

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

For the years and periods of three-month ended December 31, 2019 and 2018

- 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 the accounting policy for instruments derivatives and hedging activities and is consistent with the guidelines of Sempra's Energy (parent and ultimate holding company in the United States of America) for the use of derivatives for hedging purposes. If the derivative transaction is for trading purposes, the authorization of the Executed Finance Vice president of the Company will be required, in the case of interest rate and exchange rate hedges.

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.
- 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 and electricity prices, to 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 mexican pesos.

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, 2019 and 2018 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. Forward currency transactions.
- d. Electric energy price swaps and natural gas price swaps.
- e. 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 or unconsolidated affiliates.

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.

6. Policies with respect to margins, collateral, credit facilities and market risk.

As of December 31, 2019 and 2018, the Company have policies with respect margins, collateral, credit facilities and market risk the Company and its subsidiaries do not provide their counterparts margin or collateral for their hedging operations.

The Company uses valuation techniques that incorporate observable market inputs to estimate the fair value of certain types of financial instruments. Note 8.2 in Condensed Interim Consolidated Financial Statements as of and for the twelve-month period ended December 31, 2019 and 2018 respectively, contains a detailed description of the key assumptions used to determine the fair value of FIDs.

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

See Note 3.2.4 in the annual Consolidated Financial Statements ended December 31, 2018.

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

As of December 31, 2019, 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, commodities, 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 market risk management activities, and monitor the results of trading and other activities to ensure



compliance with Company's stated market risk management and trading policies. These activities include, but are not limited to, daily monitoring of derivative that could generate credit risk, liquidity and market risk. The respective oversight organizations are independent from the management Risk Department.

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 mexican pesos and variable rate.
- Interest rate swaps to mitigate the risk of rising interest rates.
- 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 mexican pesos.
- 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 in the annual Consolidated Financial Statements as of and for the year ended December 31, 2018.

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, 2019 and 2018, including operations with FIDs, the Company's management receives advice from Chatham Hedging Advisors, LLC 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 Company's risk management area and Sempra Energy, oversee Company's market risk management activities, supervise and authorizes according to the established policy the results of Company's trading and other activities to ensure compliance with Company's establish management and trading policies. These activities include, but are not limited to, daily monitoring of derivative position which originate credit, liquidity and market risk. Respective oversight organizations are independent from management Risk Department.

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. (Exit price)



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, management considers the Company's credit risk 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) and the lowest priority to unobservable inputs (Level 3).

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 as of the reporting date, either directly (i.e. prices) or indirectly.
- 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 and are generally less observable than objective sources (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 presented.

See Note 8.3 of Condensed Interim Consolidated Financial Statements as of and for the years and periods of three-month ended December 31, 2019 and 2018 respectively and see Note 24.11.3 of Consolidated Financial Statement as of and for the year ended December 31, 2018.

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 are determined by an independent third party valuation provider using recognized valuation techniques in the financial sector using standard industry models. The valuation of these instruments is determined using widely accepted valuation techniques including discounted cash flow analysis on the expected cash flows of each derivative. This analysis reflects the contractual terms of the derivatives, including the period to maturity, and uses observable market-based inputs, including interest rate curves, spot and forward rates.

To comply with the provisions of IFRS 13 Fair Value Measurement, the Company incorporates credit valuation adjustments to appropriately reflect both its own nonperformance risk and the respective counterparty's nonperformance risk in the fair value measurements. In adjusting the fair value of its derivative contracts for the effect of nonperformance risk, the Company has considered the impact of netting and any applicable credit enhancements, such as collateral postings, thresholds, mutual puts, and guarantees. As of December 31, 2019 the Company does not have any of these compensation mechanism.



Although the Company has determined that the majority of the inputs used to value its derivatives fall within Level 2 of the fair value hierarchy. The Company has determined that its derivative valuations in their entirety are classified in Level 2 of the fair value hierarchy.

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. 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 on a period to period basis.

The management has assessed the cross currency swaps using the dollar-offset method and using the statistical regressions methodology for both prospective and retrospective testing for the Interest Rate Swaps and FX hedges and has determined that such instruments were effective during the twelve-month periods ended December 31, 2019 y 2018, hedge is effective because its results range between 80 percent and 125 percent.



- 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, 2019 and 2018, is a gain of \$1,559 and of \$3,754 (thousands of U.S. dollars), and a loss of \$1,525 and a gain of \$77 (thousands of U.S. dollars) for the three-months periods ended December 31, 2019 and 2018 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 Condensed Interim Consolidated Statements of Profit (for the same periods).

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

For the three months ended December 31, 2019. 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/reference variable | Annual maturities/(income) expense |
|-----|---|--|-------------------|------------------|---------------------------------|---|--|
| IV | Natural gas swap price | Trading Long Position | 1-Oct-19 | 31-Oct-19 | 2500 MMBTU | USD 2.759/MMBTU is paid | - |
| IV | Natural gas swap price | Trading Long Position | 1-Oct-19 | 31-Oct-19 | 2500 MMBTU | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts -0.5200 is paid | - |
| IV | Natural gas swap price | Trading Long Position | 1-Oct-19 | 31-Oct-19 | 2500 MMBTU | USD 2.783/MMBTU is paid | - |
| IV | Natural gas swap price | Trading Long Position | 1-Oct-19 | 31-Oct-19 | 2500 MMBTU | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.8500 is paid | - |
| IV | Natural gas swap price | Trading Long Position | 1-Oct-19 | 31-Oct-19 | 2500 MMBTU | USD 2.934/MMBTU is paid | - |
| IV | Natural gas swap price | Trading Long Position | 1-Oct-19 | 31-Oct-19 | 2500 MMBTU | USD 2.935/MMBTU is paid | - |
| IV | Natural gas swap price | Trading Long Position | 1-Oct-19 | 31-Oct-19 | 5000 MMBTU | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.8500 is paid | - |
| IV | Natural gas swap price | Trading Long Position | 1-Oct-19 | 31-Dec-19 | 7500MMBTU | USD 3.014/MMBTU is paid | - |
| IV | Natural gas swap price | Trading Long Position | 1-Oct-19 | 31-Dec-19 | 7500MMBTU | USD 3.015/MMBTU is paid | - |
| IV | Natural gas swap price | Trading Long Position | 1-Oct-19 | 31-Dec-19 | 15000MMBTU | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.8500 is paid | - |
| IV | Electric power swap price | Trading Short Position | 1-Oct-19 | 31-Oct-19 | 25MW | USD 41.5/MWh is received | - |
| IV | Electric power swap price | Trading Short Position | 1-Oct-19 | 31-Oct-19 | 25MW | USD 43/MWh is received | - |
| IV | Electric power swap price | Trading Short Position | 1-Oct-19 | 31-Oct-19 | 50MW | USD 44.5/MWh is received | - |
| IV | Electric power swap price | Trading Short Position | 1-Oct-19 | 31-Dec-19 | 150MW | USD 46.75/MWh is received | - |
| IV | Electric power swap price | Trading Short Position | 1-Oct-19 | 31-Dec-19 | 50MW | USD 45.5/MWh is received | - |
| IV | Electric power swap price | Trading Short Position | 1-Oct-19 | 31-Dec-19 | 50MW | USD 38.5/MWh is received | - |
| IV | Natural gas swap price | Trading Long Position | 1-Oct-19 | 31-Dec-19 | 7500MMBTU | USD 2.78/MMBtu is paid | - |
| IV | Natural gas swap price | Trading Long Position | 1-Oct-19 | 31-Dec-19 | 7500MMBTU | USD 2.782/MMBtu is paid | - |
| IV | Natural gas swap price | Trading Long Position | 1-Oct-19 | 31-Dec-19 | 7500MMBTU | USD 2.783/MMBtu is paid | - |
| IV | Natural gas swap price | Trading Long Position | 1-Oct-19 | 31-Dec-19 | 15000MMBTU | USD 2.784/MMBtu is paid | - |
| IV | Natural gas swap price | Trading Long Position | 1-Oct-19 | 31-Dec-19 | 15000MMBTU | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.8500 is paid | - |
| IV | Electric power swap price | Trading Short Position | 1-Oct-19 | 31-Oct-19 | 75MW | USD 40.75/MWh is received | - |
| | | | | | | | |



| 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/reference variable | Annual maturities/(income) expense |
|------|---|--|-------------------|------------------|---------------------------------|---|--|
| IV | Natural gas swap price | Trading Long Position | 1-Oct-19 | 31-Oct-19 | 7500MMBTU | USD 2.28/MMBtu is paid | - |
| IV | Natural gas swap price | Trading Long Position | 1-Oct-19 | 31-Oct-19 | 7500MMBTU | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.8500 is paid | - |
| IV | Electric power swap price | Trading Short Position | 1-Dic-19 | 31-Dec-19 | 25MW | USD 45.5/MWh is received | - |
| IV | Natural gas swap price | Trading Long Position | 1-Dec-19 | 31-Dec-19 | 2500MMBTU | USD 2.473/MMBtu is paid | - |
| IV | Natural gas swap price | Trading Long Position | 1-Dec-19 | 31-Dec-19 | 2500MMBTU | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.8500 is paid | - |
| IV | Electric power swap price | Trading Short Position | 1-Dec-19 | 31-Dec-19 | 25MW | USD 41.25/MWh is received | - |
| IV | Natural gas swap price | Trading Long Position | 1-Dec-19 | 31-Dec-19 | 2500MMBTU | USD 2.49/MMBtu is paid | - |
| IV | Natural gas swap price | Trading Long Position | 1-Dec-19 | 31-Dec-19 | 2500MMBTU | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.8500 is paid | - |
| IV | Natural gas swap price | Trading Long Position | 1-Dec-19 | 31-Dec-19 | 5000MMBTU | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.8500 is paid | - |
| IV | Natural gas swap price | Trading Long Position | 1-Dec-19 | 31-Dec-19 | 2500MMBTU | USD 2.667/MMBtu is paid | - |
| IV | Natural gas swap price | Trading Long Position | 1-Dec-19 | 31-Dec-19 | 2500MMBTU | USD 2.668/MMBtu is paid | - |
| IV | Electric power swap price | Trading Short Position | 1-Dec-19 | 31-Dec-19 | 25MW | USD 47.25/MWh is received | - |
| IV | Electric power swap price | Trading Short Position | 1-Dec-19 | 31-Dec-19 | 25MW | USD 47/MWh is received | - |
| VIII | Forward currency transactions | Hedge Position:long in USD/ short in MXP | 31-Aug-18 | 1-Oct-19 | USD 6,516,938 | MXP is paid/USD is received at an exchange rate of 20.06672 MXP/USD | 127,790.22 |
| VIII | Forward currency transactions | Hedge Position:long in USD/ short in MXP | 31-Aug-18 | 1-Nov-19 | USD 6,249,586 | MXP is paid/USD is received at an exchange rate of 20.06672 MXP/USD | 294,284.11 |
| VIII | Forward currency transactions | Hedge Position:long in USD/ short in MXP | 31-Aug-18 | 2-Dec-19 | USD 6,516,938 | MXP is paid/USD is received at an exchange rate of 20.06672 MXP/USD | 151,338.00 |
| II | Forward currency transactions | Hedge Position:long in USD/ short in MXP | 29-Oct-18 | 1-Oct-19 | USD 798,730 | MXP is paid/USD is received at an exchange rate of 20.894 MXP/USD | 49,236.75 |
| II | Forward currency transactions | Hedge Position:long in USD/ short in MXP | 29-Oct-18 | 1-Nov-19 | USD 863,151 | MXP is paid/USD is received at an exchange rate of 20.894 MXP/USD | 77,904.96 |
| II | Forward currency transactions | Hedge Position:long in USD/ short in MXP | 29-Oct-18 | 2-Dec-19 | USD 805,260 | MXP is paid/USD is received at an exchange rate of 20.894 MXP/USD | 52,669.00 |
| | | | | | | | |



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 percent of assets, liabilities or equity, or 3 percent 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 2.66 percent. The swaps' total notional value is USD 306.2. million (\$3,900 million historical Mexican Pesos). These contracts have been designated as cash flow hedges.

On February 8, 2018, the Company made the repayment of the public debt issuance, CEBURES, of the second placement for an amount of \$1,300.0 million of historical Mexican Pesos.

For this debt maturing in 2018, the Company swapped fixed rate in Pesos for a fixed rate in U.S. Dollars, exchanging principal and interest payments that were realized on this date, the Company received \$1,300 million of Mexican Pesos and paid \$102.1 million U.S. Dollars. This payment ended the hedged contracted and the CEBURES liability.

- II. Forward currency transactions. On October 29, 2018, the subsidiary company Transportadora del Norte SH, S. de R. L. de C.V. ("TdN"), entered into forward contracts Scotiabank Inverlat to cover foreign currency rate exposure on the future cash flows expected from the income to be received in MXP of the LP gas transport project Burgos Monterrey project, fixing future cash flows at 20.8940 MXP/USD, The notional amount of the swaps is USD 3.9 million (\$82.2 million Mexican pesos) with monthly maturities until February 2020. These contracts have been designated as cash flow hedges.
- III. Interest rate swaps. On January 22, 2014, the subsidiary company IEnova Pipelines S. de R. L. de C. V. "IEnova Pipelines" before Gasoductos de Chihuahua, S. de R.L. de C. V. ("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 249.7 million. These contracts have been designated as cash flow hedges.

- IV. Interest rate swaps On April 15, 2014, subsidiary companies Ventika, S.A.P. I. de C.V. ("Ventika I") and Ventika II S. A. P. I. de C. V. ("Ventika II"), 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, 2019 is USD 76.8 million. These contracts have been designated as cash flow hedges.
- V. Interest rate swaps On April 15, 2014, subsidiary companies Ventika I y Ventika II, 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, 2019 is USD 68.6 million. These contracts have been designated as cash flow hedges.
- VI. **Swaps commodities prices.** Price swap to trade electric power and natural gas prices with different maturities, between Termoeléctrica de Mexicali, S. de R. L. de C.V. ("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.
- VII. **Derivatives natural gas purchase contracts.** Natural gas purchase contracts between IEnova Marketing, S. de R. L. de C. V., ("IMK") and its customers, with maturity between one and five years from the date of execution for an approximate notional quantity amount of 93.1 thousand of MMBTUS as of December 31, 2019, the price per MMBtu of gas for delivery is stated in U.S. Dollars and is published "Daily prices survey or Market Center Spot Gas Prices" depending on the terms of the back to back contracts between IMK and unconsolidated affiliate SG&PM.
- VIII. Forward currency transactions. On August 30, 2018, the subsidiary company Gasoductos del Noreste, S. de R. L. de C.V. ("GdN"), entered into forward contracts with Banca Múltiple Grupo Financiero Scotiabank Inverlat ("Scotiabank Inverlat") 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 20.06672 MXP/USD. The forwards notional amount is USD 32.9 millon (\$661.1 million Mexican pesos) with monthly maturities until February 2020. These contracts have been designated as cash flow hedges.
- IX. **Forward currency transactions.** On August 29, 2019, GdN, entered into forward contracts with MUFG Bank Ltd. ("MUFG") 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 20.71368 MXP/USD. The forwards notional amount is USD 74.9 million (\$1,551.5 million Mexican pesos) with monthly maturities until February 2021. These contracts have been designated as cash flow hedges.
 - The following table contains certain quantitative, comparative information with respect to periods ended December 31, 2019 and 2018. (Unaudited).
- X. **Interest rate swaps.** On November 20, 2019, the company entered into interest rate swap contract with Credit Agricole Corporate ("CA") to cover interest rate exposure of a debt with effective date of December 5, 2019. The notional value of the swap is USD \$ 200.0 million with



maturity in November 2034, exchanging the LIBOR rate in USD at a fixed rate of 1.77 percent. This contract has been designated as cash flow hedges.

XI. Forward currency transactions. On October 29, 2019, TdN, entered into forward contracts Scotiabank Inverlat to cover foreign currency rate exposure on the future cash flows expected from the income to be received in MXP of the LP gas transport project Burgos – Monterrey project, fixing future cash flows at 19.9375 MXP/USD, The notional amount of the swaps is USD 11.0 million (\$218.6 million Mexican pesos) with monthly maturities until February 2020. These contracts have been designated as cash flow hedges.

The following table contains certain quantitative, comparative information with respect to periods ended December 31, 2019 and 2018. (Unaudited).



Comparative Quantitative Information as of December 31, 2019 an 2018, (Unaudited)

(Amount in U.S. dollars)

| | | | 1 | 1 | | | | | 1 | | I | | 1 |
|-----|----------------------------|----------------------------------|-----------|-----------|--------------------------------------|---------------------------------------|-----------------------------------|-----------------------------------|------------------|---------------|-------------|--|-------------|
| | | | | | | | | | | | | | Colla |
| | | | | | | | | | | | | | teral |
| | | | | | | | | | | | | | / |
| | | Designated as hedge or held | | | | | | | | | | | credi t |
| | | for other | | | | | | underlying | | | | naturities/ | facilit |
| | | purposes | | | Notional amo | ount/Par value | asset/refere | ence variable | Fair value of as | set/liability | (income) | expense | ies/ |
| | Type of derivative, | (e.g., trading/long | | | As of Dec | ember 31, | As of Dec | ember 31, | As of Decen | iber 31, | As of Dec | ember 31, | pledg ed |
| | value or | or short | Effective | Maturity | | | 2018(Unaudit | 2019 | | 2019 | 2018 | 2019 | secur |
| | agreement | position) | date | date | 2018 (Unaudited) | 2019 (Unaudited) | ed) | (Unaudited) | 2018 (Unaudited) | (Unaudited) | (Unaudited) | (Unaudited) | ities |
| | | | | | | | Fixed rate 6.3% is | Fixed rate 6.3% is | | | | | |
| | Cross-currency | Hedge | | | | | received; and | received; and | | | | | |
| l l | and interest rate | | 44.5-5-42 | 2 5-1- 22 | USD\$207,500,000 | USD\$207,500,000 | a fixed rate of | a fixed rate of | (04.746.506) | (02.204.460) | | | |
| IA | swaps | Long position | 14-Feb-13 | 2-Feb-23 | MXP\$2,642,803,00 | MXP\$2,642,803,000 | 4.066% is paid Fixed rate | 4.066% is paid Fixed rate | (94,746,586) | (82,301,168) | - | - | n/a |
| | | | | | | | 6.3% | 6.3% is | | | | | |
| | Cross-currency | Hedge | | | | | received; and | received; and | | | | | |
| IB | and interest rate swaps | Long position | 14-Feb-13 | 2-Feb-23 | USD\$98,708,976 MxP\$1,257,197,00 | USD\$98,708,976 MxP\$1,257,197,000 | a fixed rate of 4.246% is paid | a fixed rate of 4.246% is paid | (45,750,250) | (39,686,699) | _ | _ | n/a |
| | 344053 | Hedge | 1416515 | 210020 | 11/A \$2,237,137,00 | WW. \$1,237,137,000 | MXP is | MXP is | (43,730,230) | (55,000,055) | | | , u |
| | | | | | | | paid/USD is | paid/USD is | 1 | | | | |
| | Forward | Long position in USD/ Short | | | | | received at an exchange rate | received at an exchange rate | 1 | | | | |
| | currency | position in | | | | | of 20.894 | of 20.894 | 1 | | | | |
| П | transactions | MXP | 29-Oct-18 | 2-Jan-20 | USD 721,479 | USD 721,479 | MXP/USD | MXP/USD | 178 | (78,559) | - | 34,531 | n/a |
| | | Hedge | | | | | MXP is paid/USD is | MXP is paid/USD is | | | | | |
| | | Long position | | | | | received at an | received at an | 1 | | | | |
| | Forward | in USD/ Short | | | | | exchange rate | exchange rate | 1 | | | | |
| | currency | position in | 20 0-1 10 | 4.5-1- 20 | 1150 745 057 | 1100 745 057 | of 20.894 | of 20.894 | 4.246 | (77.027) | | | - 1- |
| -"- | transactions | MXP Hedge | 29-Oct-18 | 4-Feb-20 | USD 745,957 | USD 745,957 | MXP/USD Variable rate | MXP/USD Variable rate | 4,246 | (77,037) | - | - | n/a |
| | | - | | | | | is received | is received | | | | | |
| | | Position: Fixed | | | | | (LIBOR 3 | (LIBOR 3 | | | | | |
| | Interest rate | rate paid, Variable rate | | | | | months) and a fixed rate of | months) and a fixed rate of | | | | | |
| Ш | swaps | received | 22-Jan-14 | 15-Dec-26 | USD 144,390,773 | USD 124,831,121 | 2.63% is paid | 2.63% is paid | (277,724) | (3,522,335) | (3,474,253) | (1,550,882) | n/a |
| | | Hedge | | | | | Variable rate | Variable rate | | | | | |
| | | Position: Fixed | | | | | is received (LIBOR 3 | is received (LIBOR 3 | | | | | |
| | | rate paid, | | | | | months) and a | months) and a | | | | | |
| | Interest rate | Variable rate | | | | | fixed rate of | fixed rate of | | | | | ١. |
| III | swaps | received Hedge | 22-Jan-14 | 15-Dec-26 | USD 57,756,309 | USD 49,932,448 | 2.63% is paid A variable rate | 2.63% is paid A variable rate | (105,755) | (1,408,934) | (1,389,701) | (617,895) | n/a |
| | | | | | | | is received | is received | 1 | | | | |
| | | Position: Fixed | | | | | (LIBOR 3 | (LIBOR 3 | | | | | |
| | Interest rate | rate paid, Variable rate | | | | | months) and a fixed rate of | months) and a fixed rate of | | | | | |
| Ш | swaps | received | 22-Jan-14 | 15-Dec-26 | USD 43,317,232 | USD 37,449,336 | 2.63% is paid | 2.63% is paid | (80,095) | (1,056,701) | (1,042,276) | (1,042,276) | n/a |
| | | Hedge | | | | | A variable rate | A variable rate |] | | | | |
| | | Position: Fixed | | | | | is received (LIBOR 3 | is received (LIBOR 3 | 1 | | | | |
| | | rate paid, | | | | | months) and a | months) and a | 1 | | | | |
| | Interest rate | Variable rate | | 48.8 63 | | | fixed rate of | fixed rate of | (00 ==== | (4.000.00 | (4.040.005) | / A THE OF THE O | |
| III | swaps | received Hedge | 22-Jan-14 | 15-Dec-26 | USD 43,317,232 | USD 37,449,336 | 2.63% is paid Variable rate | 2.63% is paid Variable rate | (83,781) | (1,056,701) | (1,046,238) | (474,769) | n/a |
| | | - | | | | | is received | is received | 1 | | | | |
| | | Position: Fixed | | | | | (LIBOR 3 | (LIBOR 3 | 1 | | | | |
| | Interest rate | rate is paid, variable rate | | | | | months) and fixed rate of | months) and fixed rate of | | | | | |
| IV | swaps | is received | 15-Apr-14 | 16-Mar-32 | USD 39,268,523 | USD 38,394,145 | 3.68% is paid | 3.68% is paid | (2,865,329) | (5,102,245) | 358,689 | (66,013) | n/a |
| | | Hedge | | | | | Variable rate | Variable rate | | | | | |
| | | Position: Fixed | | | | | is received (LIBOR 3 | is received (LIBOR 3 | 1 | | | | |
| | | rate is paid, | | | | | months) and | months) and | | | | | |
| 1 1 | Interest rate | variable rate | | | | | fixed rate of | fixed rate of | | | l | | 1 . |
| IV | swaps | is received | 15-Apr-14 | 16-Mar-32 | USD 39,268,523 | USD 38,394,145 | 3.68% is paid | 3.68% is paid Variable rate | (2,865,329) | (5,102,245) | 570,657 | (55,899) | n/a |
| | | Hedge | | | | | Variable rate is received | is received | 1 | | | | |
| | | Position: Fixed | | | | | (LIBOR 3 | (LIBOR 3 | 1 | | | | |
| | Interest | rate is paid, | | | | | months) and | months) and | 1 | | | | |
| v | Interest rate swaps | variable rate is received | 15-Apr-14 | 15-Mar-24 | USD 39,906,876 | USD 32,702,675 | fixed rate of 2.94% is paid | fixed rate of 2.94% is paid | (394,958) | (938,316) | (68,644) | 259,791 | n/a |
| | | Hedge | | | | | Variable rate | Variable rate | (== -,==0) | ,,) | , -,, | , | 7- |
| | | | | | | | is received | 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 | 1 | | | | |
| V | swaps | is received | 15-Apr-14 | 15-Mar-24 | USD 43,791,299 | USD 35,885,862 | 2.94% is paid | 2.94% is paid | (433,402) | (1,029,649) | 137,094 | 257,450 | n/a |



| | | | | | | | | | | | | | Colla |
|----|------------------------------|---|-------------------|------------------|------------------|------------------|---------------------|--|-------------------|---------------------|---------------------|-----------------------|-------------------------------------|
| | | Designated as hedge or held for other | | | Notional am | ount/Par value | | underlying ence variable | Fair value of as: | set/liahility | | aturities/ expense | teral / credi t facilit |
| | Type of | purposes (e.g., | | | | cember 31, | As of Dec | | As of Decem | | As of Dec | | ies/ pledg |
| | derivative, value or | trading/long or short position) | Effective date | Maturity date | 2018 (Unaudited) | 2019 (Unaudited) | 2018(Unaudit ed) | 2019 (Unaudited) | 2018 (Unaudited) | 2019 (Unaudited) | 2018 (Unaudited) | 2019 (Unaudited) | ed secur ities |
| | agreement | position) | date | date | 2018 (Onaudited) | 2019 (Onaudited) | euj | (Onaudited) | 2018 (Onaudited) | (Onaudited) | (Onaudited) | (Onaudited) | ities |
| VI | Natural gas swap price | Trading Long Position | 1-Jul-20 | 30-Sep-20 | - | 7,500 MMBTU | - | USD 2.64 is paid/MMBtu | - | (74,606) | - | 74,606 | n/a |
| | | | | | | | | | | | | | |
| VI | Electric power swap price | Trading Short Position | 1-Jul-20 | 30-Sep-20 | - | 75MW | - | USD 57 is received /MW | _ | (562) | _ | 562 | n/a |
| | | | | | | | | , | | , | | | |
| VI | Electric power swap price | Trading Short Position | 1-Jan-20 | 31-Mar-20 | - | 25MW | - | USD 44 is received /MW | - | 158,479 | - | (158,479) | n/a |
| | | | | | | | | | | | | | |
| VI | Natural gas swap price | Trading Long Position | 1-Jan-20 | 31-Mar-20 | - | 7,500 MMBTU | - | USD 2.968 is paid/MMBtu | - | (181,249) | - | 181,249 | n/a |
| | | | | | | | | | | | | | |
| VI | Electric power swap price | Trading Short Position | 1-Jan-20 | 31-Mar-20 | - | 25MW | - | USD 43.25 is received /MW | - | 135,478 | - | (135,478) | n/a |
| | | | | | | | | | | | | | |
| VI | Natural gas swap price | Trading Long Position | 1-Jan-20 | 31-Mar-20 | = | 7,500 MMBTU | - | USD 2.908 is paid/MMBtu The natural | - | (167,658) | - | 167,658 | n/a |
| | | | | | | | | gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts | | | | | |
| VI | Natural gas swap price | Trading Long Position | 1-Jan-20 | 31-Mar-20 | - | 15,000 MMBTU | - | 0.14250 is paid | - | 206,481 | - | (206,481) | n/a |
| | | | | | | | | | | | | | |
| VI | Electric power | Trading Short Position | 1-Jan-20 | 31-Mar-20 | | 50MW | | USD 44.75 is received /MW | | 362,961 | | (362,961) | 2/2 |
| VI | swap price | SHORE POSITION | 1-Jd11-20 | 31-IVId1-20 | - | SUIVIV | - | received / M/W | - | 302,901 | - | (302,961) | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Jan-20 | 31-Mar-20 | - | 15,000 MMBTU | - | USD 2.935 is paid/MMBtu | - | (347,548) | - | 347,548 | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Jan-20 | 31-Mar-20 | _ | 15,000 MMBTU | | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts 0.1400 is paid | | 207,614 | | (207,614) | n/a |
| VI | Swap blice | Long i Osition | 1 3011-20 | 31-1VIGI-20 | - | 13,000 IVIIVID10 | - | 0.1400 is paid | - | 207,014 | - | (207,014) | 11/4 |
| | Electric power | Trading | | | | | | USD 57 is | | | | | |
| VI | swap price | Short Position | 1-Jul-20 | 30-Sep-20 | - | 25MW | - | received /MW | - | (562) | - | 562 | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Jul-20 | 30-Sep-20 | - | 7,500 MMBTU | - | USD 2.607 is paid/MMBtu | - | (67,123) | - | 67,123 | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Jul-20 | 30-Sep-20 | - | 7,500 MMBTU | | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts 0.2700 is paid | - | 46,128 | - | (46,128) | n/a |



| | Type of derivative, value or | Designated as hedge or held for other purposes (e.g., trading/long or short | Effective | Maturity | As of Dec | ount/Par value cember 31, | asset/refere As of Dec 2018(Unaudit | 2019 | Fair value of ass | nber 31, 2019 | Annual m (income) As of Dec 2018 | ember 31, | Colla teral / credi t facilit ies/ pledg ed secur |
|------|------------------------------------|---|-----------|------------------------|------------------|------------------------------|---|--|-------------------|--------------------|---|--------------------|---|
| | agreement | position) | date | date | 2018 (Unaudited) | 2019 (Unaudited) | ed) | (Unaudited) | 2018 (Unaudited) | (Unaudited) | (Unaudited) | (Unaudited) | ities |
| VI | Electric power swap price | Trading Short Position | 1-Jan-20 | 31-Mar-20 | - | 75MW | - | USD 39.75 is received /MW | - | 455,375 | - | (455,375) | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Jan-20 | 31-Mar-20 | - | 7,500 MMBTU | - | USD 2.969 is paid/MMBtu | - | (181,476) | - | 181,476 | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Jan-20 | 31-Mar-20 | - | 7,500 MMBTU | - | USD 2.97 is paid/MMBtu | - | (181,702) | - | 181,702 | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Jan-20 | 31-Mar-20 | | 15,000 MMBTU | | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts 0.1200 is paid | | 216,675 | | (216,675) | n/a |
| - *1 | змар рпсе | Long Position | 1-3811-20 | 31-Wai-20 | | 13,000 WINBTO | | 0.1200 is paid | | 210,073 | | (210,073) | II/a |
| VI | Electric power swap price | Trading Short Position | 1-Jul-20 | 30-Sep-20 | _ | 25MW | _ | USD 49.25 is received /MW | _ | (235,903) | _ | 235,903 | n/a |
| | Swap price | SHOTE T GUILDEN | 1 341 20 | 30 3cp 20 | | 231111 | | received/iiiii | | (233,303) | | 233,303 | 1,74 |
| VI | Electric power swap price | Trading Short Position | 1-Jan-20 | 31-Jan-20 | - | 50MW | - | USD 44 is received /MW | - | (6,224) | - | 6,224 | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Jan-20 | 31-Jan-20 | _ | 5,000 MMBTU | _ | USD 2.598 is paid/MMBtu | _ | (68,021) | _ | 68,021 | n/a |
| | Natural gas | Trading | | | | | | USD 2.395 is | | | | | |
| VI | swap price Natural gas swap price | Long Position Trading Long Position | 1-Jul-20 | 30-Sep-20 30-Sep-20 | | 7,500 MMBTU | - | paid/MMBtu The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts 0.13500 is paid | | (19,049) 76,741 | - | 19,049 (76,741) | n/a |
| | Natural gas | Trading | | | | | | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts 0.44250 is | | | | | |
| VI | swap price | Long Position | 1-Jan-20 | 31-Jan-20 | | 5,000 MMBTU | - | paid | - | 78,455 | - | (78,455) | n/a |
| VI | Electric power swap price | Trading Short Position | 1-Jun-20 | 30-Jun-20 | | 25MW | - | USD 33.5 is received /MW | - | (13,377) | - | 13,377 | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Jun-20 | 30-Jun-20 | | 2,500 MMBTU | - | USD 2.283 is paid/MMBtu | - | (2,746) | - | 2,746 | 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 amount/Par value As of December 31, 2018 (Unaudited) 2019 (Unaudited) | | Value of underlying asset/reference variable As of December 31, 2018(Unaudit 2019 ed) (Unaudited) | | Fair value of asset/liability As of December 31, 2019 2018 (Unaudited) (Unaudited) | | Annual maturities/ (income) expense As of December 31, 2018 2019 (Unaudited) (Unaudited) | | Colla teral / credi t facilit ies/ pledg ed secur ities |
|----|---|--|-------------------|------------------|--|-------------|--|--|--|-----------|---|----------|---|
| | Electric power | Trading | | | | . , | | USD 32 is | | , | | | |
| VI | swap price | Short Position | 1-Jun-20 | 30-Jun-20 | | 100MW | - | received /MW | - | (115,244) | - | 115,244 | n/a |
| VI | Electric power swap price | Trading Short Position | 1-Jun-20 | 30-Jun-20 | | 50MW | - | USD 41.75 is received /MW | - | (52,900) | - | 52,900 | n/a |
| VI | Electric power swap price | Trading Short Position | 1-Jan-20 | 31-Mar-20 | | 25MW | - | USD 36.25 is received /MW | - | (79,200) | - | 79,200 | n/a |
| VI | Electric power swap price | Trading Short Position | 1-Feb-20 | 29-Feb-20 | | 50MW | - | USD 37.75 is received /MW | - | (59,744) | ÷ | 59,744 | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Jun-20 | 30-Jun-20 | - | 2,500 MMBTU | - | USD 2.294 is paid/MMBtu | - | (3,562) | - | 3,562 | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Jun-20 | 30-Jun-20 | - | 7,500 MMBTU | - | USD 2.295 is paid/MMBtu | - | (10,908) | - | 10,908 | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Jan-20 | 31-Mar-20 | - | 7,500 MMBTU | - | USD 2.493 is paid/MMBtu | - | (73,649) | - | 73,649 | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Jan-20 | 31-Jan-20 | | 5,000 MMBTU | - | USD 2.536 is paid/MMBtu | - | (58,436) | - | 58,436 | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Feb-20 | 29-Feb-20 | - | 5,000 MMBTU | - | USD 2.51 is paid/MMBtu | - | (46,347) | - | 46,347 | n/a |
| VI | Electric power swap price | Trading Short Position | 1-Jul-20 | 30-Sep-20 | | 25MW | - | USD 49.25 is received /MW | _ | (235,903) | - | 235,903 | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Jul-20 | 30-Sep-20 | - | 7,500 MMBTU | - | USD 2.334 is paid/MMBtu | - | (5,217) | - | 5,217 | n/a |
| | Natural gas | Trading | | · | | | | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts 0.29000 is | | | | | |
| VI | swap price | Long Position | 1-Jul-20 | 30-Sep-20 | | 7,500 MMBTU | = | paid | - | 41,593 | - | (41,593) | n/a |
| VI | Electric power swap price | Trading Short Position | 1-Jul-20 | 30-Sep-20 | | 25MW | - | USD 53.5 is received /MW | - | (106,845) | - | 106,845 | n/a |
| VI | Electric power swap price | Trading Short Position | 1-Jul-20 | 30-Sep-20 | | 50MW | - | USD 36.25is received /MW | - | 87,931 | - | (87,931) | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Jul-20 | 30-Sep-20 | - | 7,500 MMBTU | - | USD 2.447 is paid/MMBtu | - | (30,841) | - | 30,841 | 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 amount/Par value As of December 31, 2018 (Unaudited) 2019 (Unaudited) | | Value of underlying asset/reference variable As of December 31, 2018(Unaudit 2019 ed) (Unaudited) | | Fair value of asset/liability As of December 31, 2019 2018 (Unaudited) (Unaudited) | | Annual maturities/ (income) expense As of December 31, 2018 2019 (Unaudited) (Unaudited) | | Colla teral / credi t facilit ies/ pledg ed secur ities |
|----|---|--|-------------------|------------------|--|------------------|--|---|--|-------------|---|-------------|---|
| | agreement | position) | date | date | 2018 (Onaudited) | 2019 (Onaudited) | edj | (Onaudited) | 2018 (Onaudited) | (Onaudited) | (Onaudited) | (Onaudited) | ities |
| VI | Natural gas | Trading Long Position | 1-Jul-20 | 30-Sep-20 | | 15,000 MMBTU | | USD 2.448 is paid/MMBtu | | (62,135) | | 62,135 | 2/2 |
| VI | swap price | Long Position Trading | 1-301-20 | 30-Sep-20 | - | 15,000 MMB10 | | paid/Ministu The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts 0.23000 is | - | (62,135) | - | 62,135 | n/a |
| VI | swap price | Long Position | 1-Jul-20 | 30-Sep-20 | | 7,500 MMBTU | - | paid The natural | - | 55,199 | - | (55,199) | n/a |
| | Natural gas | Trading | | | | 7,500 MMBTU | | gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts 0.23000 is | | | | | |
| VI | swap price | Long Position Trading | 1-Jul-20 | 30-Sep-20 | | 7,300 WIWIB TO | | paid The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts 0.25000 is | | 55,199 | | (55,199) | n/a |
| VI | swap price | Long Position | 1-Jan-20 | 31-Mar-20 | | 7,500 MMBTU | - | paid | - | 78,889 | - | (78,889) | n/a |
| VI | Electric power swap price | Trading Short Position | 1-Oct-20 | 31-Dec-20 | | 25MW | - | USD 38.5 is received /MW | - | (45,018) | - | 45,018 | n/a |
| | | | | | | | | | | | | | |
| VI | Natural gas swap price | Trading Long Position | 1-Oct-20 | 31-Dec-20 | - | 7,500 MMBTU | - | USD 2.54is paid/MMBtu | - | (18,298) | - | 18,298 | n/a |
| VI | Natural gas swan nire | Trading Long Position | 1-Jan-20 | 31-Dec-20 | | 30,000 MMBTU | | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts - 0.03000 is paid | | 202 519 | _ | (202 518) | n/a |
| VI | swap price | Long Position Trading | 1-Jan-2U | 31-DEC-20 | | SU,UUU MMBFU | - | paid The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts 0.22000 is | - | 202,518 | - | (202,518) | n/a |
| VI | swap price | Long Position | 1-Jul-20 | 30-Sep-20 | | 7,500 MMBTU | - | paid | - | 57,466 | - | (57,466) | n/a |
| VI | Electric power swap price | Trading Short Position | 1-Jan-20 | 31-Mar-20 | | 25MW | - | USD 33.75 is received /MW | - | 9,751 | - | (9,751) | n/a |



| | Type of derivative, value or | Designated as hedge or held for other purposes (e.g., trading/long or short | Effective | Maturity | | | | underlying ence variable ember 31, 2019 | | | Annual maturities/ (income) expense As of December 31, 2018 2019 (Upaydised) (Upaydised) | | Colla teral / credi t facilit ies/ pledg ed secur |
|----|------------------------------------|---|-----------|-------------------|------------------|------------------|-----|---|------------------|-------------|---|-------------|---|
| | agreement | position) | date | date ['] | 2018 (Unaudited) | 2019 (Unaudited) | ed) | (Unaudited) The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts | 2018 (Unaudited) | (Unaudited) | (Unaudited) | (Unaudited) | ities |
| VI | Natural gas swap price | Trading Long Position | 1-Jan-20 | 31-Mar-20 | | 7,500 MMBTU | - | 0.20000 is paid | - | 90,215 | - | (90,215) | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Jan-20 | 31-Mar-20 | | 7,500 MMBTU | - | USD 2.73 is paid/MMBtu | | (127,336) | - | 127,336 | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Feb-20 | 29-Feb-20 | | 2,500 MMBTU | | USD 2.666 is paid/MMBtu | | (34,435) | | 34,435 | n/a |
| VI | | | 1-reb-20 | 29-PED-20 | - | 2,500 WIWIBTO | | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts | - | (34,452) | - | 34,433 | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Feb-20 | 29-Feb-20 | | 2,500 MMBTU | - | 0.37000 is paid | - | 23,823 | - | (23,823) | n/a |
| VI | Electric power swap price | Trading Short Position | 1-Feb-20 | 29-Feb-20 | - | 25MW | - | USD 41 is received /MW The natural | - | 2,489 | - | (2,489) | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Jan-20 | 31-Jan-20 | | 5,000 MMBTU | - | gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts 0.60000 is paid | _ | 54,107 | - | (54,107) | n/a |
| | Natural gas | Trading | | | | | | USD 2.667 is | | | | | |
| VI | Natural gas swap price | Long Position | 1-Jan-20 | 31-Jan-20 | - | 2,500 MMBTU | - | paid/MMBtu | - | (39,344) | - | 39,344 | n/a |
| VI | Natural gas swap price | Trading Long Position | 1-Jan-20 | 31-Jan-20 | - | 2,500 MMBTU | - | USD 2.68 is paid/MMBtu | - | (40,349) | - | 40,349 | n/a |
| VI | Electric power swap price | Trading Short Position | 1-Jan-20 | 31-Jan-20 | | 50MW | - | USD 45 is received /MW | - | 14,522 | - | (14,522) | n/a |
| VI | Electric power swap price | Trading Short Position | 1-Jan-20 | 31-Jan-20 | - | 50MW | - | USD 36.25 is received /MW | - | (13,903) | - | 13,903 | |
| VI | Natural gas swap price | Trading Long Position | 1-Jan-20 | 31-Jan-20 | | 2,500 MMBTU | - | USD 2.771 is paid/MMBtu | - | (47,382) | - | 47,382 | |
| VI | Natural gas swap price | Trading Long Position | 1-Jan-20 | 31-Jan-20 | - | 2,500 MMBTU | - | USD 2.772 is paid/MMBtu | - | (47,460) | - | 47,460 | |



| | Type of derivative, value or | Designated as hedge or held for other purposes (e.g., trading/long or short position) | Effective date | Maturity date | Notional amount/Par value As of December 31, 2018 (Unaudited) 2019 (Unaudited) | | asset/refere | underlying ence variable ember 31, 2019 (Unaudited) | Fair value of asset/liability As of December 31, 2019 2018 (Unaudited) (Unaudited) | | Annual maturities/ (income) expense As of December 31, 2018 2019 (Unaudited) (Unaudited) | | Colla teral / credi t facilit ies/ pledg ed secur ities |
|----|------------------------------------|--|-------------------|------------------|--|--------------|--------------|--|---|----------|---|-----------|---|
| VI | agreement Natural gas swap price | Trading Long Position | 1-Jan-20 | 31-Jan-20 | zoto (unaduted) | 5,000 MMBTU | edj | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.20000 is paid | 2016 (Unaudited) | 115,944 | (Unaudited) | (115,944) | ities |
| VI | Electric power swap price | Trading Short Position | 1-Jul-20 | 30-Sep-20 | - | 25MW | - | USD 58.50 is received /MW | - | 44,988 | - | (44,988) | |
| VI | Natural gas swap price | Trading Long Position | 1-Jul-20 | 30-Sep-20 | - | 7,500 MMBTU | - | USD 2.375 is paid/MMBtu The natural gas price | - | (14,514) | - | 14,514 | |
| VI | Natural gas swap price | Trading Long Position | 1-Jul-20 | 30-Sep-20 | - | 7,500 MMBTU | - | published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.32500 is paid | - | 33,656 | - | (33,656) | |
| VI | Electric power swap price | Trading Short Position | 1-Feb-20 | 29-Feb-20 | - | 25MW | - | USD 40.00 is received /MW | - | (7,468) | - | 7,468 | |
| VI | Natural gas swap price | Trading Long Position | 1-Feb-20 | 29-Feb-20 | - | 2,500 MMBTU | - | USD 2.236 is paid/MMBtu | - | (3,393) | - | 3,393 | |
| VI | Natural gas swap price | Trading Long Position | 1-Feb-20 | 29-Feb-20 | | 2,500 MMBTU | - | The natural gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.50000 is paid | | 14,438 | - | (14,438) | |
| VI | Electric power swap price | Trading Short Position | 1-Jul-20 | 30-Sep-20 | - | 25MW | - | USD 57.25 is received /MW | - | 7,030 | - | (7,030) | |
| VI | Electric power swap price | Trading Short Position | 1-Jul-20 | 30-Sep-20 | - | 25MW | - | USD 57.50 is received /MW | - | 14,622 | - | (14,622) | |
| VI | Natural gas swap price | Trading Long Position | 1-Jul-20 | 30-Sep-20 | - | 15,000 MMBTU | - | USD 2.29 is paid/MMBtu The natural | - | 9,522 | - | (9,522) | |
| VI | Natural gas swap price | Trading Long Position | 1-Jul-20 | 30-Sep-20 | | 15,000 MMBTU | - | gas price published in NYMEX of the Henry Hub Gas Natural price of futures and spread contracts +0.40000 is paid | - | 33,298 | - | (33,298) | |



| | Type of | Designated as hedge or held for other purposes (e.g., | | | Notional am | ount/Par value | asset/refere | underlying ence variable | Fair value of ass | set/liability | (income | naturities/ expense | Colla teral / credi t facilit ies/ pledg |
|----------|-------------------------------------|---|------------------------|----------------------|------------------|--------------------------------|-------------------------------------|--|-------------------|---|-------------|------------------------|--|
| | derivative, value or | trading/long or short | Effective | Maturity | As of De | cember 31, | As of Dec 2018(Unaudit | ember 31, 2019 | As of Decem | ber 31, 2019 | As of Dec | ember 31, 2019 | ed secur |
| | agreement | position) | date | date | 2018 (Unaudited) | 2019 (Unaudited) | ed) | (Unaudited) | 2018 (Unaudited) | (Unaudited) | (Unaudited) | (Unaudited) | ities |
| | Natural gas purchase | | | | Aprox. 799.6 K | Aprox. 93.1 K | Index refered in the contract | Index refered in the contract | | | | | |
| VII | contracts | Short Position | 2018 | 2022 | MMBTUS | MMBTUS | USD/MMBTus | USD/MMBTus | 200,315 | 5,260,104 | 750,090 | (3,471,708) | n/a |
| VIII | Forward currency transactions | Long position in USD/ Short position in MXP | 31-Aug-18 | 2-Jan-20 | USD 6,698,090 | USD 6,698,090 | - | MXP is paid/USD is received at an exchange rate of 20.06672 MXP/USD MXP is | 259,429 | (435,263) | (5,102) | 564,740 | n/a |
| VIII | Forward currency transactions | Hedge Long position in USD/ Short position in MXP | 31-Aug-18 | 4-Feb-20 | USD 6,965,442 | USD 6,965,442 | - | paid/USD is received at an exchange rate of 20.06672 MXP/USD | 305,501 | (415,535) | (8,309) | 578,729 | n/a |
| IX | Forward currency transactions | Long position in USD/ Short position in MXP | 29-Aug-19 | 3-Mar-20 | - | USD 6,575,014 | - | MXP is paid/USD is received at an exchange rate of 20.71368 MXP/USD MXP is | - | (585,629) | - | 757 | n/a |
| IX | Forward currency transactions | Hedge Long position in USD/ Short position in MXP | 29-Aug-19 | 2-Apr-20 | - | USD 5,531,746 | - | paid/USD is received at an exchange rate of 20.71368 MXP/USD | - | (465,770) | - | 47 | n/a |
| ıx | Forward currency transactions | Hedge Long position in USD/ Short position in MXP | 29-Aug-19 | 5-May-20 | _ | USD 6,381,905 | - | MXP is paid/USD is received at an exchange rate of 20.71368 MXP/USD | _ | (503,482) | - | - | n/a |
| | Forward currency | Hedge Long position in USD/ Short position in | | | | | | MXP is paid/USD is received at an exchange rate of 20.71368 | | | | | |
| IX | Forward currency | MXP Hedge Long position in USD/ Short position in | 29-Aug-19 | 2-Jun-20 | - | USD 6,149,934 | - | MXP/USD MXP is paid/USD is received at an exchange rate of 20.71368 | - | (457,809) | - | - | n/a |
| IX | transactions | MXP Hedge | 29-Aug-19 | 2-Jul-20 | - | USD 6,381,904 | - | MXP/USD MXP is | - | (444,982) | - | - | n/a |
| IX | Forward currency transactions | Long position in USD/ Short position in MXP | 29-Aug-19 | 4-Aug-20 | - | USD 6,149,934 | - | paid/USD is received at an exchange rate of 20.71368 MXP/USD | - | (398,226) | - | - | n/a |
| ıx | Forward currency transactions | Hedge Long position in USD/ Short position in MXP | 29-Aug-19 | 2-Sep-20 | | USD 6,381,905 | | MXP is paid/USD is received at an exchange rate of 20.71368 MXP/USD | | (385.706) | | | n/a |
| | Forward currency | Hedge Long position in USD/ Short position in | | | - | | - | MXP is paid/USD is received at an exchange rate of 20.71368 | - | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | - | - | |
| IX | Forward currency | Hedge Long position in USD/ Short position in | 29-Aug-19 | 2-Oct-20 | - | USD 6,381,905 | - | MXP/USD MXP is paid/USD is received at an exchange rate of 20.71368 | - | (357,527) | - | - | n/a |
| IX IX | Forward currency transactions | MXP Hedge Long position in USD/ Short position in MXP | 29-Aug-19 29-Aug-19 | 4-Nov-20 2-Dec-20 | - | USD 6,149,934 USD 6,381,905 | - | MXP/USD MXP is paid/USD is received at an exchange rate of 20.71368 MXP/USD | - | (315,516) | - | | n/a n/a |
| IX | Forward currency transactions | Hedge Long position in USD/ Short position in MXP | 29-Aug-19 | 5-Jan-21 | - | USD 6,149,934 | - | MXP is paid/USD is received at an exchange rate of 20.71368 MXP/USD | - | (262,056) | - | - | n/a |



| | Type of | Designated as hedge or held for other purposes (e.g., | | | | ount/Par value | asset/refer | underlying ence variable | Fair value of ass | | (income | naturities/) expense | Colla teral / credi t facilit ies/ pledg |
|----|-------------------------------------|---|------------------------|----------------------|------------------|------------------|-------------|--|-------------------|-------------|-------------------|--------------------------|--|
| | derivative, value or | trading/long or short | Effective | Maturity | As of De | cember 31, | As of Dec | 2019 | As of Decen | 2019 | As of Dec 2018 | ember 31, 2019 | ed secur |
| | agreement | position) | date | date | 2018 (Unaudited) | 2019 (Unaudited) | ed) | (Unaudited) MXP is | 2018 (Unaudited) | (Unaudited) | (Unaudited) | (Unaudited) | ities |
| IX | Forward currency transactions | Hedge Long position in USD/ Short position in MXP | 29-Aug-19 | 3-Feb-21 | - | USD 6,285,350 | - | paid/USD is received at an exchange rate of 20.71368 MXP/USD | - | (243,424) | - | - | n/a |
| х | Interest rate swaps | Position: Fixed rate is paid, variable rate is received | 5-Dec-19 | 19-Nov-34 | - | USD\$200,000,000 | | Variable rate (LIBOR 6 months) is received; and a fixed rate of 1.77% is paid | - | 3,178,078 | - | (37,664) | n/a |
| ХI | Forward currency transactions | Hedge Long position in USD/ Short position in MXP | 29-Oct-19 | 3-Mar-20 | - | USD 835,116 | - | MXP is paid/USD is received at an exchange rate of 19.9375 MXP/USD | - | (40,397) | - | - | n/a |
| хі | Forward currency transactions | Hedge Long position in USD/ Short position in MXP | 29-Oct-19 | 2-Apr-20 | - | USD 860,431 | - | MXP is paid/USD is received at an exchange rate of 19.9375 MXP/USD | - | (37,635) | - | - | n/a |
| XI | Forward currency transactions | Hedge Long position in USD/ Short position in MXP | 29-Oct-19 | 5-May-20 | _ | USD 954,109 | _ | MXP is paid/USD is received at an exchange rate of 19.9375 MXP/USD | _ | (36,914) | _ | _ | n/a |
| XI | Forward currency transactions | Hedge Long position in USD/ Short position in MXP | 29-Oct-19 | 2-Jun-20 | _ | USD 911,983 | _ | MXP is paid/USD is received at an exchange rate of 19.9375 MXP/USD | _ | (31,422) | _ | _ | n/a |
| | Forward currency | Hedge Long position in USD/ Short position in MXP | 29-Oct-19 | 2-Jul-20 | | USD 953,606 | | MXP is paid/USD is received at an exchange rate of 19.9375 MXP/USD | | (28,577) | | | |
| ХІ | Forward currency | Hedge Long position in USD/ Short position in | | | | | | MXP is paid/USD is received at an exchange rate of 19.9375 | | | | | n/a |
| ХІ | Forward currency | MXP Hedge Long position in USD/ Short position in | 29-Oct-19 | 4-Aug-20 | - | USD 902,054 | - | MXP/USD MXP is paid/USD is received at an exchange rate of 19.9375 | - | (22,765) | - | - | n/a |
| ХІ | Forward currency | MXP Hedge Long position in USD/ Short position in | 29-Oct-19 | 2-Sep-20 | - | USD 963,030 | - | MXP/USD MXP is paid/USD is received at an exchange rate of 19.9375 | - | (20,350) | - | - | n/a |
| ХІ | transactions Forward currency | MXP Hedge Long position in USD/ Short position in | 29-Oct-19 | 2-Oct-20 | - | USD 953,606 | - | MXP/USD MXP is paid/USD is received at an exchange rate of 19.9375 | - | (16,145) | - | - | n/a |
| ХІ | transactions Forward currency | MXP Hedge Long position in USD/ Short position in | 29-Oct-19 | 4-Nov-20 | - | USD 911,479 | - | MXP/USD MXP is paid/USD is received at an exchange rate of 19.9375 | - | (11,341) | - | - | n/a |
| хі | Forward currency | MXP Hedge Long position in USD/ Short position in | 29-Oct-19 | 2-Dec-20 | - | USD 953,606 | - | MXP/USD MXP is paid/USD is received at an exchange rate of 19.9375 | - | (8,281) | - | - | n/a |
| ХI | Forward currency transactions | MXP Hedge Long position in USD/ Short position in MXP | 29-Oct-19 29-Oct-19 | 5-Jan-21 3-Feb-21 | - | USD 954,312 | - | MXP/USD MXP is paid/USD is received at an exchange rate of 19.9375 MXP/USD | - | (3,384) | - | | n/a n/a |



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

IFRS 9 - Financial Instruments, provides an accounting policy option. This option establish that entities can continue to apply the hedge accounting requirements of IAS 39 - Financial instruments: Recognition and measurement, pending completion of the macro risk hedges project, or may apply IFRS 9.

This option will apply to all hedge accounting and cannot be made on a hedge basis. The Company selected to continue using the methodology of IAS 39. Refer to Note 38 of the Consolidated Financial Statements for the year ended December 31, 2018.

This accounting policy option applies only to the of hedge accounting

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, 2019 and 2018.

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, 2018.

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 percent in the price of the underlying assets, and the remote scenario considers a change of at least 50 percent 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.

Not applicable