V., Fisterra Energy Mexico III, S. de R. L. de C. V., Fisterra Energy Mexico IV, S. de R. L. de C. V., Ventika, S. A. P. I. de C. V., and Ventika II, S. A. P. I. de C. V. (collectively "Ventika"), In December 15, 2016 was signed the necessary documents with Blackstone Energy Partners, Fisterra Energy and other minority owners to conclude the acquisition in accordance with the terms established in the purchase agreement.



The policies, procedures and manuals related to the Financial Risk Management maintained by GdC and Ventika for the administration of the FIDs before the acquisition are consistent with the guidelines exercised by IEnova, as of December 31, 2016 and 2017.

2. General description of the objectives for use of the financial instruments derivatives and the risks associated with such instruments.

IEnova celebrates FIDs to reduce Company's exposure to fluctuations in natural gas prices, manage the exposure to fluctuations in interest rates movements, to help manage the exposure for obligation payments denominated in Mexican pesos (The Company's functional currency is the U.S. Dollar), and to help manage the exposure on the future income flows received in MXP.

The Company seeks to minimize the potential negative effects of these risks on its financial performance through an overall risk management program.

3. Used instruments; hedging or trading strategies implemented.

As shown in the table below (reference to number 20), as of December 31, 2017 and 2016 the Company had entered into the following FIDs, for hedge and trading purposes.

- a. Cross currency swaps and interest rate swaps
- b. Interest rate swaps
- c. Swaps for hedging prices.
- d. Forward currency transactions
- e. Electric energy price swaps and natural gas price swaps
- f. Natural gas purchase contracts

4. Authorized trading markets and eligible counterparties.

The derivative operation are "Over the Counter" ("OTC") and the counterparts are recognized institutions.

5. Policies with respect to the appointment of appraisers or valuation agents.

The Company recognizes all assets or liabilities that arise from transactions with FIDs at fair value on the Consolidated Statements of Financial Position, regardless of the intent in holding them. Fair value is determined using prices quoted on recognized markets or derived from directly or indirectly observable inputs.

The fair value is determined by applying valuation techniques recognized in the financial sector which use standard industry models.

Policies with respect to margins, collateral, credit facilities and VaR.

As of December 31, 2017 and 2016, the Company have policies with respect margins, collateral, credit facilities and VaR.

The Company uses valuation techniques that incorporate observable market inputs to estimate the fair value of certain types of financial instruments. Note 13.2 in interim condensed



consolidated financial statements as of and for the twelve-month period ended December 31, 2017 and 2016 respectively, contains a detailed description of the key assumptions used to determine the fair value of FIDs.

The Company believes that the valuation techniques and assumptions used to determine the fair value of our FIDs are appropriate.

See Note 3.2.4 in audited consolidated financial statements ended December 31, 2016.

7. Internal control procedures to manage the exposure to market and liquidity risks.

As of December 31, 2017, the market risk is the risk of erosion of the Company's cash flows, earnings, asset values and equity due to adverse changes in market prices and interest rate and foreign currency rates.

The Company has policies governing its market risk management and trading activities. The Parent's senior officers are members of committees that establish policies, oversee energy risk management activities, and monitor the results of trading and other activities to ensure compliance with Company's stated energy risk management and trading policies. These activities include, but are not limited to, daily monitoring of market positions that could generate credit risk, liquidity and market risk. The respective oversight organizations and committees are independent from the energy procurement departments.

The Company enters into a variety of FIDs to manage its exposure to commodity price risk, interest rate and foreign currency exchange rate risks, including:

- Cross-currency and interest rate swaps to mitigate the peso exposure of debt issued in pesos and variable rates.
- Interest rate swaps to mitigate the risk of rising interest rates
- Swaps to hedge the natural gas price
- Forward currency transactions to mitigate the risk of exposure to the volatility of the currency rate on the future flows expected from the income received in MXP
- Electric energy price swaps and natural gas price swaps
- Natural gas purchase contracts

Parent's senior management and the risk management areas of the Company and Sempra Energy, manage liquidity risk; who have established a liquidity risk management framework to mitigate the financing and liquidity requirements of the Company.

See Note 24.10 of audited consolidated financial statements as of and for the year ended December 31, 2016.

8. Review of the aforementioned procedures by an independent third party.

For the condensed interim consolidated financial statements for the twelve month periods ended December 31, 2017 and 2016, including operations with FIDs, the Company's management receives advice from PriceWaterhouseCoopers in the fair value verification and in the determination of the effectiveness of hedging instruments; of the risk management areas of the Company and Sempra Energy; additionally, these amounts, positions and conclusions have been



reviewed by Deloitte Mexico - Galaz, Yamazaki, Ruiz Urquiza, S.C., external auditor of the Company.

9. Information concerning the FID approval process, indicating whether there is a committee responsible therefor and for managing the risks associated therewith.

IEnova's key directors and senior officers, supported by the risk management area from Sempra Energy, oversee Company's energy risk management activities and supervise the results of Company's trading and other activities to ensure compliance with Company's stated energy risk management and trading policies. These activities include, but are not limited to, daily monitoring of market position which originate credit, liquidity and market risk. Respective oversight organizations and committees are independent from the energy procurement departments.

B. Description of policies and valuation techniques.

10. Description of valuation methods and techniques, variables and assumptions, and valuation frequency.

The Company frequently applies fair value measurements to financial assets and liabilities. "Fair Value" is defined as 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.

A fair value measurement reflects the assumptions market participants would use in pricing an asset or liability based on the best available information. These assumptions include the risk inherent in a particular valuation technique (such as a pricing model) and the risks inherent in the inputs to the model. Also, Company's management considers the Company's credit standing when measuring its liabilities at fair value.

The Company establishes a fair value hierarchy that prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurement) and the lowest priority to unobservable inputs (Level 3 measurement).

The three levels of the fair value hierarchy are as follows:

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active
 markets for identical assets or liabilities as of the reporting date. Active markets are those
 in which transactions for the asset or liability occur in sufficient frequency and volume to
 provide pricing information on an ongoing basis;
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. prices) or indirectly (i.e. derived from prices); and
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (no observable indicators).

The Company does not have financial assets or liabilities classified as Level 3 and there were no transfers between Level 1 and 2 during the reporting periods.



See Note 13.3 of interim condensed consolidated financial statements as of and for the twelve-month periods ended December 31, 2016 and 2017 respectively.

11. Clarify whether the valuation is performed internally or by a third party, and under what circumstances is each such type of valuation used. If performed by a third party, indicate whether such third party is the structuring agent, seller or counterparty to the FIDs.

The fair value of FIDs is determined by a counterparty to each relevant agreement or internally using recognized valuation techniques in the financial sector using standard industry models.

Recognized valuation techniques in the financial industry are used to determine each coverage effectiveness with observable inputs at the measurement date obtained from Bloomberg information system.

12. Describe the method used to assess the effectiveness of a hedging instrument, including the current level of hedging provided by the overall position of FIDs.

For the hedging instruments, the Company documents the relationship between the hedging instrument and the hedged item at the inception of the hedge relationship, along with Company's risk management objectives and Company's strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Company documents whether the hedging instrument is highly effective in offsetting changes in fair values or cash flows of the hedged item attributable to the hedged risk.

The Company uses the following methods to assess the effectiveness of the hedging instrument:

- Prospective effectiveness tests. These tests are based on scenarios designed to
 demonstrate that, notwithstanding an increase or decrease in value of the underlying
 instrument (covered risks interest rate, exchange rate, and underlying price). Hedge is
 effective due to_the extent to which changes in the fair value of FIDs offset changes in
 the fair value of the hedge item.
- Retrospective effectiveness tests. To estimate the retrospective effectiveness is used the U.S. dollar displacement method on a period-to-period basis. The Company models the hedge using a hypothetical derivative with the same contractual characteristics (or critical terms) as the hedged item. This method entails the comparison of the changes in fair values of the hedging instruments and the hedged item.

The management has assessed hedging instruments and has determined that such instruments were effective during the twelve month periods ended December 31, 2017 y 2016, hedge is effective because its results range between 80% and 125%.



- c. Information with respect to the risks relating to the use of derivative instruments.
- 13. Discussion of the internal and external sources of liquidity available to satisfy the requirements associated with the FIDs.

The resources required to satisfy the FIDs obligations, as the case may be, will derive from internal sources (i.e., through the cash flows generated by the Company).

14. Discussion of changes in exposure to the primary risks identified and their management; contingencies that may affect future reports.

Not applicable. No change in the risks identified has occurred since the date of inception of each FDI.

15. Disclosure of contingencies such as changes in the value of the underlying asset that may change or cause such value to differ from the amount contracted, or that have affected the extent of the hedge, thus affecting the issuer's liquidity or requiring the issuer to incur in additional obligations.

Not applicable. No contingency has arisen since the date of inception of each FIDs.

16. Describe the impact of such derivative transactions on income or cash flows.

The net effect on the interim condensed consolidated cash flow statements as of and for the twelve-month periods ended December 31, 2016 and 2017, is a loss of \$6,715 and a gain of \$21,001 (thousands of U.S. dollars), respectively. And for the three-month periods ended December 31, 2016 and 2017 a loss of \$1,809 and a gain of \$23,111, respectively, which has been classified as an adjustment that does not give rise to a refund in cash or cash equivalents. These amounts have been reported as "Other losses and gains" in the interim condensed consolidated statements of losses and gains (for the same periods).

17. Description and number of FIDs matured and/or settled during the quarter.

For the three months ended December 31, 2017. The following financial instruments derivatives expired:



| Ref | Type of derivative, value or agreement | Designated as hedge or held for other purposes (e.g., trading/long or short position) | Effective date | Maturity date | Notional amount/Par value | Value of underlying asset/refere nce variable | Annual maturities/(in come) expense |
|-----|---|---|-------------------|------------------|---------------------------------|--|--|
| 11 | Natural gas swap price | Trading Long Position | 1-Nov-17 | 30-Nov-17 | 2,500 MMBTU | USD 2.746 is paid/MMBtu | - |
| II | Natural gas swap price | Trading Long Position | 1-Nov-17 | 30-Nov-17 | 2,500 MMBTU | USD 2.747 is paid/MMBtu | - |
| II | Natural gas swap price | Trading Long Position | 1-Nov-17 | 30-Nov-17 | 5,000 MMBTU | USD 2.750 is paid/MMBtu | - |
| II | Natural gas swap price | Trading Long Position | 1-Nov-17 | 30-Nov-17 | 10,000 MMBTU | The natural gas price published in NYM EX of the Henry Hub Gas Natural price of futures and spread contracts +0.1150 is paid | - |
| II | Electric power swap price | Trading Long Position | 1-Nov-17 | 30-Nov-17 | 50 M W | USD 37.2500 received/MWh | - |
| II | Electric power swap price | Trading Long Position | 1-Nov-17 | 30-Nov-17 | 50 M W | USD 37.0000 is received/MWh | - |
| IV | Forward currency transactions | Hedge Long position in USD/ Short position in MXP | 30-Sep-16 | 3-Oct-17 | USD 3,447,857 | MXP is paid/USD is received at an exchange rate of 19.9808 MXP/USD | 419,836 |
| IV | Forward currency transactions | Hedge Long position in USD/ Short position in MXP | 30-Sep-16 | 3-Nov-17 | USD 3,336,636 | MXP is paid/USD is received at an exchange rate of 19.9808 MXP/USD | 224,818 |
| IV | Forward currency transactions | Hedge Long position in USD/ Short position in MXP | 30-Sep-16 | 4-Dec-17 | USD 3,447,857 | MXP is paid/USD is received at an exchange rate of 19.9808 MXP/USD | 338,031 |
| V | Forward currency transactions | Hedge Long position in USD/ Short position in M X P | 29-Sep-16 | 3-Oct-17 | USD 3,269,203 | MXP is paid/USD is received at an exchange rate of 19.891814 MXP/USD | 389,487 |
| V | Forward currency transactions | Hedge Long position in USD/ Short position in MXP | 29-Sep-16 | 3-Nov-17 | USD 3,163,745 | MXP is paid/USD is received at an exchange rate of 19.891814 MXP/USD | 199,287 |
| V | Forward currency transactions | Hedge Long position in USD/ Short position in MXP | 29-Sep-16 | 4-Dec-17 | USD 3,269,203 | MXP is paid/USD is received at an exchange rate of 19.891814 MXP/USD | 307,007 |



18. Description and number of margin calls occurred during the quarter.

The instruments contracted are not subject to margin calls since they do not have a Credit Support Agreement ("CSA").

19. Disclose any default under the relevant agreements.

No default has occurred.

- II. Quantitative information (if the absolute fair value is equal to at least 5% of assets, liabilities or equity, or 3% of sales).
 - A. Characteristics of the derivative financial instruments as of the reporting date.
- 20. Identify each derivative financial instrument by name or type (e.g., swap, forward, call, etc.), or aggregate them under a single category.
- I. Cross-currency and interest rate swaps.

On February 14, 2013, regarding the placements of CEBURES, the Company executed full cross-currency and interest rate swap contracts for hedging its exposure to the payment of its liabilities in Mexican Pesos. For the debt maturing in 2023, the Company swapped fixed rate in Mexican Pesos for a fixed rate in U.S. Dollars, for the principal and interest payments. The weighted average interest rate, in U.S. Dollars for this swap was 4.12 percent. For the debt maturing in 2018, the Company swapped variable rate in Mexican Pesos for a fixed rate in U.S. Dollars, for the principal and interest payments. The weighted average interest rate, in U.S. Dollars for this swap was 2.65 percent. The swaps' total notional value is USD 408.3 million (\$5.2 billion historical Mexican Pesos). These contracts have been designated as cash flow hedges.

II. Swap to hedge natural gas. On November, 2015, the subsidiary company Ecogas México, S de R. L. de C. V., entered into swaps to hedge gas price. The total amount is 1.4M of MMBTUS, distribuited montly in the hedge time, the start hedge time is March, 1 2016 to December 31, 2018 with maturities and monthly renewals. The fixed price to receive/pay is USD 2.6801 per MMBTU. The counterparties are Pemex TRI and B-Energy industries, S. A. de C. V.

In July 2017, the hedge operations were concluded due to early termination of the natural gas purchase contract between Ecogas and Pemex TRI.

The FDIs expired as of December 31, 2017 and effective as of December 31, 2016, are shown for comparative purposes in the quantitative information table.

III. Interest rate swaps. On January 22, 2014, the subsidiary company GdC entered into interest rate swap agreements to cover interest rate exposure on its debt over the total amount of the loan maturing in 2026, exchanging the LIBOR rate in USD at a fixed rate of 2.63 percent. The notional amount of the swaps is USD 330 million. These contracts have been designated as cash flow hedges.



The FDIs results amount as of December 31, 2016, represent the result for the period from September 26, 2016 ("GdC's Acquisition") to December 31, 2016.

IV. Forward currency transactions. On September 30, 2016, the subsidiary company Gasoductos del Noreste, S. de R.L. de CV entered into forward contracts with Banco Santander Santander (México), S. A. ("Santander") to cover foreign currency rate exposure on the future cash flows expected from the income to be received in MXP of the Ramones I operation, fixing future cash flows at 19.9808 MXP/USD. The forwards notional amount is USD 6.8 million (\$ 135.6 million pesos) with monthly maturities until February 2018. These contracts have been designated as cash flow hedges.

The FIDs amount expired as of December 31, 2017 are shown in the table of comparative quantitative information only for information purposes as of December 31, 2016.

V. Forward currency transactions. On September 1, 2016, the subsidiary company Gasoductos del Noreste, S. de R. L. de C.V., entered into forward contracts with The Bank of Tokyo-Mitsubishi ("BTMU") to cover foreign currency rate exposure on the future cash flows expected from the income to be received in MXP of the Ramones I operation, fixing future cash flows at 19.891814 MXP/USD. The forwards notional amount is USD 6.4 million (\$ 128.0 million pesos) with monthly maturities until February 2018. These contracts have been designated as cash flow hedges.

The FIDs amount expired as of December 31, 2017 are shown in the table of comparative quantitative information only for information purposes as of December 31, 2016.

VI. *Interest rate swaps* On April 15, 2014, subsidiary companies Ventika, S.A.P. I. de C.V., and Ventika II, S. A. P. I. de C.V., entered into two interest rate swap contracts with the Banco Nacional de Obras y Servicios Públicos S.N.C., "(Banobras)" to cover interest rate exposure of a debt percentage with maturity in 2032, exchanging the LIBOR rate in USD at a fixed rate of 3.68 percent. The notional amount of the two swaps as of December 31, 2017 is USD 80.0 million. These contracts have been designated as cash flow hedges.

The FIDs results amount as of December 31, 2016 represent the result for the period from December 15 to December 31, 2016.

VII. Interest rate swaps On April 15, 2014, subsidiary companies Ventika, S.A.P. I. de C.V., and Ventika II, S. A. P. I. de C.V., entered into two interest rate swap contracts with Santander to cover interest rate exposure of a debt percentage with maturity in 2024, exchanging the LIBOR rate in USD at a fixed rate of 2.94 percent. The notional amount of the two swaps as of December 31, 2017 is USD 96.6 million. These contracts have been designated as cash flow hedges.

The FIDs results amount as of December 31, 2016, represent the result for the period from December 15 to December 31, 2016.

VIII. **Swaps commodities prices.** Price swap to trade electric power and natural gas prices with different maturities, between TDM and unconsolidated affiliate Sempra Gas & Power



Marketing, LLC. ("SG&PM"), SG&PM executes one or several operations for TDM who recognizes the rights and obligations of these operations.

In February 2016, the Company's management approved a plan to market and sell TDM, a 625-MW natural gas-fired power plant located in Mexicali, Baja California, Mexico. As of March 31, 2016, the assets and liabilities were classified under current assets and liabilities as held for sale. The valuation effect of financial instruments is in the loss of discontinued operations category.

- IX. **Derivatives for natural gas purchase contracts.** Natural gas purchase contracts between IEnova Marketing, S. de R. L. de C. V., ("IMK") and its customers (Energas de Mexico S. A. de CV, Toyota Motor Manufacturing of Baja California S. de R. L. de C. V., GCC Cemento, S. A. de C. V., celebrated during 2016 and 2017, with maturity between one and five years from the date of execution for an approximate notional amount of 3.7 million MMBTUS plus an additional cost of approximately between USD 0.02 to 0.05 USD/MMBTU of the Back to Back contracts between IMK and unconsolidated affiliate SG&PM.
- X. Forward currency transactions. On September 28, 2017, the subsidiary company Gasoductos del Noreste, S. de R. L. de C. V., entered into forward contracts with Santander to cover foreign currency rate exposure on the future cash flows expected from the income to be received in MXP of the Ramones I operation, fixing future cash flows at 18.81374 MXP/USD. The forwards notional amount is USD 40.7 million (\$765.2 million pesos) with monthly maturities until February 2019. These contracts have been designated as cash flow hedges.
- XI. Forward currency transactions. On August 30, 2017, the subsidiary company Gasoductos del Noreste, S. de R. L. de C. V., entered into forward contracts with BMTU to cover foreign currency rate exposure on the future cash flows expected from the income to be received in MXP of the Ramones I operation, fixing future cash flows at 18.813643 MXP/USD. The forwards notional amount is USD 40.7 million (\$766.3 million pesos) with monthly maturities until February 2019. These contracts have been designated as cash flow hedges.
- XII. Forward currency transactions. On March 18, 2016, the subsidiary company Gasoductos del Noreste, S. de R. L. de C. V., entered into forward contracts with Santander to cover foreign currency rate exposure on the future cash flows expected from the income to be received in MXP of the Ramones I operation, fixing future cash flows at 17.7390 MXP/USD. with monthly maturities until February 2017. These contracts have been designated as cash flow hedges.

The FIDs amount expired as of December 31, 2017 are shown in the table of comparative quantitative information only for information purposes as of December 31, 2016.

The following table contains certain quantitative, comparative information with respect to periods ended December 31, 2017 and 2016. (Unaudited)



Comparative Quantitative Information as of December, 31 2017 an 2016, (Unaudited)

(Monto en USD Estadounidenses)

| | | | | | | | I | | 1 | | | | |
|-----|--|---|-------------------|------------------|--|--|--|--|-----------------------------------|------------------------------|---------------------|-----------------------|------------------------------------|
| | | Designated as hedge or held for other purposes | | | Notional amo | unt/Par value | | underlying ence variable | Fair value of as | sset/liability | Annual m (income | aturities/ expense | Colla teral / credi t facilit ies/ |
| | Type of derivative, | (e.g., trading/long | | | As of Dec | ember 31, | As of Dec | ember 31, | As of Decer | mber 31, | As of Dec | ember 31, | pledg ed |
| | value or | or short | Effective | Maturity | | | 2016(Unaudit | 2017 | | 2017 | 2016 | 2017 | secur |
| IA | Cross-currency and interest rate swaps | position) Hedge Long position | date 14-Feb-13 | date 2-Feb-23 | 2016 (Unaudited) USD\$207,500,000 MXP\$2,642,803,000 | 2017 (Unaudited) USD\$207,500,000 MXP\$2,642,803,000 | ed) Fixed rate 6.3% is received; and a fixed rate of 4.246% is paid | (Unaudited) Fixed rate 6.3% is received; and a fixed rate of 4.246% is paid | 2016 (Unaudited) (106,329,858) | (Unaudited) (100,898,241) | (Unaudited) | (Unaudited) | ities n/a |
| IB | Cross-currency and interest rate swaps | Hedge Long position | 14-Feb-13 | 2-Feb-23 | USD\$98,708,976 MxP\$1,257,197,000 | USD\$98,708,976 MxP\$1,257,197,000 | Fixed rate 6.3% received; and a fixed rate of 4.246% is paid | Fixed rate 6.3% is received; and a fixed rate of 4.246% is paid | (52,562,080) | (49,151,859) | - | - | n/a |
| ıc | Cross-currency and interest rate swaps | Hedge Long position | 14-Feb-13 | 8-Feb-18 | USD\$102,069,659 MxP\$1,300,000,000 | USD\$102,069,659 MxP\$1,300,000,000 | 28-day TIIE rate plus 0.30% is received, and a fixed rate of 2.6575% is paid | 28-day TIIE rate plus 0.30% is received, and a fixed rate of 2.6575% is paid | (39,995,453) | (35,884,419) | - | - | n/a |
| | Interest rate swaps | Hedge Position: Fixed rate paid, Variable rate received | 22-Jan-14 | 15-Dec-26 | USD 184,998,538 | USD 165,171,952 | Variable rate is received (LIBOR 3 months) and a fixed rate of 2.63% is paid | Variable rate is received (LIBOR 3 months) and a fixed rate of 2.63% is paid | (5,219,275) | (2,848,287) | 775,834 | 2,322,085 | n/a |
| | Interest rate | Hedge Position: Fixed rate paid, Variable rate received | 22-Jan-14 | 15-Dec-26 | USD 73,999,415 | USD 66,068,781 | Variable rate is received (LIBOR 3 months) and a fixed rate of 2.63% is paid | Variable rate is received (LIBOR 3 months) and a fixed rate of 2.63% is paid | (2,085,547) | (1,139,315) | 310,333 | 928,834 | n/a |
| | swaps Interest rate swaps | Hedge Position: Fixed rate paid, Variable rate received | 22-Jan-14 | 15-Dec-26 | USD 55,499,561 | USD 49,551,586 | A variable rate is received (LIBOR 3 months) and a fixed rate of 2.63% is paid | A variable rate is received (LIBOR 3 months) and a fixed rate of 2.63% is paid | (1,564,182) | (854,492) | 232,752 | 696,625 | n/a |
| | Interest rate swaps | Hedge Position: Fixed rate paid, Variable rate received | 22-Jan-14 | 15-Dec-26 | USD 55,499,561 | USD 49,551,586 | A variable rate is received (LIBOR 3 months) and a fixed rate of 2.63% is paid | A variable rate is received (LIBOR 3 months) and a fixed rate of 2.63% is paid | (1,572,313) | (860,877) | 234,010 | 696,625 | n/a |
| XII | Forward currency transactions | Hedge Position:long in USD/ short in MXP | 18-Mar-16 | 4-Jan-17 | USD 3,241,530 | - | MXP is paid/USD is received at an exchange rate of 17.7390 MXP/USD | - | 452,824 | - | - | (13,340) | n/a |
| XII | Forward currency transactions | Hedge Position:long in USD/ short in MXP | 18-Mar-16 | 2-Feb-17 | USD 3,349,581 | - | MXP is paid/USD is received at an exchange rate of 17.7390 MXP/USD | - | 478,275 | - | - | (91,529) | n/a |
| IV | Forward currency transactions | Hedge Posición: larga en USD/ Corta MXP | 30-Sep-16 | 2-Mar-17 | USD 3,447,857 | <u>-</u> | MXP is paid/USD is received at an exchange rate of 19.9808 MXP/USD | | 130,986 | - | 48,746 | (16,984) | n/a |
| IV | Forward currency transactions | Hedge Position:long in USD/ short in MXP | 30-Sep-16 | 4-Apr-17 | USD 3,114,193 | - | MXP is paid/USD is received at an exchange rate of 19.9808 MXP/USD | - | 131,836 | - | 32,349 | 197,344 | n/a |
| IV | Forward currency transactions | Hedge Position:long in USD/ short in MXP | 30-Sep-16 | 2-May-17 | USD 3,447,857 | - | MXP is paid/USD is received at an exchange rate of 19.9808 MXP/USD | - | 160,065 | - | 24,190 | 166,222 | n/a |



| | | | | | | | | | | | | | Colla teral |
|----|-------------------------------------|--|----------------|---------------|------------------|------------------|--|---|------------------|---------------------|----------------------|---------------------|-----------------|
| | | Designated as hedge or held | | | | | | | | | | | credi t |
| | | for other purposes | | | Notional amo | unt/Par value | | underlying ence variable | Fair value of as | set/liability | Annual m (income) | | facilit ies/ |
| | Type of derivative, | (e.g., trading/long | | | As of Dec | ember 31, | As of Dec | ember 31, | As of Decen | nber 31, | As of Dec | ember 31, | pledg ed |
| | value or agreement | or short position) | Effective date | Maturity date | 2016 (Unaudited) | 2017 (Unaudited) | 2016(Unaudit ed) | 2017 (Unaudited) | 2016 (Unaudited) | 2017 (Unaudited) | 2016 (Unaudited) | 2017 (Unaudited) | secur ities |
| | | Hedge | | | | | MXP is paid/USD is | | | | | | |
| | Forward | Position:long in USD/ short | | | | | received at an exchange rate of 19.9808 | | | | | | |
| IV | currency transactions | in MXP | 30-Sep-16 | 2-Jun-17 | USD 3,336,636 | - | MXP/USD MXP is | - | 169,810 | - | 11,068 | 204,141 | n/a |
| | | Hedge | | | | | paid/USD is received at an | | | | | | |
| | Forward currency | Position:long in USD/ short | | | | | exchange rate of 19.9808 | | | | | | |
| IV | transactions | in MXP | 30-Sep-16 | 5-Jul-17 | USD 3,447,857 | - | MXP/USD MXP is | - | 191,629 | - | (1,998) | 392,382 | n/a |
| | Farmed | Hedge | | | | | paid/USD is received at an | | | | | | |
| IV | Forward currency transactions | Position:long in USD/ short in MXP | 30-Sep-16 | 2-Aug-17 | USD 3,336,636 | _ | exchange rate of 19.9808 MXP/USD | _ | 198,434 | _ | (13,477) | 454,905 | n/a |
| | a ansactions | Hedge | 30 3cp 10 | 2,105 17 | 330 3,330,030 | | MXP is paid/USD is | _ | 130,434 | | (15)4777 | -13-1,303 | .,, a |
| | Forward | Position:long | | | | | received at an exchange rate | | | | | | |
| IV | currency transactions | in USD/ short in MXP | 30-Sep-16 | 5-Sep-17 | US 3,447,857 | - | of 19.9808 MXP/USD | - | 221,088 | - | (28,259) | 493,662 | n/a |
| | | Hedge | | | | | MXP is paid/USD is received at an | | | | | | |
| | Forward currency | Position:long in USD/ short | | | | | exchange rate of 19.9808 | | | | | | |
| IV | transactions | in MXP | 30-Sep-16 | 3-Oct-17 | USD 3,447,857 | - | MXP/USD MXP is | - | 234,131 | - | (39,935) | 419,836 | n/a |
| | | Hedge | | | | | paid/USD is received at an | | | | | | |
| | Forward | Position:long in USD/ short | 20.5 45 | 2 Nov. 47 | UCD 2 22C C2C | | exchange rate of 19.9808 | | 244 220 | | (50.752) | 224.040 | (|
| IV | transactions | in MXP Hedge | 30-Sep-16 | 3-Nov-17 | USD 3,336,636 | - | MXP/USD MXP is paid/USD is | - | 241,339 | - | (50,753) | 224,818 | n/a |
| | Forward | Position:long | | | | | received at an exchange rate | | | | | | |
| IV | currency transactions | in USD/ short in MX MXP | 30-Sep-16 | 4-Dec-17 | USD 3,447,857 | - | of 19.9808 MXP/USD | - | 264,439 | - | (64,807) | 338,031 | n/a |
| | | Hedge | | | | | MXP is paid/USD is | MXP is paid/USD is | | | | | |
| | Forward currency | Position:long in USD/ short | | | | | received at an exchange rate of 19.9808 | received at an exchange rate of 19.9808 | | | | | |
| IV | transactions | in MXP | 30-Sep-16 | 2-Jan-18 | USD 3,336,636 | USD 3,336,636 | MXP/USD | MXP/USD | 269,338 | (36,926) | (73,786) | 339 | n/a |
| | | Hegde | | | | | MXP is paid/USD is | MXP is paid/USD is | | | | | |
| | Forward | Position:long | | | | | received at an exchange rate | received at an exchange rate | | | | | |
| IV | currency transactions | in USD/ short in MXP | 30-Sep-16 | 2-Feb-18 | USD 3,447,857 | USD 3,447,857 | of 19.9808 MXP/USD MXP is | of 19.9808 MXP/USD | 292,574 | (20,112) | (88,338) | 274 | n/a |
| | | Hedge | | | | | paid/USD is received at an | | | | | | |
| | Forward currency | Position:long in USD/ short | | | | | exchange rate of 19.891814 | | | | | | |
| V | transactions | in MXP | 29-Sep-16 | 2-Mar-17 | USD 3,269,203 | - | MXP/USD MXP is | - | 151,683 | - | 185 | (2,569) | n/a |
| | Forward | Hedge Position:long | | | | | paid/USD is received at an exchange rate | | | | | | |
| v | currency transactions | in USD/ short in MXP | 29-Sep-16 | 4-Apr-17 | USD 2,952,828 | - | of 19.891814 MXP/USD | - | 137,637 | - | 102 | 257,894 | n/a |
| | | Hedge | | , | , | | MXP is paid/USD is | | ,, | | | - / | |
| | Forward | Position:long | | | | | received at an exchange rate | | | | | | |
| v | currency transactions | in USD/ short in MXP | 29-Sep-16 | 2-May-17 | USD 3,269,203 | - | of 19.891814 MXP/USD MXP is | - | 165,732 | - | 49 | 244,600 | n/a |
| | | Hedge | | | | | paid/USD is received at an | | | | | | |
| | Forward currency | Position:long in USD/ short | | | | | exchange rate of 19.891814 | | | | | | |
| V | transactions | in MXP Hedge | 29-Sep-16 | 2-Jun-17 | USD 3,163,745 | - | MXP/USD | - | 174,500 | - | (21) | 338,908 | n/a |
| | Forward | Position:long in USD/ short | | | | | MXP is paid/USD is received at an | | | | | | |
| v | currency transactions | in MXP | 29-Sep-16 | 5-Jul-17 | USD 3,269,203 | - | exchange rate | - | 195,623 | - | (95) | 369,319 | n/a |



| | Type of derivative, value or | Designated as hedge or held for other purposes (e.g., trading/long or short | Effective | Maturity | Notional amo | ember 31, | asset/refere As of Dec 2016(Unaudit | 2017 | Fair value of as | nber 31, 2017 | Annual m (income) As of Decc 2016 | ember 31, 2017 | Colla teral / credi t facilit ies/ pledg ed secur |
|------|------------------------------------|---|-----------|-------------|------------------|------------------|--|--|------------------|------------------|--|-------------------|---|
| - | agreement | position) | date | date | 2016 (Unaudited) | 2017 (Unaudited) | ed) of 19.891814 | (Unaudited) | 2016 (Unaudited) | (Unaudited) | (Unaudited) | (Unaudited) | ities |
| | | | | | | | MXP/USD | | | | | | |
| | | Hedge | | | | | MXP is paid/USD is | | | | | | |
| | Forward | Position:long | | | | | received at an exchange rate | | | | | | |
| ., | currency | in USD/ short | 20 Can 16 | 2 Aug 17 | UCD 2 162 74F | | of 19.891814 | | 201 620 | | (156) | 427.057 | 2/2 |
| V | transactions | in MXP | 29-Sep-16 | 2-Aug-17 | USD 3,163,745 | | MXP/USD MXP is | - | 201,630 | - | (156) | 427,057 | n/a |
| | | Hedge | | | | | paid/USD is received at an | | | | | | |
| | Forward | Position:long | | | | | exchange rate | | | | | | |
| v | currency transactions | in USD/ short in MXP | 29-Sep-16 | 5-Sep-17 | USD 3,269,203 | - | of 19.891814 MXP/USD | - | 223,579 | - | (241) | 461,509 | n/a |
| | | Hedge | | | | | MXP is paid/USD is | | | | | | |
| | Former | | | | | | received at an | | | | | | |
| | Forward currency | Position:long in USD/ short | | | | | exchange rate of 19.891814 | | | | | | |
| V | transactions | in MXP | 29-Sep-16 | 3-Oct-17 | USD 3,269,203 | - | MXP/USD MXP is | - | 235,977 | - | (306) | 389,487 | n/a |
| | | Hedge | | | | | paid/USD is | | | | | | |
| | Forward | Position:long | | | | | received at an exchange rate | | | | | | |
| v | currency | in USD/ short in MXP | 20 Con 16 | 3-Nov-17 | USD 3,163,745 | | of 19.891814 MXP/USD | | 242,412 | | (262) | 199,287 | n/2 |
| | transactions | | 29-Sep-16 | 3-14OV-17 | 030 3,103,745 | - | MXP is | - | 242,412 | - | (363) | 133,267 | n/a |
| | | Hedge | | | | | paid/USD is received at an | | | | | | |
| | Forward | Position:long | | | | | exchange rate | | | | | | |
| v | currency transactions | in USD/ short in MXP | 29-Sep-16 | 4-Dec-17 | USD 3,269,203 | <u>-</u> | of 19.891814 MXP/USD | | 264,835 | | (444) | 307,007 | n/a |
| | Forward | Hedge Position:long | | | | | MXP is paid/USD is received at an exchange rate | MXP is paid/USD is received at an exchange rate | | | | | |
| | currency | in USD/ short | 20.6. 16 | 21 | Hen a rea mr | 1100 0 100 5 | of 19.891814 | of 19.891814 | 200 000 | (5.00.1) | (,,,,, | | |
| V | transactions | in MXP | 29-Sep-16 | 2-Jan-18 | USD 3,163,745 | USD 3,163,745 | MXP/USD MXP is | MXP/USD MXP is | 269,097 | (54,031) | (491) | 6,568 | n/a |
| | | Hedge | | | | | paid/USD is received at an | paid/USD is received at an | | | | | |
| | Forward | Position:long | | | | | exchange rate | exchange rate | | | | | |
| v | currency transactions | in USD/ short in MXP | 29-Sep-16 | 2-Feb-18 | USD 3,269,203 | USD 3,269,203 | of 19.891814 MXP/USD | of 19.891814 MXP/USD | 291,671 | (36,699) | (575) | 4,877 | n/a |
| | | Hedge | | | | | Variable rate is received | Variable rate is received | | | | | |
| | | Position: Fixed | | | | | (LIBOR 3 | (LIBOR 3 | | | | | |
| | Interest rate | rate is paid, variable rate | | | | | months) and fixed rate of | months) and fixed rate of | | | | | |
| VII | swaps | is received | 15-Apr-14 | 15-Mar-24 | USD 49,426,087 | USD 46,081,082 | 2.94% is paid Variable rate | 2.94% is paid Variable rate | (2,106,635) | (1,204,446) | - | 117,267 | n/a |
| | | Hedge | | | | | is received | is received | | | | | |
| | | Position: Fixed rate is paid, | | | | | (LIBOR 3 months) and | (LIBOR 3 months) and | | | | | |
| VI | Interest rate swaps | variable rate is received | 15-Apr-14 | 16-Mar-32 | USD 40,489,875 | USD 40,018,050 | fixed rate of 3.68% is paid | fixed rate of 3.68% is paid | (5,183,918) | (4.639.174) | _ | 127,256 | n/a |
| 71 | эмарэ | Hedge | 13-Mp1-14 | TO IMIGI-27 | 030 40,405,073 | 050 40,010,030 | Variable rate | Variable rate | (3,103,310) | (4,033,174) | | 121,230 | 11/0 |
| | | Position: Fixed | | | | | is received (LIBOR 3 | is received (LIBOR 3 | | | | | |
| | Interest rate | rate is paid, variable rate | | | | | months) and fixed rate of | months) and fixed rate of | | | | | |
| VII | swaps | is received | 15-Apr-14 | 15-Mar-24 | USD 54,237,084 | USD 50,566,485 | 2.94% is paid | 2.94% is paid | (2,309,263) | (1,319,601) | - | 128,614 | n/a |
| | | Hedge | | | | | Variable rate is received | Variable rate is received | | | | | |
| | | Position: Fixed rate is paid, | | | | | (LIBOR 3 months) and | (LIBOR 3 months) and | | | | | |
| | Interest rate | variable rate | | | | | fixed rate of | fixed rate of | | | | | |
| VI | swaps | is received | 15-Apr-14 | 16-Mar-32 | USD 40,489,875 | USD 40,018,050 | 3.68% is paid | 3.68% is paid | (5,183,918) | (4,639,174) | - | 127,065 | n/a |
| \ | Electric power | Trading | 1 45-40 | 30 lv = 40 | | 75.554 | | USD 29.1500 is received | | 27.000 | | (27.000) | |
| VIII | swap price | Short Position | 1-Apr-18 | 30-Jun-18 | - | 75 MW | - | /MWh | - | 27,869 | - | (27,869) | n/a |
| V''' | Electric power | Trading | 1 Apr 10 | 20 Jun 40 | | 225 84144 | | USD 29.0000 is received | | £0 074 | | (60.974) | 2/2 |
| VIII | swap price | Short Position | 1-Apr-18 | 30-Jun-18 | - | 225 MW | - | /MWh | - | 69,871 | - 1 | (69,871) | n/a |



| | | | | | | | | | | | | | Colla |
|------|------------------------------|---|-------------------|------------------|------------------|------------------|------------------|---|------------------|---------------------|---------------------|------------------------|-------------------------------------|
| | | Designated as hedge or held for other | | | Notional amo | ount/Par value | Value of a | underlying ence variable | Fair value of as | set/liability | | naturities/ expense | teral / credi t facilit |
| | Type of derivative, | purposes (e.g., trading/long | | | | ember 31, | As of Dec | | As of Decen | | As of Dec | • | ies/ pledg ed |
| | value or agreement | or short position) | Effective date | Maturity date | 2016 (Unaudited) | 2017 (Unaudited) | 2016(Unaudit ed) | 2017 (Unaudited) | 2016 (Unaudited) | 2017 (Unaudited) | 2016 (Unaudited) | 2017 (Unaudited) | secur ities |
| | - | | | | | | | | | | | | |
| | Electric power | Trading | | | | | | USD 41.0000 is received | | | | | |
| VIII | swap price | Short Position | 1-Jul-18 | 30-Sep-18 | - | 150 MW | - | /MWh | - | 75,349 | - | (75,349) | n/a |
| | Electric power | Trading | | | | | | USD 39.4000 is received | | | | | |
| VIII | swap price | Short Position | 1-Feb-18 | 28-Feb-18 | - | 25 MW | - | MWh | - | 25,820 | - | (25,820) | n/a |
| | | | | | | | | USD 39.4500 | | | | | |
| VIII | Electric power swap price | Trading Short Position | 1-Feb-18 | 28-Feb-18 | - | 25 MW | - | is received /MWh | - | 26,298 | - | (26,298) | n/a |
| | Natural gas | Trading | | | | | | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts - | | | | | |
| VIII | swap price | Long Position | 1-Oct-17 | 31-Dec-17 | - | 15,000 MMBTU | - | 0.1825 is paid The natural | - | 72,548 | - | (72,548) | n/a |
| | Natural gas | Trading | 4140 | 20.540 | | 45.000 MMRTU | | gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts - | | 2004 | | (2.004) | |
| VIII | swap price | Long Position | 1-Jul-18 | 30-Sep-18 | - | 15,000 MMBTU | | 0.2600 is paid | - | 3,094 | - | (3,094) | n/a |
| VIII | Natural gas swap price | Trading Long Position | 1-Dec-17 | 31-Dec-17 | - | 5,000 MMBTU | - | USD 2.964 is paid/MMBtu | - | 17,034 | - | (17,034) | n/a |
| | | | | | | | | | | | | | |
| VIII | Natural gas swap price | Trading Long Position | 1-Dec-17 | 31-Dec-17 | - | 2,500 MMBTU | = | USD 2.958 is paid/MMBtu | = | 8,981 | - | (8,981) | n/a |
| | | | | | | | | | | | | | |
| | Natural gas | Trading Long Position | 1 Dec 17 | 31 Dec 17 | | 2,500 MMBTU | | USD 2.962 is paid/MMBtu | | 8,672 | | (8,672) | 2/2 |
| VIII | swap price | Trading | 1-Dec-17 | 31-Dec-17 | - | | - | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.2600 is | - | | - | | n/a |
| VIII | swap price | Long Position | 1-Dec-17 | 31-Dec-17 | - | 10,000 MMBTU | - | paid | - | 8,052 | - | (8,052) | n/a |
| VIII | Natural gas swap price | Trading Long Position | 1-Dec-17 | 31-Dec-17 | - | 5,000 MMBTU | - | USD 2.887 is paid/MMBtu | - | 28,957 | - | (28,957) | n/a |
| VIII | Natural gas swap price | Trading Long Position | 1-Dec-17 | 31-Dec-17 | ÷ | 2,500 MMBTU | - | USD 3.036 is paid/MMBtu | - | 2,942 | - | (2,942) | n/a |
| VIII | Natural gas swap price | Trading Long Position | 1-Dec-17 | 31-Dec-17 | <u>-</u> | 2,500 MMBTU | | USD 3.068 is paid/MMBtu | | 465 | | (465) | n/a |
| VIII | Natural gas swap price | Trading Long Position | 1-Dec-17 | 31-Dec-17 | - | 2,500 MMBTU | - | USD 3.017 is paid/MMBtu | - | 4,413 | - | (4,413) | n/a |



| | | | | | | | | | I | | 1 | | 1 |
|------|------------------------------|---|-------------------|------------------|------------------|------------------|---------------------|---------------------------------------|------------------|---------------------|---------------------|--------------------------|------------------------------------|
| | | Designated as hedge or held for other purposes | | | Notional amo | unt/Par value | | underlying ence variable | Fair value of as | set/liability | | naturities/) expense | Colla teral / credi t facilit ies/ |
| | Type of derivative, | (e.g., trading/long | | | As of Dec | ember 31, | As of Dec | | As of Decen | | As of Dec | | pledg ed |
| | value or agreement | or short position) | Effective date | Maturity date | 2016 (Unaudited) | 2017 (Unaudited) | 2016(Unaudit ed) | 2017 (Unaudited) | 2016 (Unaudited) | 2017 (Unaudited) | 2016 (Unaudited) | 2017 (Unaudited) | secur ities |
| | | | | | | | | | | | | | |
| | Natural gas | Trading | | | | | | USD 3.015 is | | | | | |
| VIII | swap price | Long Position | 1-Dec-17 | 31-Dec-17 | = | 2,500 MMBTU | - | paid/MMBtu | - | 4,568 | - | (4,568) | n/a |
| VIII | Electric power swap price | Trading Short Position | 1-Oct-17 | 31-Dec-17 | - | 150 MW | - | USD 35.0000 is received/MW h | - | (194,636) | - | 194,636 | n/a |
| | | | | | | | | USD 39.9000 | | | | | |
| | Electric power | Trading | | | | | | is received/MW | | | | | |
| VIII | swap price | Short Position | 1-Jul-18 | 30-Sep-18 | - | 75 MW | - | h | - | 4,722 | - | (4,722) | n/a |
| | | | | | | | | USD 39.8000 is | | | | | |
| VIII | Electric power swap price | Trading Short Position | 1-Jul-18 | 30-Sep-18 | _ | 75 MW | _ | received/MW h | _ | 1,726 | _ | (1,726) | n/a |
| | | | | | | | | USD 42.0000 | | -,-20 | | (=):==) | .,,, |
| | Electric power | Trading | | | | | | is received/MW | | | | | |
| VIII | swap price | Short Position | 1-Dec-17 | 31-Dec-17 | - | 25 MW | - | h | - | (27,385) | - | 27,385 | n/a |
| | | | | | | | | USD 41.6500 is | | | | | |
| VIII | Electric power swap price | Trading Short Position | 1-Dec-17 | 31-Dec-17 | | 75 MW | | received/MW h | _ | (92,645) | _ | 92,645 | n/a |
| VIII | swap price | SHORE POSITION | 1-Det-17 | 31-Dec-17 | - | 75 IVIVV | - | USD 43.2500 | - | (92,043) | - | 92,043 | II/a |
| | Florida accessor | To die | | | | | | is | | | | | |
| VIII | Electric power swap price | Trading Short Position | 1-Nov-17 | 31-Dec-17 | - | 50 MW | - | received/MW h | - | (29,794) | - | 29,794 | n/a |
| | | | | | | | | USD 41.0000 | | | | | |
| | Electric power | Trading | | | | | | is received/MW | | | | | |
| VIII | swap price | Short Position | 1-Jan-18 | 31-Jan-18 | - | 50 MW | - | h | - | 15,563 | - | (15,563) | n/a |
| | | | | | | | | USD 31.0000 is | | | | | |
| VIII | Electric power swap price | Trading Short Position | 1-Jul-18 | 30-Sep-18 | - | 225 MW | = | received/MW h | - | (8,223) | - | 8,223 | n/a |
| | | | | | | | | USD 42.0000 | | | | | |
| | Electric power | Trading | | | | | | is received/MW | | | | | |
| VIII | swap price | Short Position | 1-jan-18 | 31-jan-18 | - | 100 MW | - | h | - | 72,626 | - | (72,626) | n/a |
| | | | | | | | | USD 46.1500 is | | | | | |
| VIII | Electric power swap price | Trading Short Position | 1-Dec-17 | 31-Dec-17 | = | 25 MW | - | received/MW h | - | 14,075 | - | (14,075) | n/a |
| | | | | | | | | USD 46.1000 | | | | | |
| | Electric power | Trading | | | | | | is received/MW | | | | | |
| VIII | swap price | Short Position | 1-Dec-17 | 31-Dec-17 | - | 25 MW | - | h | - | 13,576 | - | (13,576) | n/a |
| | | | | | | | | USD 46.2500 is | | | | | |
| VIII | Electric power swap price | Trading Short Position | 1-Dec-17 | 31-Dec-17 | _ = | 25 MW | - | received/MW h | - | 15,074 | | (15,074) | n/a |
| | | | | | | | | USD 46.2500 | | | | | |
| | Electric power | Trading | | | | | | is received/MW | | | | | |
| VIII | swap price | Short Position | 1-Dec-17 | 31-Dec-17 | = | 25 MW | - | h | - | 15,074 | - | (15,074) | n/a |
| | | | | | | | | | | | | | |
| VIII | Natural gas swap price | Trading Long Position | 1-Oct-17 | 31-Dec-17 | - | 7,500 MMBTU | _ | USD 3.1000 is paid/MMBtu | - | (2,013) | _ | 2,013 | n/a |
| | and broce | | | 52 200 27 | | ., | | paray minuted | | (2,023) | | 2,023 | ,5 |
| VIII | Natural gas | Trading Long Position | 1-Oct-17 | 31-Dec-17 | _ | 7,500 MMBTU | _ | USD 3.0950 is paid/MMBtu | _ | (1,626) | - | 1,626 | n/2 |
| VIII | swap price | LUNG FUSILIUM | 1-011-17 | 31-060-17 | - | 7,500 IVIIVIDIO | · - | paiu/iviivibtu | I | (1,020) | | 1,026 | n/a |



| | | | | | | | | | | | | | Colla |
|------|---------------------------|---|-------------------|---------------|------------------|------------------|--------------------------|---|------------------|---------------------|---------------------|-----------------------|------------------------------|
| | | Designated as hedge or held for other purposes | | | Notional amo | ount/Par value | Value of asset/refere | underlying ence variable | Fair value of as | set/liability | | aturities/ expense | teral / credi t facilit ies/ |
| | Type of derivative, | (e.g., trading/long | | | As of Dec | ember 31, | As of Dec | ember 31, | As of Decen | nber 31, | As of Dec | ember 31, | pledg |
| | value or agreement | or short position) | Effective date | Maturity date | 2016 (Unaudited) | 2017 (Unaudited) | 2016(Unaudit ed) | 2017 (Unaudited) | 2016 (Unaudited) | 2017 (Unaudited) | 2016 (Unaudited) | 2017 (Unaudited) | secur ities |
| | | | | | | | | | | | | | |
| | Natural gas | Trading | | | | | | USD 2.9960 is | | | | | |
| VIII | swap price | Long Position | 1-Jul-18 | 30-Sep-18 | - | 7,500 MMBTU | - | paid/MMBtu | = | (44,394) | - | 44,394 | n/a |
| | Network | Totalling | | | | | | UCD 2 0070 Is | | | | | |
| VIII | Natural gas swap price | Trading Long Position | 1-Jul-18 | 30-Sep-18 | ÷ | 7,500 MMBTU | - | USD 2.9970 is paid/MMBtu | - | (44,620) | - | 44,620 | n/a |
| | | | | | | | | | | | | | |
| VIII | Natural gas swap price | Trading Long Position | 1-Apr-18 | 30-Jun-18 | - | 7,500 MMBTU | - | USD 2.9640 is paid/MMBtu | - | (47,310) | - | 47,310 | n/a |
| | | | · | | | | | | | , , | | | |
| | Natural gas | Trading | | | | | | USD 2.9500 is | | | | | |
| VIII | swap price | Long Position | 1-Apr-18 | 30-Jun-18 | - | 7,500MMBTU | - | paid/MMBtu | - | (44,153) | - | 44,153 | n/a |
| | | | | | | | | | | | | | |
| VIII | Natural gas swap price | Trading Long Position | 1-Apr-18 | 30-Jun-18 | - | 7,500MMBTU | - | USD 2.9500 is paid/MMBtu | - | (44,153) | - | 44,153 | n/a |
| | | | | | | | | | | | | | |
| VIII | Natural gas swap price | Trading Long Position | 1-Abr-18 | 30-Jun-18 | _ | 7,500MMBTU | _ | USD 2.9480 is paid/MMBtu | _ | (43,702) | _ | 43,702 | n/a |
| V | змар рпсс | Long Fosition | 1 Abi 10 | 30 3011 10 | | 7,500141141510 | | The natural gas price | | (43,702) | | 43,702 | 11/4 |
| | | | | | | | | published in NYMEX of the | | | | | |
| | | | | | | | | Henry Hub Gas Natural | | | | | |
| | | | | | | | | price of futures and | | | | | |
| | | | | | | | | spread contracts - | | | | | |
| VIII | Natural gas swap price | Trading Long Position | 1-Abr-18 | 30-Jun-18 | - | 15,000 MMBTU | - | +0.4125 is paid | - | (30,194) | - | 30,194 | n/a |
| | | | | | | | | The natural gas price | | | | | |
| | | | | | | | | published in NYMEX of the | | | | | |
| | | | | | | | | Henry Hub Gas Natural | | | | | |
| | | | | | | | | price of futures and | | | | | |
| | Natural gas | Trading Long Position | 4.41-40 | 20 1 10 | | 45 000 14140711 | | spread contracts - | | (20.007) | | 20.057 | - 1- |
| VIII | swap price | Long Position | 1-Abr18 | 30-Jun-18 | - | 15,000 MMBTU | - | +0.4150 paid The natural | - | (29,067) | - | 29,067 | n/a |
| | | | | | | | | gas price published in NYMEX of the | | | | | |
| | | | | | | | | Henry Hub Gas Natural | | | | | |
| | | | | | | | | price of futures and | | | | | |
| | | | | | | | | spread contracts | | | | | |
| VIII | Natural gas swap price | Trading Long Position | 1-Dec-17 | 31-Dec-17 | - | 5,000 MMBTU | - | +0.3450 is paid | - | (9,136) | - | 9,136 | n/a |
| | | | | | | | | | | | | | |
| | Natural gas | Trading | | | | | | USD 3.192 is | | | | | |
| VIII | swap price | Long Position | 1-Jan-18 | 31-Jan-18 | - | 5,000 MMBTU | - | paid/MMBtu | - | (21,184) | - | 21,184 | n/a |
| | Notice-1 | Tendin | | | | | | HCD 2 042 !- | | | | | |
| VIII | Natural gas swap price | Trading Long Position | 1-Jan-18 | 31-Jan-18 | = | 2,500 MMBTU | - | USD 3.013 is paid/MMBtu | - | (21,262) | - | 21,262 | n/a |
| | | | | | | | | The natural gas price published in | | | | | |
| | | | | | | | | NYMEX of the Henry Hub | | | | | |
| | | | | | | | | Gas Natural price of | | | | | |
| VIII | Natural gas swap price | Trading Long Position | 1-Jan-18 | 31-Jan-18 | - | 5,000 MMBTU | - | futures and spread | - | 3,866 | _ | (3,866) | n/a |



| | Type of derivative, value or agreement | Designated as hedge or held for other purposes (e.g., trading/long or short position) | Effective date | Maturity date | Notional amo As of Dec 2016 (Unaudited) | ount/Par value ember 31, 2017 (Unaudited) | Value of u asset/refere As of Dec 2016(Unaudit ed) | underlying ence variable ember 31, 2017 (Unaudited) contracts +0.1900 is paid | Fair value of as As of Decen 2016 (Unaudited) | | | expense ember 31, 2017 (Unaudited) | Colla teral / credi t facilit ies/ pledg ed secur ities |
|------|---|--|-------------------|------------------|---|---|--|---|---|----------|---|------------------------------------|---|
| VIII | Natural gas swap price | Trading Long Position | 1-Jul-18 | 30-Sep-18 | - | 15,000 MMBTU | - | USD 2.898 is paid/MMBtu The natural | - | (44,364) | - | 44,364 | n/a |
| VIII | Natural gas swap price | Trading Long Position | 1-Jul-18 | 30-Sep-18 | | 15,000 MMBTU | _ | gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.2225 is paid | | (13,905) | _ | 13,905 | n/a |
| | Natural gas | Trading | | 0000,00 | | | | USD 3.194 is | | (-5)233) | | | .,, . |
| VIII | swap price | Long Position | 1-Jan-18 | 31-Jan-18 | - | 5,000 MMBTU | - | paid/MMBtu | - | (70,512) | - | 70,512 | n/a |
| VIII | Natural gas swap price | Trading Long Position | 1-Jan-18 | 31-Jan-18 | - | 5,000 MMBTU | - | USD 3.192 is paid/MMBtu The natural | - | (70,202) | - | 70,202 | n/a |
| VIII | Natural gas swap price | Trading Long Position | 1-Jan-18 | 31-Jan-18 | | 5,000MMBTU | - | gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.2175 is paid | - | (387) | - | 387 | n/a |
| | Natural gas | Trading | | | | | | USD 2.996 is | | | | | |
| VIII | swap price Natural gas swap price | Long Position Trading Long Position | 1-Jul-18 | 30-Sep-18 | | 5,000MMBTU | - | paid/MMBtu The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.3775 is paid | | (88,787) | - | 88,787 14,169 | n/a |
| | | | 1 800 17 | 31 500 17 | | 3,333111112 | | | | (14,103) | | 14,103 | .,,u |
| VIII | Natural gas swap price | Trading Long Position | 1-Feb-18 | 28-Feb-18 | - | 2,500MMBTU | - | USD3.134 is paid/MMBtu | - | (12,621) | - | 12,621 | n/a |
| VIII | Natural gas swap price | Trading Long Position | 1-Feb-18 | 28-Feb-18 | - | 2,500 MMBTU | - | USD3.153 is paid/MMBtu The natural | - | (13,946) | - | 13,946 | n/a |
| VIII | Natural gas swap price | Trading Long Position | 1-Feb-18 | 28-Feb-18 | | 5,000 MMBTU | - | gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.0300 is paid | - | (20,222) | - | 20,222 | n/a |



| | | Davidson in the | | | | | | | | | | | Colla teral / |
|------|--------------------------------------|---|-------------------|---------------|------------------|--------------------------------|------------------|---|-------------------|---------------------|---------------------|--------------------------|-------------------------------|
| | | Designated as hedge or held for other purposes | | | Notional amo | ount/Par value | | underlying ence variable | Fair value of as: | set/liability | | naturities/) expense | credi t facilit ies/ |
| | Type of derivative, | (e.g., trading/long | | | As of Dec | ember 31, | As of Dec | cember 31, | As of Decen | nber 31, | As of Dec | ember 31, | pledg ed |
| | value or agreement | or short position) | Effective date | Maturity date | 2016 (Unaudited) | 2017 (Unaudited) | 2016(Unaudit ed) | 2017 (Unaudited) | 2016 (Unaudited) | 2017 (Unaudited) | 2016 (Unaudited) | 2017 (Unaudited) | secur ities |
| VIII | Natural gas swap price | Trading Long Position | 1-Jul-18 | 30-Sep-18 | | 15,000MMBTU | | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.2025 is paid | | (22,971) | _ | 22,971 | n/a |
| VIII | Natural gas swap price | Trading Long Position | 1-Dec-17 | 31-Dec-17 | | 2,500 MMBTU | - | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.3600 is paid | - | (5,730) | - | 5,730 | n/a |
| VIII | Natural gas swap price | Trading Long Position | 1-Dec-17 | 31-Dec-17 | | 2,500 MMBTU | | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.3700 is paid | | (6,504) | _ | 6,504 | n/a |
| ıx | Natural gas purchase contracts | Short Position | 2017 | 2022 | - | Aprox. 3,740,520 MMBTUS | - | Index refered in the contract plus approx. USD 0.02 0.05 USD/MMBTus | - | 950,404 | - | (950,404) | n/a |
| | Forward currency | Hedge Long position in USD/ Short position in | | | | | | MXP is paid/USD is received at an exchange rate of 18.81374 | | | | | |
| х | Forward currency | MXP Hedge Long position in USD/ Short position in | 28-Sep-17 | 1-Mar-18 | - | USD 3,454,392 | - | MXP/USD MXP is paid/USD is received at an exchange rate of 18.81374 | - | 182,449 | - | - | n/a |
| х | Forward currency | MXP Hedge Long position in USD/ Short position in | 28-Sep-17 | 2-Apr-18 | - | USD 3,120,096 | - | MXP/USD MXP is paid/USD is received at an exchange rate of 18.81374 | - | 181,014 | - | - | n/a |
| x | Forward currency transactions | MXP Hedge Long position in USD/ Short position in MXP | 28-Sep-17 | 2-May-18 | _ | USD 3,454,392 USD 3,342,960 | - | MXP/USD MXP is paid/USD is received at an exchange rate of 18.81374 MXP/USD | - | 217,481 | - | - | n/a n/a |
| x | Forward currency transactions | Hedge Long position in USD/ Short position in MXP | 28-Sep-17 | 2-Jul-18 | - | USD 3,454,392 | - | MXP/USD MXP is paid/USD is received at an exchange rate of 18.81374 MXP/USD | - | 260,000 | - | - | n/a |
| х | Forward currency transactions | Hedge Long position in USD/ Short position in MXP | 28-Sep-17 | 1-Aug-18 | - | USD 3,342,960 | - | MXP is paid/USD is received at an exchange rate of 18.81374 MXP/USD | - | 336,722 | - | - | n/a |
| х | Forward currency transactions | Hedge Long position in USD/ Short position in MX | 28-Sep-17 | 4-Sep-18 | - | USD 3,454,392 | - | MXP is paid/USD is received at an exchange rate of 18.81374 MXP/USD | - | 341,096 | - | - | n/a |



| | | Designated as hedge or held for other purposes | | | Notional amo | ount/Par value | | underlying ence variable | Fair value of as | set/liability | Annual m (income | | Colla teral / credi t facilit ies/ |
|----|--------------------------|---|-------------------|------------------|------------------|---|------------------|---|------------------|---------------------|---------------------|---------------------|--|
| | Type of derivative. | (e.g., trading/long | | | As of Dec | ember 31, | As of Dec | ember 31, | As of Decen | nber 31, | As of Dec | ember 31, | pledg |
| | value or agreement | or short position) | Effective date | Maturity date | 2016 (Unaudited) | 2017 (Unaudited) | 2016(Unaudit ed) | 2017 (Unaudited) | 2016 (Unaudited) | 2017 (Unaudited) | 2016 (Unaudited) | 2017 (Unaudited) | secur ities |
| | ugreement | Hedge | uute | uute | 2010 (Ondudited) | 2017 (Ondudited) | | MXP is paid/USD is | 2010 (Onadancea) | (onadarca) | (Gridanica) | (Ondudited) | inco |
| | Forward | Long position in USD/ Short | | | | | | received at an exchange rate | | | | | |
| x | currency | position in MXP | 28-Sep-17 | 1-Oct-18 | _ | USD 3,454,392 | _ | of 18.81374 MXP/USD | _ | 366,999 | _ | _ | n/a |
| | transactions | Hedge | 20 000 17 | 1 000 10 | | 030 3,434,332 | | MXP is paid/USD is | | 300,333 | | | 1,70 |
| | Forward | Long position in USD/ Short | | | | | | received at an exchange rate | | | | | |
| x | currency | position in MXP | 28-Sep-17 | 1-Nov-18 | _ | USD 3,342,960 | _ | of 18.81374 MXP/USD | _ | 309,378 | _ | _ | n/a |
| | | Hedge | | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | MXP is paid/USD is | | | | | |
| | Forward | Long position in USD/ Short | | | | | | received at an exchange rate | | | | | |
| x | currency | position in MXP | 28-Sep-17 | 3-Dec-18 | - | USD 3,454,392 | - | of 18.81374 MXP/USD | - | 302,930 | - | - | n/a |
| | | Hedge | | | | | | MXP is paid/USD is | | | | | |
| | Forward | Long position in USD/ Short | | | | | | received at an exchange rate | | | | | |
| х | currency transactions | position in MXP | 28-Sep-17 | 2-Jan-19 | - | USD 3,342,960 | - | of 18.81374 MXP/USD | - | 287,867 | - | - | n/a |
| | | Hedge | | | | | | MXP is paid/USD is | | | | | |
| | Forward | Long position in USD/ Short | | | | | | received at an exchange rate | | | | | |
| х | currency transactions | position in MXP | 28-Sep-17 | 1-Feb-19 | = | USD 3,454,392 | - | of 18.81374 MXP/USD | = | 251,487 | - | - | n/a |
| | | Hedge | | | | | | MXP is paid/USD is | | | | | |
| | Forward | Long position in USD/ Short | | | | | | received at an exchange rate | | | | | |
| ΧI | currency transactions | position in MXP | 30-Aug-17 | 1-Mar-18 | - | USD 3,459,451 | - | of 18.813643 MXP/USD | - | 182,718 | - | - | n/a |
| | | Hedge | | | | | | MXP is paid/USD is | | | | | |
| | Forward | Long position in USD/ Short | | | | | | received at an exchange rate | | | | | |
| ΧI | currency transactions | position in MXP | 30-Aug-17 | 2-Apr-18 | = | USD 3,124,666 | - | of 18.813643 MXP/USD | - | 181,272 | - | - | n/a |
| | | Hedge | | | | | | MXP is paid/USD is | | | | | |
| | Forward | Long position in USD/ Short position in | | | | | | received at an exchange rate of 18.813643 | | | | | |
| ХI | currency transactions | MXP Hedge | 30-Aug-17 | 2-May-18 | - | USD 3, 459,451 | - | MXP/USD MXP is | - | 217,781 | - | - | n/a |
| | | Long position | | | | | | paid/USD is received at an | | | | | |
| | Forward currency | in USD/ Short position in | | | | | | exchange rate of 18.813643 | | | | | |
| ΧI | transactions | MXP Hedge | 30-Aug-17 | 1-Jun-18 | - | USD 3,347,856 | - | MXP/USD MXP is | - | 227,072 | - | - | n/a |
| | | Long position | | | | | | paid/USD is received at an | | | | | |
| | Forward currency | in USD/ Short position in | | | | | | exchange rate of 18.813643 | | | | | |
| ΧI | transactions | MXP Hedge | 30-Aug-17 | 2-Jul-18 | - | USD 3,459,451 | - | MXP/USD MXP is | - | 251,812 | - | - | n/a |
| | | Long position | | | | | | paid/USD is received at an | | | | | |
| | Forward currency | in USD/ Short position in | | | | | | exchange rate of 18.813643 | | | | | |
| ΧI | transactions | MXP Hedge | 30-Aug-17 | 1-Ago-18 | - | USD 3,347,856 | - | MXP/USD MXP is | - | 260,324 | - | - | n/a |
| | | Long position | | | | | | paid/USD is received at an | | | | | |
| | Forward currency | in USD/ Short position in | | | | | | exchange rate of 18.813643 | | | | | |
| XI | transactions | MXP Hedge | 30-Aug-17 | 4-Sep-18 | = | USD 3,459,451 | - | MXP/USD MXP is | - | 288,212 | - | - | n/a |
| | | Long position | | | | | | paid/USD is received at an | | | | | |
| | Forward currency | in USD/ Short position in | | | | | | exchange rate of 18.813643 | | | | | |
| XI | transactions | MXP Hedge | 30-Aug-17 | 1-Oct-18 | - | USD 3,459,451 | - | MXP/USD MXP is | - | 303,282 | - | - | n/a |
| | | Long position | | | | | | paid/USD is received at an | | | | | |
| | Forward currency | in USD/ Short position in | | 4.0 | | | | exchange rate of 18.813643 | | | | | |
| ΧI | transactions | MXP | 30-Aug-17 | 1-Nov-18 | - | USD 3,347,856 | - | MXP/USD | <u> </u> | 309,724 | - | - | n/a |



| | | Designated as hedge or held | | | | | | | | | | | Colla teral / credi t |
|-----|--|--|-------------|------------------------|---------------------------|------------------|--|---|------------------|------------------|----------------------|-------------------|-----------------------------------|
| | T | for other purposes | | | Notional amo | unt/Par value | | underlying ence variable | Fair value of as | set/liability | Annual m (income) | | facilit ies/ |
| | Type of derivative, value or | (e.g., trading/long or short | Effective | Maturity | As of Deco | ember 31, | As of Dec | ember 31, 2017 | As of Decen | nber 31, 2017 | As of Dec | ember 31, 2017 | pledg ed secur |
| | agreement | position) Hedge | date | date | 2016 (Unaudited) | 2017 (Unaudited) | ed) | (Unaudited) MXP is | 2016 (Unaudited) | (Unaudited) | (Unaudited) | (Unaudited) | ities |
| | Forward currency | Long position in USD/ Short position in | | | | | | paid/USD is received at an exchange rate of 18.813643 | | | | | |
| ΧI | transactions | MXP Hedge | 30-Aug-17 | 3-Dec-18 | - | USD 3,459,451 | - | MXP/USD MXP is | - | 337,085 | - | - | n/a |
| ΧI | Forward currency transactions | Long position in USD/ Short position in MXP | 30-Aug-17 | 2-Jan-19 | - | USD 3,347,856 | - | paid/USD is received at an exchange rate of 18.813643 MXP/USD | - | 341,447 | - | = | n/a |
| ХI | Forward currency transactions | Hedge Long position in USD/ Short position in MXP | 30-Aug-17 | 1-Feb-19 | _ | USD 3,459,451 | _ | MXP is paid/USD is received at an exchange rate of 18.813643 MXP/USD | _ | 367,351 | _ | _ | n/a |
| 7.1 | transactions | Hedge | 30 / lug 1/ | 110013 | | 030 3,133,131 | | WWW.7000 | | 307,331 | | | .,,0 |
| Ш | Swap to hedge natural gas | Long position in USD/ Short position in MXP | 1-Jan-17 | 31-Jan-17 | 41,553 MMBTU | - | Is received / is paid USD 2.6801 by MMBTU | - | - | - | - | - | n/a |
| | Swap to hedge | Hedge Position: | | | | | Is received / is paid USD 2.6801 by | | | | | | |
| Ш | natural gas | short/long | 1-Feb-17 | 28-Feb-17 | 38,872 MMBTU | - | MMBTU | - | - | - | - | - | n/a |
| Ш | Swap to hedge natural gas | Hedge Position: short/long | 1-Mar-17 | 31-Mar-17 | 41,553 MMBTU | - | Is received / is paid USD 2.6801 by MMBTU | - | - | - | - | - | n/a |
| | Swap to hedge natural gas | Hedge Position: short/long | 1-Apr-17 | 30-Apr-17 | 40,157 MMBTU | _ | Is received / is paid USD 2.6801 by MMBTU | _ | _ | _ | _ | _ | n/a |
| | | Hedge | | | , | | Is received / is | | | | | | .,,= |
| Ш | Swap to hedge natural gas | Position: short/long | 1-May-17 | 31-May-17 | 41,553 MMBTU | - | paid USD 2.6801 by MMBTU | - | - | - | - | - | n/a |
| Ш | Swap to hedge natural gas | Hedge Position: short/long | 1-Jun-17 | 1-Jun-17 | 40,212 MMBTU | - | Is received / is paid USD 2.6801 by MMBTU | - | - | - | - | - | n/a |
| | | Hedge | | | | | received / | | | | | | |
| п | Swap to hedge natural gas | Position: short/long | 1-Jul-17 | 30-Jul-17 | 41,553 MMBTU | - | paid USD 2.6801 by MMBTU | - | - | = | - | - | n/a |
| | Swap to hedge | Hedge Position: | 1-Διισ-17 | 31-Aug-17 | 41,553 MMRTII | | Is received / is paid USD 2.6801 by | | | | | | n/a |
| - | Swap to hedge | Hedge Position: | 1 Mg-1/ | 31 Aug-1/ | O LOUISING CCCTT | - | Is received / is paid USD 2.6801 by | - | - | - | - | - | 11/4 |
| Ш | natural gas | short/long | 1-Sep-17 | 30-Sep-17 | 40,212 MMBTU | ÷ | MMBTU | = | - | = | = | = | n/a |
| п | Swap to hedge natural gas | Hedge Position: short/long | 1-Oct-17 | 31-Oct-17 | 41,609 MMBTU | - | Is received / is paid USD 2.6801 by MMBTU | - | - | - | - | - | n/a |
| | Swap to hedge natural gas | Hedge Position: short/long | 1-Nov-17 | 30-Nov-17 | 40,212 MMBTU | - | Is received / is paid USD 2.6801 by MMBTU | - | - | = | - | = | n/a |
| | Swap to hedge | Hedge Position: | | | | | Is received / is paid USD 2.6801 by | | | | | | |
| " | natural gas Swap to hedge natural gas | short/long Hedge Position: short/long | 1-Dec-17 | 31-Dec-17 31-Jan-18 | 41,553 MMBTU 41,553 MMBTU | - | Is received / is paid USD 2.6801 by MMBTU | - | - | - | - | - | n/a n/a |



| | | 1 | | | | | | | 1 | | 1 | | 1 |
|----|------------------------------------|---|-----------|-----------|------------------|------------------|---|--------------|------------------|-------------|-------------|---|---|
| | Type of derivative, value or | Designated as hedge or held for other purposes (e.g., trading/long or short | Effective | Maturity | Notional amo | | Value of u asset/refere As of Dec 2016(Unaudit | nce variable | Fair value of as | - | | naturities/) expense ember 31, 2017 | Colla teral / credi t facilit ies/ pledg ed secur |
| | agreement | position) | date | date | 2016 (Unaudited) | 2017 (Unaudited) | ed) | (Unaudited) | 2016 (Unaudited) | (Unaudited) | (Unaudited) | (Unaudited) | ities |
| II | Swap to hedge natural gas | Hedge Position: short/long | 1-Feb-18 | 28-Feb-18 | 38,872 MMBTU | - | Is received / is paid USD 2.6801 by MMBTU | - | - | - | - | - | n/a |
| п | Swap to hedge natural gas | Hedge Position: short/long | 1-Mar-18 | 31-Mar-18 | 41,553 MMBTU | - | Is received / is paid USD 2.6801 by MMBTU | - | - | - | - | - | n/a |
| II | Swap to hedge natural gas | Hedge Position: short/long | 1-Apr-18 | 30-Apr-18 | 40,157 MMBTU | - | Is received / is paid USD 2.6801 by MMBTU | - | - | = | - | - | n/a |
| II | Swap to hedge natural gas | Hedge Position: short/long | 1-May-18 | 31-May-18 | 41,553 MMBTU | - | Is received / is paid USD 2.6801 by MMBTU | - | - | - | - | - | n/a |
| II | Swap to hedge natural gas | Hedge Position: short/long | 1-Jun-18 | 1-Jun-18 | 40,212 MMBTU | - | Is received / is paid USD 2.6801 by MMBTU | - | - | - | - | - | n/a |
| = | Swap to hedge natural gas | Hedge Position: short/long | 1-Jul-18 | 30-Jul-18 | 41,553 MMBTU | - | Is received / is paid USD 2.6801 by MMBTU | - | - | - | - | - | n/a |
| II | Swap to hedge natural gas | Hedge Position: short/long | 1-Aug-18 | 31-Aug-18 | 41,553 MMBTU | - | Is received / is paid USD 2.6801 by MMBTU | - | - | - | - | - | n/a |
| Ш | Swap to hedge natural gas | Hedge Position: short/long | 1-Sep-18 | 30-Sep-18 | 40,212 MMBTU | - | Is received / is paid USD 2.6801 by MMBTU | - | - | - | - | - | n/a |
| II | Swap to hedge natural gas | Hedge Position: short/long | 1-Oct-18 | 31-Oct-18 | 41,609 MMBTU | - | Is received / is paid USD 2.6801 by MMBTU | - | - | - | - | - | n/a |
| п | Swap to hedge natural gas | Hedge Position: short/long | 1-Nov-18 | 30-Nov-18 | 40,212 MMBTU | - | Is received / is paid USD 2.6801 by MMBTU | - | - | | - | - | n/a |
| II | Swap to hedge natural gas | Hedge Position: short/long | 1-Dec-18 | 31-Dec-18 | 41,553 MMBTU | - | Is received / is paid USD 2.6801 by MMBTU | - | - | - | - | - | n/a |



21. Based on the classification contained in the applicable accounting standards, describe the intended purpose of the derivative (e.g., hedging, trading).

The Company uses the classification of the FIDs in accordance with the International Financial Reporting Standard ("IAS 39") - Financial instruments: Recognition and measurement.

22. The individual or aggregate notional amount of each type of FID is stated in thousands of pesos, while the value of its underlying asset and its fair value are reported in the currency in which they are denominated.

The FIDs notional amounts and the fair value are expressed in thousands of US dollars in an aggregate manner in the condensed Interim Consolidated Financial Statements for the twelve-month period ended December 31, 2017 and 2016.

23. It is clear whether the relevant position constitutes a short or long position.

See table (number 20) of FIDs where it is mentioned that there are financial instruments for trading and hedging and others such as gas purchase contracts

24. Breakdown of maturities by year, for current year and subsequent.

Please refer to Note 24.10.1 of the consolidated financial statements for the year ended December 31, 2016.

25. Indicate whether it is specified if there are any credit facilities or securities pledged as collateral for margin calls.

No credit lines or securities under guarantee for margin calls were used.

- B. Sensibility analysis and changes in fair value (solely as with respect to FIDs held for trading purposes and to ineffective hedges).
- 26. In the case of FIDs held for trading purposes or that have proven ineffective as a hedge, describe the method used to determine the expected losses or the price sensibility of the derivatives, including volatility.

Stress scenarios are used to determine possible losses in the FIDs due to changes in the underlying.



- 27. Provide a sensibility analysis for the aforementioned transactions, including, at least, the following:
 - a) Identification of the FID transaction-related risks that may give rise to losses for the issuer.
 - b) Identification of the instruments that would give rise to such losses.

Not applicable. The hedging transactions have been deemed effective.

- 28. Describe three scenarios (e.g., likely, potential and remote/stress scenarios) that could have an adverse effect on the issuer, including a description of the assumptions and parameters used in the development of such scenarios.
 - c) The potential scenario considers a change of at least 25% in the price of the underlying assets, and the remote scenario considers a change of at least 50% therein.

Refer to number 27 above to verify the different scenarios.

29. Estimated potential loss recognized in the income and cash flow statements under each scenario.

Refer to number 27 above to verify the different scenarios.

30. For the FIDs that have been designated as hedges, indicate the level of stress or change in the underlying assets at which the effectiveness measurements are sufficient.

The measures are effective for stress scenarios of between -30% and up to 30%.