# FINAL REPORT

# Punjab Thermal Power (Private) Limited (PTPL)

**REPORT DATE:**
10 June, 2020

**RATING ANALYSTS:**

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| RATING DETAILS | | |
|---|---|---|
| **Rating Category** | **Initial Rating** | |
| | **Long-term** | **Short-term** |
| **Entity** | AA- | A-1 |
| **Rating Outlook** | Stable | |
| ***Rating Date*** | *10th June'20* | |

| COMPANY INFORMATION | |
|---|---|
| **Incorporated in 2017** | |
| **Private Limited Company** | |
| **Key Shareholders (with stake 10% or more):** | Government of the Punjab – 100% |
| **Chairman: Mohammad Ali** | **Chief Executive Officer:** Mr. Akhtar Hussain Mayo |

| APPLICABLE METHODOLOGY(IES) |
|---|
| **VIS Entity Rating Criteria** *Corporates (May 2019)* |
| **https://www.vis.com.pk/kc-meth.aspx** |

# Punjab Thermal Power (Pvt.) Limited (PTPL)

## RATING RATIONALE

The ratings assigned to Punjab Thermal Power (Private) Limited (PTPL) incorporate its strong ownership profile being wholly owned by a sub-sovereign, Government of Punjab (GoPb) through Energy Department. Moreover, underlying economic risk factors are largely mitigated by initialing of 30 year-long power purchase agreement (PPA), in pursuance of ECC decision with Central Power Purchasing Agency Guarantee Limited (CPPA-G) which shall be signed by Mid of June 2020. The ratings also draw comfort from government guaranteed cash flow stream under the agreement upon meeting certain performance benchmarks. The ratings remain dependent upon timely completion of the project as per terms of agreement with the power purchaser. Moreover, upholding operational performance in line with agreed performance levels would remain a key rating driver. In addition, the ratings will be revised if there is any change in the PPA.

PTPL is a combined cycle power project of 1,263.2 MW (net 1,242.7 MW) on Re-gasified Liquefied Natural Gas (RLNG) as the primary fuel and High-Speed Diesel (HSD) as back-up fuel located near Haveli Bahadur Shah /Trimmu Barrage, District Jhang, Punjab, Pakistan. The project was approved by the Cabinet Committee on Energy (CCE) of the Federal Government on 6th June 2017. CCE also relaxed, to the extent of this project, the ban it had placed on new imported fuel based power projects. PTPL filed application for grant of generation license on July 26th, 2017; meanwhile, National Electric Power Regulatory Authority (NEPRA) granted power generation license to PTPL in February,2018.

**Completion risk largely mitigated; the financial close is expected by end-July'20**

PTPL is to be constructed and operated on land with title owned in the company's name with debt to equity proportion of 70:30. The financial close of the 1,263MW project is expected to be achieved by end-July'20. As per the binding agreement, the project needs to be completed within 26 months from the financial close date; however given 80% of the construction is complete, the management expects that the project will be completed by end-last quarter 2020. The company has received 97% of equipment shipments including turbines, generators, HRSGs and various auxiliary systems etc. whereas foundation works, turning gear tests, gas pipeline and metering systems are also completed. The proposed combined cycle efficiencies are 61.2% and 55.8% on RLNG and HSD respectively and Simple Cycle efficiency is 39.2% on RLNG. Meanwhile, the proposed annual plant availability is 92%. In addition, the proposed net capacity after auxiliary consumption is 1242.7 MW (Gross 1263.2 MW) on RLNG and 1081.8 MW (Gross 1105.0 MW) on HSD. The lenders of the project include leading commercial banks. The salient features of the project are tabulated below:

| Breakup of Project Cost | USD in million |
|---|---|
| **EPC Cost** | **520.0** |
| Additional EPC Cost: | 5.710 |
| i. Combustion Monitoring System of Gas Turbines | 0.500 |
| ii. Flood Protection | 2.000 |
| iii. Auditorium | 1.500 |
| iv. BOP Spares | 1.710 |
| Non EPC Cost: | 54.938 |
| i. Engineering consultancy | 10.678 |
| ii. O&M mobilization | 5.257 |
| iii. Land Cost | 4.437 |
| iv. Insurance during construction | 5.257 |
| v. Security Surveillance | 7.986 |
| vi. Administrative Expenses during construction | 10.995 |

## OVERVIEW OF THE INSTITUTION

*Punjab Thermal Power (Private) Limited was incorporated as a private limited company under the Companies Act2017 on June 08, 2017. The principal activity of the company is to build, own, operate and maintain a thermal plant having a total capacity of 1,263.2 MW.*

***Chairman's Profile:*** *Muhammad Ali is currently serving as Chairman Board of Directors of PTPL. He did his Bachelor`s Degree in Electrical Engineering from UET, Lahore. He has over 20 years of experience and expertise in Energy & Petrochemical Sectors; holding leading roles that oversaw development, construction, operations and management of mega-size projects. He has recently taken over the energy business portfolio of the JS group of companies as CEO of JS Energy where he looks after the group's oil and gas, power generation, and energy storage and handling businesses.*

***CEO's Profile: Mr.*** *Akhtar Hussain Mayo is currently serving as Chief Executive Officer of Punjab Thermal Power (Private) Limited. He did his BSc in Mechanical Engineering & MS (Total Quality Management). He has more than 36 years of practical experience in the field of engineering. He has previously served as General Manager/ Head Power Plants & Mechanical Section NESPAK.*

| | |
|---|---|
| vii. Testing & Commissioning | 10.327 |
| Custom Duties & Cess | 29.326 |
| LTSA Initial Spare Parts | 10.500 |
| Gas Pipeline Cost | 36.224 |
| **CAPEX** | **656.698** |
| Financing Fees & Charges | 14.776 |
| Interest During Construction | 36.285 |
| **Total Project Cost** | **707.759** |

**Power Purchase Agreement (PPA) initialed with CPPA-G for 30 years with take or pay provision; the PPA is expected to be signed by mid of June'20**

PTPL initialed a PPA with CPPA-G on February 20, 2019 for a period of 30 years. As the PPA is expected to be finalized by mid of June'20, the cost overruns until the physical completion date of the project are to be determined at the time of COD and may be partially claimed under the tariff true-up. As per the agreement, CPPA-G should take delivery of and pay for all Net Delivered Energy generated by PTPL at the interconnection point. Further, the power purchaser should also pay the take or pay energy shortfall as per the pre-negotiated terms. In this regard, PTPL should not take any action, which would encumber, impair or diminish its ability to generate, sell and deliver the energy.

**Power purchaser has exclusive right to energy and capacity:** Except to the extent that electric energy is required for the operation of any part of the complex, the company cannot without the prior written approval of the CPPA-G sell or deliver electric energy produced to anyone other than the power purchaser. Moreover, the company cannot allocate the right to or in the available capacity to any other party other than the power purchase.

**Construction of Interconnection Facilities:** The power purchaser will be responsible for the design, construction, financing, completion and commissioning of the interconnection facilities. If CPPA-G has not completed and commercialized the interconnection works by the required date, the pre-set commercial operations date (COD) can be extended day-for-day until the date on which the interconnection works are completed. However, if the delay exceeds more than 15 days, the power purchaser will have to pay the company an amount equal to 50% of the fixed O&M (foreign) component, the fixed O&M (local) component and working capital component, multiplied with the contract capacity. In addition, if the delay in completing the interconnection facilities continues beyond the scheduled COD, CPPA-G will be required to pay the principal payments due under the financing documents; provided that such principal debt paid by the power purchaser is excluded in any determination or calculation of tariff at COD to be paid by the power purchaser. However, it is to be noted that Interconnection facilities between the Power Plant and National Grid (220 kV Grid Station Toba Tek Singh, almost 50 kM from the project site) have already been completed and energized and ready to disperse the power produced by the plant to the national grid.

**PPA Liquidated Damages (LDs) on Energy Output:** In respect of any downward revised declared available capacity made between twelve and four hours prior to the beginning of an operating day, PTPL will pay the power purchaser as liquidated damages an amount equal to 10% of the difference between the declared available capacity prevailing twelve hours before the start of the operating day and the revised declared available capacity prevailing four hours before the start of the operating day multiplied by the applicable capacity price for the relevant hour of that operating day. However, no adjustment will be made to the actual declared available capacity. Similarly, any downward revised declared available capacity made less than four hours prior to the beginning of an operating day, the company will pay the power purchaser, an amount equal to twenty percent 20% of the difference between the declared available capacity prevailing four hours before the start of the operating day and the revised declared available capacity prevailing at the start of the operating day multiplied by the applicable capacity price for the relevant hour of that operating day.

However, in case of any upward revision to the declared available capacity for any hour, with a notice at least four hours prior to the start of the relevant hour, no liquidated damages will be payable. Moreover, after COD if the company fails to comply with dispatch requirements, then for any hour the company is required to pay the power purchaser as liquidated damages an amount equal to 100% of the difference between the declared available capacity prevailing at the start of the hour and the available capacity for that hour multiplied by the applicable capacity price for such hour.

**PPA LDs on Delay in Commercial Operations:** If the company does not initiate commercial operations by the Required Commercial Operations Date (RCOD), then for each month (prorated daily) thereafter until the COD is actually achieved, PTPL will pay CPPA-G as liquidated damages an amount equal to $2.50 per kW of contract capacity per month; however, the company will not be liable to make the aforementioned liquidated damages payment if the delay in achieving COD has been caused solely due to the simple Cycle Operations and has been communicated to the power purchaser in writing within 24 hours of the occurrence of any such issue.

**Gas supply arrangement (GSA) initialed with Sui Northern Gas Pipelines Limited (SNGPL) for 15 years for gas supply of 185mmcfd; the GSA is expected to be signed by mid of June'20:** The proposed 15 year contract can be extended for another 15 years; PTPL will be required to give notice for extension. The company will have first right of refusal to any new imported gas that SNGPL intends to include in its network. PTPL will have the option to terminate the agreement if the Implementation Agreement or PPA is terminated; either party will not have any liability to the other party by virtue of such termination. Gas supply arrangement for 185mmcfd has been proposed on take or pay basis. However, the PTPL is under no obligation to accept delivery of any gas, which has a value below 950btu/per Standard Cubic Foot or above 1170btu/ Standard Cubic foot.

In case monthly take-or-pay quantity is not fully utilized by the company in the complex, PTPL can request SNGPL to divert any unutilized monthly take-or-pay quantity to other power plants; SNGPL can arrange for such diversion at the cost and risk of buyer subject to available capacity in its pipelines. Any amounts received by the seller from the other power plants in consideration of supply of the diverted gas, after making deduction of any additional charges incurred by the seller in arranging the sale will be paid by the seller to the company.

**Late Payment Surcharge & Maintenance by Gas Supplier:** If any bill payment is not made by the due date, a late payment surcharge entailing 1M Kibor+ 2% per annum, compounded semi-annually, will be calculated for the actual number of days against which the amount remains unpaid. Every year maintenance will be carried out by SNGPL within 16 days for any scheduled periods required for maintenance, provided however that maintenance undertaken at one time during a year should not exceed a maximum of 7 continuous days. Each party will also be allowed an additional 72 hours of outages for any unscheduled periods required for maintenance.

**Engineering, Procurement and Construction (EPC) with China Machinery Engineering Corporation (CMEC):** After international competitive bidding process, the company entered into an EPC contract with CMEC on September 29, 2017. As per the terms of the EPC contract, the company has made 15% advance payment to EPC contractor after obtaining advance payment security and bank guarantee. PTPL has also established letter of credit (LCs) equivalent to 85% of the EPC price comprising offshore LC of USD $353m along with onshore LC of Rs. 9.3b against GoPb irrevocable guarantee and unconditional debit authority as security for the LC banks. CMEC has issued an EPC performance security at the signing of the EPC contract for an amount equal to 10% of the agreement price. The Power Island equipment has to be procured from Siemens.

CMEC was established in 1978 with controlling stake now owned by China National Machinery Industry Corporation. The core business of the company is engineering contracting, but as a large international conglomerate, it also extends into trade, investment, R&D and international services. In 2012, CMEC was listed on the Hong Kong Stock Exchange. With more than 30 years of experience in the engineering industry, CMEC has the capacity to provide one-stop, customized, complete plant solutions spanning preliminary planning, EPC, financing, and operation and maintenance. It has expanded its business presence to 47 countries and regions in Asia, Africa, Europe and South America, forming a project contracting system with electric power energy at the core and covering transportation, telecommunications, waterworks, building materials and cement, etc.

In February 1983, CMEC won the bid to build a 210MW thermal power station in Guddu, Pakistan, becoming the first Chinese corporation to undertake overseas contracts under the export seller's credit agreement. In early 2000, CMEC became the first company to introduce Chinese-made 600MW supercritical coal-fired generator (Turkey) to the international market. Other notable projects include Puttalam coal fired power plant (300MWx3), Srilanka, Saif 225MW Gas Turbine Combined Cycle Power Plant, Pakistan, 335MW Gas Power Plant, Nigeria, 600MW Central Power Plant, Venezuela, Serbian waste power generation plant, Belgrano freight rail project in Argentina, Supplementary Credit Facility in Thar coal project, Pakistan and Thauk-Ye-Khat (II) hydropower plant project, Burma.

**EPC Liquidated Damages (LDs) on Performance Standards:** If the facility upon carrying out completion tests is unable to **meet** the required conditions set, PTPL has the right to reject the facility by giving a notice to the EPC contractor along with reasons. The conditions include that if the net power output (NPO) at any fuel (natural gas or high speed diesel) is less than 95% of the guaranteed NPO of the facility and if the net heat rate (NHR) on either fuel exceeds 103% of the guaranteed GNHR. Hence the LDs for NPO of the facility for each 1% deviation in NPO, 3% of the agreement price will be charged. The aggregate cap for LDs for not achieving the guaranteed NPO will be limited to 15% of agreement price. Further the LDs for NPO of gas turbines for either fuel will be calculated at 1% of the agreement price multiplied by percentage differential between guaranteed NPO and actual NPO. Moreover, for LDs of NHR of the facility on either fuel involve 5% of the agreement price charged for each 1% deviation in guaranteed NHR.

**EPC LDs on Project Completion:** LDs for delay in procuring the taking over certificate of gas turbine-1 (GT1) by the expiry of the time for completion GT1 will be 0.035% of the agreement price multiplied by the number of days delayed. Similarly, LDs for delay in procurement of taking over certificate of gas turbine-2 (GT2) by the expiry of the time for completion GT2 will be 0.025% of the agreement price multiplied by the number of days delayed. Further, the LDs for delay in procuring the taking over certificate of the facility by the expiry of the time for completion of the project will be 0.1% of the agreement price multiplied by the number of days delayed. However, the cap for all LDs for delay in completion of the facility is limited to 10% of the agreement price. The aggregate maximum amount for LDs for deviation from performance standards coupled with delay incompletion will be equal to 20% of the agreement price. In addition, performance security has also been obtained from the OEM (Siemens AG), under which various delivery and TOC milestones are also guaranteed by the OEM with maximum cap of USD 20 million.

**Force Majeure Event:** In an event that is beyond the reasonable control of party including but not limited to war, change in regulations, pandemic, natural calamity, explosion etc, the contractor is obligated to provide a force majeure notice to PTPL within seven days. If, as the consequence of a force majeure event, the contractor has to incur additional cost or additional time in complying with proposals, the contractor will be entitled to payment of any such cost added to the agreement price coupled with extension of time for such delays. However, if the force majeure event exceeds 180 days, both the parties can serve each other with termination notice. However, the FME claims, if any shall be subject to determination and EPC contractor has to substantiate their claims with verifiable supporting documents. Further, the similar rights are also available to the company to issue FME to Power Purchaser and PPIB for the extension in time and cost claims along with verifiable supporting documents to substantiate its claim if any.

Long Term Service Agreement LTSA: Through ICB process, Siemens was declared as successful bidder for LTSA and the Company entered into the LTSA with Siemens in December 2017 for an amount of USD 156 million for period of 12 years. The amount shall be payable in local currency using the applicable exchange rate.

**Operations & Maintenance (O&M):** As per the terms of the EPC Agreement, , the company can ask the EPC contractor to undertake simple cycle Operations and Maintenance (O&M) services; in this case CMEC will be obligated to enter into simple cycle O&M agreement. However, the company can contract any third party also to undertake O&M services also. Hence, the finalization of the O&M contractor is to be done after the project is operational. The Company had exercised the available option and appoint EPC contractor as an O&M operator for simple cycle operations only.

The Company has also initiated process for hiring of O&M operator for combined cycle operations and has completed pre-qualification process. Bidding documents are being finalized and shall be circulated shortly.

**Tariff:** NEPRA has determined the tariff for PTPL for 30 years; the return on equity component of tariff has been calculated on the basis of 15% USD IRR. Moreover, proposed annual insurance cost is calculated at 1% of the EPC Cost. The Petitioner assumed Ex-GST base fuel price USD $8.2/mmbtu-HHV for gas and Rs. 59.5/Liter on HSD; the following tariff has been proposed:

| **Combined Cycle Operation** | | |
|---|---|---|
| Description | RLNG | HSD |
| **Energy Charge (Rs./kWh):** | | |
| Fuel cost component | 5.6005 | 10.7216 |
| Variable O&M | 0.3079 | 0.4443 |
| **Total** | 5.9084 | 11.1659 |
| **Capacity Charge (Rs./kW/hour):** | | |
| Fixed O&M (Local) | 0.0631 | 0.0724 |
| Fixed O&M (Foreign) | 0.1041 | 0.1196 |
| Cost of working capital | 0.0922 | 0.1059 |
| Insurance | 0.0531 | 0.0610 |
| Return on Equity | 0.3330 | 0.3825 |
| Debt servicing (1-10 years only) | 0.8112 | 0.9318 |
| **Total 1-10 years** | 1.4565 | 1.6732 |
| **Total 11-30 years** | 0.6454 | 0.7414 |
| **Avg. Tariff 1-10 years @ 92% (Rs./kWh)** | 7.4916 | 12.9845 |
| **Avg. Tariff 11-30 years @ 92% (Rs./kWh)** | 6.6100 | 11.9717 |
| **Levelized tariff (Rs./kWh)** | 7.1846 | 12.6319 |
| **Levelized tariff (Cents/kWh)** | 6.5374 | 11.4940 |

For the simple cycle operation on RLNG, the tariff structure is presented in table below:

| **Description** | **Rs./kWh** |
|---|---|
| Fuel cost component | 8.7369 |
| Variable O&M | 0.3079 |
| Fixed O&M (Local) | 0.0631 |
| Fixed O&M (Foreign) | 0.1041 |
| Cost of working capital | 0.0922 |
| **Total** | **9.3042** |

| Punjab Thermal Power (Pvt) Limited | Appendix I *(Amounts in PKR Millions)* | |
|---|---|---|
| <u>BALANCE SHEET</u> | **30-Jun-18** | **30-Jun-19** |
| Fixed Assets | 20,232 | 74,949 |
| Stores and Spares | - | - |
| Stock in Trade | - | - |
| Trade Debts | - | - |
| Advances & Prepayments | 319 | 533 |
| Cash & Bank Balances | 1,326 | 10,101 |
| Total Assets | 21,887 | 85,594 |
| Trade and Other Payables | 8,551 | 58,624 |
| Long Term Debt (*incl. current maturity) | - | - |
| Short Term Debt | - | - |
| Deferred Liabilities | - | 16 |
| Paid Up Capital | 10 | 10 |
| Tier 1/Total Equity | 13,336 | 26,955 |
| <u>INCOME STATEMENT</u> | **30-Jun-18** | **30-Jun-19** |
| Revenue | - | - |
| Gross Profit | - | - |
| Operating (Loss) | (124) | (132) |
| Profit/ (Loss) Before Tax | (39) | 57 |
| Profit/ (Loss) After Tax | (64) | 19 |
| FFO | 23 | (81) |
| <u>RATIO ANALYSIS</u> | **30-Jun-18** | **30-Jun-19** |
| Gross Margin (%) | - | - |
| FFO to Total Debt (x) | - | - |
| FFO to Long Term Debt (x) | - | - |
| Debt Servicing Coverage Ratio (x) | - | - |
| Current Ratio (x) | - | - |
| Gearing (x) | - | - |
| Debt Leverage (x) | 0.64 | 2.18 |

## ISSUE/ISSUER RATING SCALE & DEFINITIONS — Annexure III

VIS Credit Rating Company Limited

### RATING SCALE & DEFINITIONS: ISSUES / ISSUERS

**Medium to Long-Term**

**AAA**
Highest credit quality; the risk factors are negligible, being only slightly more than for risk-free Government of Pakistan's debt.

**AA+, AA, AA-**
High credit quality; Protection factors are strong. Risk is modest but may vary slightly from time to time because of economic conditions.

**A+, A, A-**
Good credit quality; Protection factors are adequate. Risk factors may vary with possible changes in the economy.

**BBB+, BBB, BBB-**
Adequate credit quality; Protection factors are reasonable and sufficient. Risk factors are considered variable if changes occur in the economy.

**BB+, BB, BB-**
Obligations deemed likely to be met. Protection factors are capable of weakening if changes occur in the economy. Overall quality may move up or down frequently within this category.

**B+, B, B-**
Obligations deemed less likely to be met. Protection factors are capable of fluctuating widely if changes occur in the economy. Overall quality may move up or down frequently within this category or into higher or lower rating grade.

**CCC**
Considerable uncertainty exists towards meeting the obligations. Protection factors are scarce and risk may be substantial.

**CC**
A high default risk

**C**
A very high default risk

**D**
Defaulted obligations

**Short-Term**

**A-1+**
Highest certainty of timely payment; Short-term liquidity, including internal operating factors and /or access to alternative sources of funds, is outstanding and safety is just below risk free Government of Pakistan's short-term obligations.

**A-1**
High certainty of timely payment; Liquidity factors are excellent and supported by good fundamental protection factors. Risk factors are minor.

**A-2**
Good certainty of timely payment. Liquidity factors and company fundamentals are sound. Access to capital markets is good. Risk factors are small.

**A-3**
Satisfactory liquidity and other protection factors qualify entities / issues as to investment grade. Risk factors are larger and subject to more variation. Nevertheless, timely payment is expected.

**B**
Speculative investment characteristics; Liquidity may not be sufficient to ensure timely payment of obligations.

**C**
Capacity for timely payment of obligations is doubtful.

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**Rating Watch:** VIS places entities and issues on 'Rating Watch' when it deems that there are conditions present that necessitate re-evaluation of the assigned rating(s). Refer to our 'Criteria for Rating Watch' for details. www.vis.com.pk/images/criteria_watch.pdf

**Rating Outlooks:** The three outlooks 'Positive', 'Stable' and 'Negative' qualify the potential direction of the assigned rating(s). An outlook is not necessarily a precursor of a rating change. Refer to our 'Criteria for Rating Outlook' for details.www.vis.com.pk/images/criteria_outlook.pdf

**(SO) Rating:** A suffix (SO) is added to the ratings of 'structured' securities where the servicing of debt and related obligations is backed by some sort of financial assets and/or credit support from a third party to the transaction. The suffix (SO), abbreviated for 'structured obligation', denotes that the rating has been achieved on grounds of the structure backing the transaction that enhanced the credit quality of the securities and not on the basis of the credit quality of the issuing entity alone.

**(blr) Rating:** A suffix (blr) is added to the ratings of a particular banking facility obtained by the borrower from a financial institution. The suffix (blr), abbreviated for 'bank loan rating' denotes that the rating is based on the credit quality of the entity and security structure of the facility.

**'p' Rating:** A 'p' rating is assigned to entities, where the management has not requested a rating, however, agrees to provide informational support. A 'p' rating is shown with a 'p' subscript and is publicly disclosed. It is not modified by a plus (+) or a minus (-) sign which indicates relative standing within a rating category. Outlook is not assigned to these ratings. Refer to our 'Policy for Private Ratings' for details. www.vis.com.pk/images/policy_ratings.pdf

**'SD' Rating:** An 'SD' rating is assigned when VIS believes that the ratee has selectively defaulted on a specific issue or obligation but it will continue to meet its payment obligations on other issues or obligations in a timely manner.

| REGULATORY DISCLOSURES | | | | | Annexure-IV |
|---|---|---|---|---|---|
| **Name of Rated Entity** | Punjab Thermal Power (Private) Limited | | | | |
| **Sector** | Power | | | | |
| **Type of Relationship** | Solicited | | | | |
| **Purpose of Rating** | Entity Rating | | | | |
| **Rating History** | **Rating Date** | **Medium to Long Term** | **Short Term** | **Rating Outlook** | **Rating Action** |
| | **RATING TYPE: ENTITY** | | | | |
| | 10-06-2020 | AA- | A-1 | Stable | Initial |
| **Statement by the Rating Team** | VIS, the analysts involved in the rating process and members of its rating committee do not have any conflict of interest relating to the credit rating(s) mentioned herein. This rating is an opinion on credit quality only and is not a recommendation to buy or sell any securities. | | | | |
| **Probability of Default** | VIS' ratings opinions express ordinal ranking of risk, from strongest to weakest, within a universe of credit risk. Ratings are not intended as guarantees of credit quality or as exact measures of the probability that a particular issuer or particular debt issue will default. | | | | |
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