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Methodology

Global Methodology for Rating Companies in the Regulated Electric, Natural Gas, and Water Utilities Industry

DBRS Morningstar
September 2022

Previous Release
September 2021

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Related Research

DBRS Morningstar is a full-service credit rating agency established in 1976. Spanning North America, Europe, and Asia, DBRS Morningstar is respected for its independent, third-party evaluations of corporate and government issues. DBRS Morningstar's extensive coverage of securitizations and structured finance transactions solidifies its standing as a leading provider of comprehensive, in-depth credit analysis.

All DBRS Morningstar ratings and research are available in hard-copy format and electronically on Bloomberg and at dbrsmorningstar.com, its lead delivery tool for organized, web-based, up-to-the-minute information. DBRS Morningstar remains committed to continuously refining its expertise in the analysis of credit quality and is dedicated to maintaining objective and credible opinions within the global financial marketplace.

Scope and Limitations

This methodology represents the current DBRS Morningstar approach for rating companies in the regulated electric, natural gas, and water utilities industry globally. It includes consideration of historical and expected business and financial risk factors as well as industry-specific issues, regional nuances, and other subjective factors and intangible considerations. DBRS Morningstar's approach incorporates a combination of both quantitative and qualitative factors. This methodology provides guidance regarding the DBRS Morningstar methods used in the sector and should not be interpreted with formulaic inflexibility but rather should be understood in the context of the dynamic environment in which it is intended to be applied. The methods described herein may not be applicable in all cases; the considerations outlined in DBRS Morningstar methodologies are not exhaustive and the relative importance of any specific consideration can vary by issuer. In certain cases, a major strength can compensate for a weakness and, conversely, a single weakness can override major strengths of the issuer in other areas. DBRS Morningstar may use, and appropriately weight, several methodologies when rating issuers that are involved in multiple business lines.

Introduction to DBRS Morningstar Methodologies

- DBRS Morningstar publishes rating methodologies to give issuers and investors insight into the rationale behind DBRS Morningstar's rating opinions.
- In general terms, DBRS Morningstar's ratings are opinions that reflect the creditworthiness of an issuer, a security, or an obligation. DBRS Morningstar's ratings assess an issuer's ability to make timely payments on outstanding obligations (whether principal, interest, or preferred share dividends),

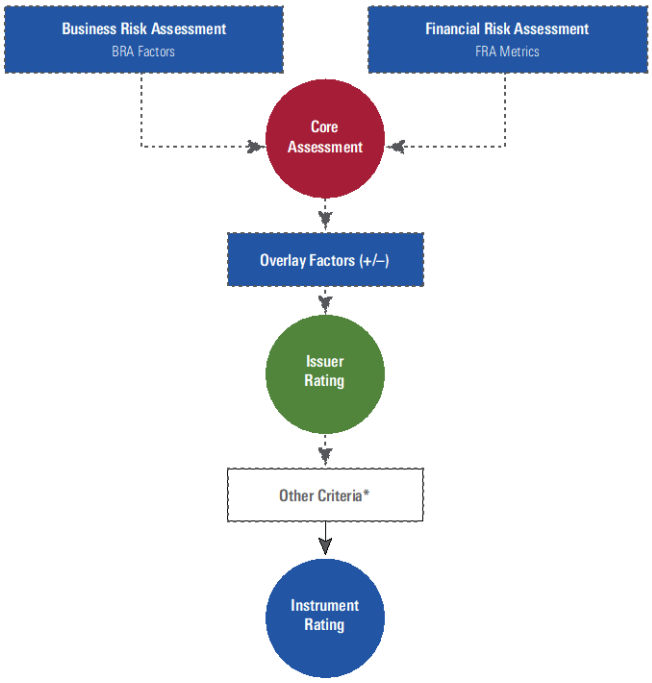
consistent with the terms of those obligations. In some cases (e.g., non-investment-grade corporate issuers), DBRS Morningstar's ratings may also address recovery prospects for a specific instrument given the assumption of an issuer default.

- DBRS Morningstar operates with a stable rating philosophy; in other words, DBRS Morningstar strives to factor the impact of a cyclical economic environment into its ratings wherever possible, which minimizes rating changes caused by economic cycles. Rating revisions do occur, however, when more structural changes, either positive or negative, have occurred or appear likely to occur in the foreseeable future.
- DBRS Morningstar also publishes criteria, which are an important part of the rating process. Criteria typically cover areas that apply to more than one industry. Both methodologies and criteria are publicly available on DBRS Morningstar's website.
- Four criteria are used in the ratings of virtually every corporate issuer and are incorporated by reference into this methodology: (1) *DBRS Morningstar Criteria: Approach to Environmental, Social, and Governance Risk Factors in Credit Ratings*; (2) *DBRS Morningstar Criteria: Evaluating Corporate Governance*; (3) *DBRS Morningstar Criteria: Common Adjustments for Calculating Financial Ratio*s; and (4) *DBRS Morningstar Criteria: Rating Corporate Holding Companies and Parent/Subsidiary Rating Relationships*.

Overview of the DBRS Morningstar Rating Process

- As illustrated below, there are generally four key components to the DBRS Morningstar corporate rating process: (1) the Business Risk Assessment (BRA), (2) the Financial Risk Assessment (FRA), (3) overlay considerations, and (4) specific instrument considerations.
- The BRA captures the major business risk aspects of the issuer and is determined by assessing each of the BRA factors outlined in the industry-specific BRA grid. The FRA pertains to financial soundness and is determined by assessing each of the FRA factors. Throughout the FRA and BRA determination process, DBRS Morningstar performs a consistency check of these factors relative to the issuer's rated industry peers.
- The BRA and FRA are then combined to derive the issuer's core assessment. For investment-grade credits, the BRA will have greater weight than the FRA in determining the core assessment.
- The core assessment may then be adjusted up or down, as applicable, if any of the general or sector-specific overlay factors is deemed applicable and material to the credit profile in order to arrive at the issuer rating, which represents DBRS Morningstar's assessment of the issuer's likelihood of default.
- The issuer rating is then used as the basis for specific instrument ratings, which may differ from the issuer rating because of seniority or, in the case of non-investment-grade issuers, expected recovery considerations. (See the Rating the Specific Instrument and Other Criteria section below.)

DBRS Morningstar Rating Analysis Process Business



* Depending on the instrument, "other criteria" may include *DBRS Morningstar Criteria: Recovery Ratings for Non-Investment-Grade Corporate Issuers* or *DBRS Morningstar Criteria: Preferred Share and Hybrid Security Criteria for Corporate Issuers*, for example. Please refer to the section below entitled Rating the Specific Instrument and Other Criteria for a list of these criteria, as well as other criteria that may be applicable at any stage of the rating process.

Regulated Electric, Natural Gas, and Water Utilities Industry

- This methodology applies to rate-regulated utilities whose primary businesses typically operate within a monopoly franchise area and may include one or more of the following business lines: (1) regulated electric generation, transmission, and distribution; (2) natural gas transmission and distribution; and (3) water and waste-water utilities.
- For companies that have both material regulated and nonregulated operations in other related industry segments (e.g., nonregulated electricity generation, energy marketing, or trading), DBRS Morningstar applies both this and the *Rating Companies in the Independent Power Producer Industry* methodology. For pipeline or diversified energy companies, see *Rating Companies in the Pipeline and Midstream Energy Industry*. For energy-related project finance transactions, see *Rating Project Finance*, *Rating Wind Power Projects*, or *Rating Solar Power Projects*.
- DBRS Morningstar may also use this methodology for utilities that are nonregulated but effectively share many features with a regulated utility, such as operating as a natural monopoly, providing an essential service, and/or having strong market power (e.g., district energy). For these entities, the Regulation and Operating Efficiency factors are not applicable and are instead replaced by the Competitive/Contractual Position.

- Per the three-tier Industry Risk Assessment (IRA) system (i.e., "A," BBB, or BB), described on the previous page, this industry's IRA is "A." [1]
- For the electric-related utilities, there are three broad business areas: generation, transmission, and distribution. Some utilities are fully integrated and participate in all three, while others may be involved in only one or two segments.
- Regulated utilities are typically monopolistic. Because of the large number of fixed costs, one large utility firm can generally provide service at a lower cost than two or more firms serving the same customer base. Utilities are generally regulated by an administrative tribunal (i.e., a government agency) created by statute to assist ratepayers in obtaining reliable energy services on a cost-effective basis. Rate-setting mechanisms generally ensure that utilities receive adequate revenue to recover all costs prudently incurred to provide service and a return on capital.
- Utilities are typically regulated under either a traditional cost-of-service (COS) framework or some form of incentive regulation mechanism (IRM).
- The risks associated with environmental regulation are growing, particularly for the electric industry; however, for a regulated utility, future cost increases attributable to environmental regulation should be recoverable from ratepayers.
- Long-term threats include competition from new distributed energy resources (such as solar and geothermal power) and small-scale power generation sources located close to end users that provide an alternative to traditional electric power generation as well as the transmission and distribution grid.
- Water and waste-water utilities typically operate under similar regulatory frameworks to other regulated distribution utility operations; however, water and waste-water sector regulations can vary widely given that regulation may be at the municipal level rather than the national/state/provincial level. In addition, capital spending may be more volatile for water and waste-water utilities.

1. The IRA is a general indication of an industry's business risk using just three categories of the DBRS Morningstar long-term rating scale (i.e., BB, BBB, and "A"). It results from a relative ranking of most industries that have a DBRS Morningstar methodology largely based on (A) profitability and cash flow, (B) competitive landscape, (C) stability, (D) regulation, and (E) other factors. An *industry*, for the purposes of the IRA, is defined as firms that are generally the larger, more established firms within the countries where the majority of DBRS Morningstar's rated issuers are based. The BRA grid (see the Regulated Electric, Natural Gas, and Water Utilities BRA section) is calibrated with the assistance of the IRA, which positions an average firm in the industry onto the BRA grid in an approximate way.

Regulated Electric, Natural Gas, and Water Utilities BRA

The BRA grid below shows the primary factors DBRS Morningstar uses in determining the BRA. While these factors are shown in general order of importance, depending on a specific issuer's business activities, this ranking can vary by issuer.

Regulated Electric, Natural Gas, and Water Utilities – Primary BRA Factors

Regulation (For Regulated Entities Only) – The quality of the regulatory regime is typically the most important BRA factor, as it lays the foundation for utilities' earning capacity, cost recovery mechanisms, and capital structure. A supportive regulatory framework contributes to stable cash flow and earnings, underpinned by a fair rate of return and a full and timely recovery of costs. To determine the BRA for regulation, DBRS Morningstar reviews eight considerations (see Appendix 1) to assess the regulatory framework in which the utility conducts its business. The eight considerations include the following: (1) deemed equity ratio, (2) allowed return on equity (ROE), (3) energy cost recovery, (4) capital cost recovery (CCR) and operating cost recovery (OCR), (5) COS versus IRM, (6) political interference, (7) stranded cost recovery, and (8) rate freeze.

AA	A	BBB	BB/B
• Highly supportive regulatory framework with the weighted-average relevant key regulatory risk factors in Appendix 1 considered to be "excellent."	• Supportive regulatory framework with the weighted-average relevant key regulatory risk factors in Appendix 1 considered to be "good" or better.	• Reasonable regulatory framework with the weighted-average relevant key regulatory risk factors in Appendix 1 considered to be "satisfactory" or better.	• Poor regulatory framework with the weighted-average relevant key regulatory risk factors in Appendix 1 considered to be "below average" and/or "poor."

Competitive/Contractual Position (For Nonregulated Entities Only) – For applicable nonregulated entities, DBRS Morningstar focuses on the contractual and market position. Contractual arrangements can mitigate a company's business risk. Earnings and cash flows from companies that are contractually secured on a long-term basis by strong counterparties are generally more stable and predictable, and may eliminate volume and commodity risk while mitigating the risk of near-term recontracting. Nevertheless, companies with significant exposure to energy activities that result in exposure to price and/or volume carry higher earnings volatility and risk. DBRS Morningstar also takes into consideration the monopolistic nature of the market.

AA	A	BBB	BB/B
• Not applicable.	• Largely contracted on a long-term basis. • Minimal recontracting and early contract termination risk. • Minimal merchant energy operations. • Fuel and purchase energy costs are fully passed through with an automatic adjustment mechanism on a quarterly basis. • Some volume risk exists but is mitigated by a high portion of rates being fixed.	• Partly contracted on a medium-term basis. • Moderate recontracting and early contract termination risk. • Modest exposure to merchant energy operations. • Fuel and purchase energy costs are fully passed through, subject to review. • Some volume risk exists but is mitigated by historically stable throughputs.	• Partly contracted on a short-term basis. • High recontracting and early contract termination risk. • Significant exposure to merchant energy operations. • Fuel and purchase energy costs are not fully passed through. • Volume risk exists because of a high portion of rates being variable.

Regulated Electric, Natural Gas, and Water Utilities – Primary BRA Factors

Diversification (Products/Markets) (For Both Regulated and Nonregulated Entities) – DBRS Morningstar views the electricity transmission segment as having the lowest risk, as the transmission grid forms the backbone of the industry and generally represents the smallest portion of the average residential electricity bill. As a result, there is strong political will to support the transmission owner to maintain safe, reliable operation of the system. The electricity distribution and gas transmission/distribution segments generally entail modestly higher risk, as the distribution segment accounts for a greater portion of the average residential bill, and the gas segment is exposed to integrity management risk. The generator segment has the highest risk, as it is exposed to fuel risk and higher operating risk than that of other segments; it also represents the highest portion of the electricity bill, which makes it more susceptible to political risk especially in a rising power cost environment. Diversification across low-risk multiline businesses is positive, limiting the impact of changes in one particular segment. DBRS Morningstar also views diversification across multiple regulatory regimes as positive, as this limits the impact of negative regulatory decisions in one jurisdiction. This is particularly true if a utility has sizable operations in multiple jurisdictions versus a utility with a significant portion of its operations in one area while having multiple smaller operations in others.

AA	A	BBB	BB/B
• Utility has operations in multiple regulatory jurisdictions. • Primarily electric transmission. • Well-diversified utilities with a range of businesses throughout the utility value chain (natural gas transmission and distribution, electricity transmission and distribution).	• Electric or gas distribution, water or waste-water distribution/services, or an integrated utility or generator with a low-risk profile.	• Integrated utility or generator with a moderate-risk profile.	• Integrated utility or generator with a high-risk profile.

Franchise and Customer Mix (For Both Regulated and Nonregulated Entities) – Operating in stable and economically strong service areas generally results in revenue stability and low accounts-receivable write-offs, as well as minimizing political interference risk in a rising electricity rate environment. DBRS Morningstar considers both the economic strength of a utility's customer base and the size of the customer base when assessing whether customers will be able to absorb rate increases. Customers in an economically strong service territory are more able to absorb higher rate increases, while a larger customer base would allow capital and operating costs to be spread out over a greater number of customers. Utilities with a higher proportion of residential and commercial customers and load also possess the ability to better weather economic downturns and demonstrate more stable operating performances than utilities with a greater exposure to industrial customers and load, which are more inclined to seek lower-cost or more reliable suppliers and are prone to economic cyclicality. However, utilities with a large residential customer base are generally more sensitive to weather conditions, exposing the utilities to greater volume risk.

AA	A	BBB	BB/B
• Economically vibrant service territory, with income that is significantly above the national average. • Utility has a significant customer base (i.e., large metropolitan area or province/state). • Customer and load mix predominantly residential and commercial.	• Economically strong service territory, with income above the national average. • Utility has a sizable customer base. • Customer and load mix heavily weighted toward residential and commercial.	• Economically stagnant service territory, with income that is in line with the national average. • Utility has a reasonably sized customer base. • Customer and load mix a balance of residential and commercial versus industrial.	• Economically weak service territory, with income that is below the national average. • Utility has a shrinking customer base. • Customer and load mix weighted toward cyclical industrials.

Regulated Electric, Natural Gas, and Water Utilities – Primary BRA Factors			
Operating Efficiency (Inputs and Costs) (For Regulated Entities Only) – Utilities with a proven track record of superior operating efficiency generally sustain profitability above their respective regulatory return parameters (i.e., the allowed or deemed ROE as distinct from the actual ROE, which is the company's reported ROE as presented in regulatory filings) and record above-average profitability relative to their peers. Improving operating efficiency also helps minimize political interference (e.g., in the form of the creation of stranded costs, a rate freeze or regulatory lag in the recoupment of costs) in recovering rising input costs and refurbishment costs for aging infrastructure. DBRS Morningstar notes that while a bigger utility (by asset or rate base) should possess a stronger ability to achieve economies of scale as well as raise funds and execute capital projects, it may be under extra scrutiny by the regulator to meet higher thresholds.			
AA	**A**	**BBB**	**BB/B**
• Actual ROE has significantly exceeded the allowed ROE as a result of continued operating efficiency. • Strong ROE outperformance is expected to be well-sustained in the foreseeable future through incremental cost savings accruing to the company. • Utility is of large comparative size, allowing for significant economies of scale.	• Actual ROE has been in line with the allowed ROE, or a difference between the allowed ROE and the actual ROE has not been material. • ROE performance is expected to remain in line with the allowed ROE for the foreseeable future. There is no expectation of material incremental cost savings arising in the foreseeable future. • Utility is of sufficiently large size to achieve economies of scale.	• Actual ROE has been somewhat below the allowed ROE, and this negative ROE performance relative to allowed ROE is expected to continue for the foreseeable future with no expectation of any material incremental cost savings. • Utility is of reasonable size to achieve some economies of scale.	• The utility has generated much lower actual ROE than the allowed ROE, and this negative ROE performance relative to allowed ROE is expected to continue for the foreseeable future with no expectation of any material incremental cost savings. • Small utility that can only achieve modest, if any, economies of scale.

Regulated Electric, Natural Gas, and Water Utilities FRA

FRA Metrics

The FRA grid below shows the metrics DBRS Morningstar uses to determine the FRA. While these FRA metrics are shown in general order of importance, depending on an issuer's activities, the ranking can vary by issuer. This section also addresses financial considerations not directly captured by the FRA metrics but nonetheless important to the financial soundness of an issuer. When deemed deficient or, on rarer occasions, favourable to the credit profile, DBRS Morningstar would generally incorporate such considerations into the rating through one of the overlay factors outlined in the Overlay Factors section of this methodology.

- DBRS Morningstar ratings are primarily based on future performance expectations, so while past metrics are important, any final rating will incorporate DBRS Morningstar's opinion on future metrics, a subjective but critical consideration.
- It is not unusual for a company's metrics to move in and out of the ranges noted in the grid below, particularly for cyclical industries. In the application of this matrix, DBRS Morningstar looks beyond the point-in-time ratio.
- Financial metrics depend on accounting data whose governing principles vary by jurisdiction. DBRS Morningstar may adjust financial statements to permit comparisons with issuers using different accounting principles (e.g., U.S. GAAP versus IFRS).

- Appendix 3 to this methodology provides definitions for the FRA metrics in the table below as well as a discussion of common financial statement adjustments for this industry. Please refer to *DBRS Morningstar Criteria: Common Adjustments for Calculating Financial Ratios* for further information.
- Liquidity can be an important credit risk factor, especially for lower-rated, non-investment-grade issuers. While ratios such as the current or quick ratio can give an indication of certain short-term assets in comparison with short-term liabilities, DBRS Morningstar will typically review all material sources of liquidity (including cash on hand, cash flow from operations, availability of bank and capital market funding, etc.) in comparison with all material short- and medium-term uses of liquidity (such as operations, capital expenditure (capex), mandatory debt repayments, share buybacks, dividends, etc.).
- Profitability, particularly in the medium term, can be an important differentiator of credit risk. DBRS Morningstar may assess profitability through a variety of metrics, including return on capital.
- While free cash flow (i.e., net of changes in working capital, dividends, capex, etc.) can be volatile and, on occasion, negative, DBRS Morningstar may use this concept and/or other cash flow metrics, such as cash flow from operations, to assess a company's ability to generate cash to repay debt.
- DBRS Morningstar considers an issuer's financial policies, including factors such as its targeted financial leverage, its dividend policy and the likelihood of share buybacks, or other management actions that may favour equityholders over creditors.
- While market pricing information (such as market capitalization or credit spreads) may be of interest to DBRS Morningstar, particularly where the information suggests that an issuer may have difficulty in raising capital, it does not usually play a material role in DBRS Morningstar's more fundamental approach to assessing credit risk.

The following table represents financial metrics related to fully regulated utilities with only modest exposure to nonregulated operations. Significant exposure to nonregulated operations would result in increasingly stringent financial metrics criteria at the various rating levels.

Regulated Electric, Natural Gas, and Water Utilities – Primary FRA Metrics

Primary Metric	AA	A	BBB	BB/B
Cash flow-to-debt (%)	> 17.5	12.5 to 17.5	10.0 to 12.5	0.0 to 10.0
Debt-to-capital (%)	< 55	55 to 65	65 to 75	75 to 90
EBIT-to-interest (x)	> 2.8	1.8 to 2.8	1.5 to 1.8	1.0 to 1.5

Blending the BRA and FRA into a Core Assessment

- The core assessment is a blend of the BRA and FRA. In most cases, the BRA will have greater weight than the FRA in determining the issuer rating.
- At the low end of the rating scale, however, particularly in the B range and below, the FRA and liquidity factors play a much larger role, and the BRA would, therefore, typically receive a lower weighting than it would at higher rating levels.
- In addition, DBRS Morningstar also takes into consideration the volatility of a company's FRA in arriving at the final rating. A company with more volatile credit metrics than its industry peers may be rated lower than it would otherwise be based on a blend of the BRA and FRA. The lower rating reflects the higher risk, especially in a downturn, associated with the increased volatility.

Overlay Factors

The overlay factors are the last consideration in the determination of the issuer rating. When deemed relevant and material to the analysis of an issuer, an overlay factor positively or negatively modifies the core assessment derived from the combination of the BRA and FRA, with the impact of a single factor potentially ranging from less than one notch to as much as several notches in the case of more significant factors. DBRS Morningstar considers both sector-specific and general overlay factors, which are outlined in the two sections that follow.

Sector-Specific Overlays

Capital Spending

- Utilities are capital-intensive businesses, especially when nuclear generation is involved. A utility might undertake large capital projects to either meet growing demand in a high-growth franchise area or replace significant aging assets. Particularly for multiyear capital spending programs, the risk of cost overruns and weaker financial metrics can be high.

Energy Supply Considerations

- The provision of utility services depends on the presence of adequate supplies of energy (e.g., natural gas and electricity) to meet end-user demand. DBRS Morningstar may penalize utilities (including distributors) that have a history of service interruptions because of inadequate or unreliable energy supply.

Ownership

- The existence of a highly rated parent typically does not result in a lift to a stand-alone utility's rating; however, DBRS Morningstar may impute some level of implicit support (see *DBRS Morningstar Criteria: Guarantees and Other Forms of Support*) in a utility's rating if it is owned by a highly rated city, despite no explicit guarantee being in place, given the potential unique circumstances of the city-utility relationship.

Retail Exposure and Other Business Exposure

- Distribution companies may be required to provide retail services to customers, such as electricity supply. Under this framework, utilities, depending on commercial arrangements, could be exposed to significant market risk. Key areas of analysis, therefore, include hedging policies, counterparty risk, and the size of the operation. Rates are, however, generally passed on to ratepayers, thereby reducing the risk to the utility.
- If the utility has other nonregulated businesses and these businesses are sizable but not sufficiently material to be assessed under a different methodology, DBRS Morningstar will also assess the risk profile of these businesses and will make an adjustment to the overall risk profile of the utility accordingly.

Competitive Environment

- DBRS Morningstar assesses the degree of competition from other forms of energy or any other potential threats to natural monopoly, including material development of new distributed energy resources and

small-scale power generation sources close to end users that could ultimately provide an alternative to the traditional electric power transmission and distribution grid.

Environmental Issues

- DBRS Morningstar assesses the extent to which utilities face environmental laws and regulations that can have an impact on a company's business and prospects, including issues related to safety (i.e., operating nuclear facilities and handling radioactive material). DBRS Morningstar also includes in its analysis the impact recurrent natural weather hazards (such as hurricanes or flood risk) have on a utility's service territory.

General Overlays

Strategic Advantage or Impediment

- Strategic advantage or impediments not otherwise captured by BRA factors may include an exceptional brand, a unique product or process, or unusually large or small operations.

Parent-Subsidiary Relationship

- Various aspects of an issuer's corporate structure have the potential to positively or negatively influence the rating of that issuer. This may include the potential presence of structural subordination when the issuer is a holding company or the possibility of implicit support from a strong parent when the issuer is an important subsidiary of a broader corporate group. For more details, refer to *DBRS Morningstar Criteria: Rating Corporate Holding Companies and Parent/Subsidiary Rating Relationships* and *DBRS Morningstar Criteria: Guarantees and Other Forms of Support.*

Other Financial Considerations

- Beyond the FRA metrics, many other financial factors reviewed as part of the rating process may point to material sources of credit risk. Such factors may include (1) a strained liquidity position; (2) unusually high cash flow volatility relative to peers; (3) considerable uncertainty in the issuer's financial outlook owing, for example, to a recent large acquisition, an aggressive acquisition strategy, or a rapidly changing competitive environment; (4) unduly large unfunded pension liabilities; or (5) weak financial policies as evidenced, for example, by a significant currency mismatch in the issuer's business or debt structure or significant refinancing risk. In contrast, substantial financial resources or other noncore valuable assets that can easily be monetized, if necessary, could potentially provide uplift to a rating.

Environmental, Social, and Governance (ESG) Considerations

- ESG factors may affect a credit rating and/or the related credit analysis. The impact of ESG factors may vary across industries, sectors, or asset classes and is described in the *DBRS Morningstar Criteria: Approach to Environmental, Social, and Governance Risk Factors in Credit Ratings*. Where an ESG factor is material to a corporate rating, but is not otherwise addressed in a BRA/FRA factor or other overlay, DBRS Morningstar will reflect the impact of the ESG factor on the rating through this general ESG overlay.

Sovereign Risk

- The issuer rating may, in some cases, be constrained by the credit quality of a sovereign. If the issuer operates in a lower-rated country or operates in multiple countries but a material amount of its business is conducted in that lower-rated country, DBRS Morningstar may reflect this risk by lowering the issuer rating. Please refer to Appendix C of the *Global Methodology for Rating Sovereign Governments* for further information.

Rating the Specific Instrument and Other Criteria

- The issuer rating is an indicator of the likelihood of default of an issuer's debt and forms the basis for rating specific instruments of an issuer, where applicable. DBRS Morningstar uses a hierarchy in rating long-term debt that affects issuers that have classes of debt that do not rank equally. In most cases, lower-ranking classes would receive a lower DBRS Morningstar rating. For more detail on this subject, please refer to the general rating information contained in DBRS Morningstar's *Credit Ratings Global Policy*.
- In addition to this methodology, the following criteria may be used from time to time in determining a rating.
- For non-investment-grade corporate issuers, DBRS Morningstar assigns a recovery rating that reflects the seniority and expected recovery of a specific instrument, under an assumed event of default scenario, by notching up or down from the issuer rating in accordance with the principles outlined in the *DBRS Morningstar Criteria: Recovery Ratings for Non-Investment-Grade Corporate Issuers*.
- Preferred share and hybrid considerations are discussed in *DBRS Morningstar Criteria: Preferred Share and Hybrid Security Criteria for Corporate Issuers*.
- For a discussion on the relationship between short- and long-term ratings and more detail on liquidity factors, please refer to the DBRS Morningstar policy *Short-Term and Long-Term Rating Relationships* and *DBRS Morningstar Criteria: Commercial Paper Liquidity Support for Nonbank Issuers*.
- Guarantees and other types of support are discussed in *DBRS Morningstar Criteria: Guarantees and Other Forms of Support*.

Appendix 1: Regulation

- To determine the BRA for regulation (see the Regulated Electric, Natural Gas, and Water Utilities BRA Factors section), DBRS Morningstar reviews the eight considerations found below, which assess the regulatory framework in which the utility conducts its business.
- The ranking of the factors is based on a five-point scale (excellent, good, satisfactory, below average, and poor).
- The first four factors are generally of greater importance than the others when assessing regulatory risk.
- While Considerations 1 to 5 can differ between utilities operating in the same jurisdiction, DBRS Morningstar typically views Considerations 6, 7, and 8 as the same for all utilities within the same jurisdiction.

Consideration 1: Deemed Equity Ratio

Definition		
The deemed equity ratio is the percentage of equity investment in the rate base on which a utility could earn a return. In general, the higher the deemed equity ratio, the higher the earnings for a utility.		
Score	**Item (%)**	**Definition**
Excellent	50.00+	• The deemed equity ratio represents 50.00% or more of the utility's rate base. • The treatment of the deemed equity ratio is consistent historically.
Good	45.00 to 49.99	• The deemed equity ratio represents 45.00% to 49.99% of the utility's capital structure. • The treatment of the deemed equity ratio is consistent historically.
Satisfactory	40.00 to 44.99	• The deemed equity ratio represents 40.00% to 44.99% of the utility's capital structure. • The treatment of the deemed equity ratio has not been consistent historically.
Below Average	35.00 to 39.99	• The deemed equity ratio represents 35.00% to 39.99% of the utility's capital structure. • The treatment of the deemed equity ratio has not been consistent historically.
Poor	Below 35.00	• The deemed equity ratio represents less than 35.00% of the utility's capital structure. • The treatment of the deemed equity ratio has not been consistent historically.

Consideration 2: Allowed ROE

Definition		
Allowed ROE is a measurement of returns on the deemed equity portion of the rate base. The regulator assesses and sets an allowed ROE based on a utility's business risk level. These allowed ROE levels assume a current North American or Western European inflationary environment.		
Score	**Item (%)**	**Definition**
Excellent	10+	• An allowed ROE is set at 10.00% or higher. • The regulatory treatment of allowed ROE has been consistent historically.
Good	9.00 to 10.00	• An allowed ROE is set at 9.00% to 10.00%. • The regulatory treatment of allowed ROE has been consistent historically.
Satisfactory	8.00 to 8.99	• An allowed ROE is set at 8.00% to 8.99%. • The regulatory treatment of allowed ROE has been consistent historically.
Below Average	7.00 to 7.99	• An allowed ROE is set at 7.00% to 7.99%. • The regulatory treatment of allowed ROE has not been consistent historically.
Poor	Below 7.00	• An allowed ROE is set at below 7.00%. • The regulatory treatment of allowed ROE has not been consistent historically.

Consideration 3: Energy Cost Recovery

Definition		
Fuel and purchased energy (F&PE) cost recovery certainty and the timing of recovery are critical in DBRS Morningstar's assessment of a regulatory system within a certain jurisdiction. DBRS Morningstar looks at the following factors: (1) whether F&PE costs are fully passed through to the customers, (2) how often a utility is allowed to adjust the F&PE costs in retail rates charged to customers, and (3) if there is a mechanism within a jurisdiction to allow utilities to make F&PE cost adjustments with no or minimal regulatory review. In addition, DBRS Morningstar focuses on the generation mix within a certain market. A high power cost market could have an impact on the utility's ability to recover the purchased power costs in a timely manner. DBRS Morningstar notes that this factor is not applicable for water and waste-water utilities.		
Score	**Item**	**Definition**
Excellent	Monthly/bimonthly	• F&PE costs are fully passed through. • Adjustment is made on a monthly basis. • There is an automatic adjustment mechanism. • The jurisdiction is in a favourable generation mix market, resulting in low power cost.
Good	Quarterly	• F&PE costs are fully passed through. • Adjustment is made on a quarterly basis. • There is an automatic adjustment mechanism. • The jurisdiction is in a favourable generation mix market, resulting in low power cost.
Satisfactory	Quarterly with regulatory review	• F&PE costs are fully passed through. • Adjustment is made on a quarterly basis. • F&PE cost deferrals are subject to some regulatory review. • The jurisdiction is in a good generation mix market.
Below Average	Annually with automatic adjustment	• F&PE costs are fully passed through, or utilities have minimal exposure to energy price volatility. • Adjustment is made on an annual basis and is subject to minimal or some regulatory review. • The jurisdiction is in a relatively high power cost market.
Poor	Annually with no automatic adjustment mechanism	• F&PE costs are fully passed through or utilities have minimal exposure to energy price volatility. • Adjustment is made on an annual basis. • F&PE cost deferrals are subject to regulatory review. • The jurisdiction is in a relatively high power cost market.

Consideration 4: Capital and Operating Cost Recoveries

Definition		
In assessing CCR and OCR, DBRS Morningstar focuses on the likelihood of a utility's capex being added to its rate base, along with the timing of such an addition. In addition, DBRS Morningstar focuses on cost-inflation adjustments that could affect the timing of the OCR. In particular, DBRS Morningstar looks at the following factors: (1) the utilization of future test periods for rate decisions, (2) whether the spending is allowed to be added to the rate base during the construction or will only be added when the project is completed, (3) the level of upfront capital spending required without regulatory approval, (4) the degree of regulatory lag and uncertainty with respect to the CCR, (5) whether or not there is a reasonable mechanism to deal with cost overruns, and (6) the degree of volume risk for the recovery of both capital and operating costs.		
Score	**Item**	**Definition**
Excellent	Minimal CCR and OCR lag risk	• Work-in-progress costs can be added to the rate base if capex is significant. • Interim base-rate increases have been frequently authorized. • Future test periods are fully incorporated for rate-case decisions. • Rate cases are typically decided well within one year unless the rate cases are litigated or unusual circumstances occur. • There is a reasonable mechanism to deal with cost overruns. • No volume risk.
Good	Reasonable CCR and OCR lag risk	• Capital costs are added to the rate base after completion of work. • Interim base-rate increases have been authorized from time to time. • Future test periods are at least partially incorporated for rate-case decisions. • Rate cases are typically decided within one year unless the rate cases are litigated or unusual circumstances occur. • There is a reasonable mechanism to deal with cost overruns. • Some volume risk exists but is mitigated by either a high portion of rates being fixed or the use of deferral accounts.
Satisfactory	Modestly elevated CCR and OCR lag risk	• Capex is generally preapproved by the regulator, but there is some modest upfront capital spending before regulatory approval. • Interim base-rate increases have been rarely authorized. • Historical test periods are commonly incorporated for rate-case decisions. • Rate cases are typically decided within one year unless the rate cases are litigated or unusual circumstances occur. • There is a reasonable mechanism to deal with cost overruns. • Some volume risk exists but is mitigated by historically stable throughputs.
Below Average	Below-average CCR and OCR lag risk	• There is significant upfront capital spending before regulatory approval. • Interim base-rate increases have been rarely authorized. • Historical test periods are commonly incorporated for rate-case decisions. • Rate-case decisions typically take more than one year because of frequent court cases and other circumstances. • There are some mechanisms to deal with cost overruns. • Some volume risk exists due to a high portion of rates being variable.
Poor	Significant CCR and OCR lag risk	• Capex is generally not preapproved by the regulator. • Capital costs are added to the rate base after completion of work. • Utilities face significant regulatory lag risk with respect to the CCR and the OCR. • There is no meaningful mechanism to deal with cost overruns. • Rates are fully variable with no fixed components.

Consideration 5: COS Versus IRM

Definition		
In general, under COS, regulated utilities are allowed to recover prudently incurred operating costs and earn a reasonable return on their investment. Under IRM, revenue requirements for the year are based on a COS base year, adjusted for inflation (using the CPI) and subtracting a productivity factor, which is set by the regulator. This forces utilities to maintain their operational efficiency to achieve allowed ROE. DBRS Morningstar views COS as lower risk than IRM. In addition, DBRS Morningstar also considers the length of an IRM period between COS years. DBRS Morningstar's scoring system gives a higher score for a shorter IRM period.		
Score	**Item**	**Definition**
Excellent	COS	• The COS regime allows utilities to recover prudently and reasonably incurred operating costs.
Good	IRM (three years or shorter)	• The IRM regime is a maximum of three years between COS years. • For an IRM period of more than three years, there are reasonable mechanisms in place to mitigate unexpected capital investment and operating costs (i.e., downside protection). In addition, key IRM assumptions, including CPI and productivity factors, are reasonable.
Satisfactory	IRM (four- to five-year framework)	• The IRM period is four to five years.
Below Average	IRM (six- to 10-year framework)	• The IRM period is six to 10 years.
Poor	IRM (10-plus years)	• The IRM period is more than 10 years.

Consideration 6: Political Interference

Definition	
Political interference refers to political risk that could occur within a jurisdiction. Political interference could be in the following forms: (1) influence on the regulator's ability to independently and impartially arrive at a decision, (2) passing legislation to override a decision made by the regulator, and (3) the regulator is elected instead of appointed.	
Score	**Definition**
Excellent	• There is no government influence on the regulatory decision-making process. • There has been no adverse legislation in the regulated utility sector. • The regulator is appointed.
Good	• There is a low degree of government influence on the regulatory decision-making process. • There has been no adverse legislation in the regulated utility sector. • The regulator is appointed.
Satisfactory	• There is a low degree of government influence on the regulatory decision-making process. • There has been no adverse legislation in the regulated utility sector. • The regulator is appointed or elected.
Below Average	• There is a modest degree of government influence on the regulatory decision-making process. • There has been no adverse legislation in the regulated utility sector. • The regulator is appointed or elected.
Poor	• There is a high degree of government influence on the regulatory decision-making process. • There has been some adverse legislation in the regulated utility sector. • The regulator is appointed or elected.

Consideration 7: Stranded Cost Recovery

Definition		
Stranded costs occur when a utility has already incurred costs (F&PE, operating cost, or capital spending) and faces uncertainty as to when it can recover these costs. In some cases, stranded costs are written off if it is certain that these costs cannot be recovered. DBRS Morningstar looks at the following factors: (1) whether stranded costs exist and their magnitude, (2) the likelihood of recovering stranded costs, (3) the frequency and materiality of writedowns, and (4) the time it takes to recover these costs.		
Score	**Item**	**Definition**
Excellent	No stranded cost	• No stranded costs associated with legitimate or reasonable costs incurred by utilities.
Good	Full recovery	• Some stranded costs exist. • Stranded costs are fully recovered in a timely manner. • No historical stranded cost writedowns.
Satisfactory	Occasional writedowns	• Some stranded costs exist. • Stranded costs are recovered but subject to some regulatory lag. • Occasional writedowns.
Below Average	Frequent writedowns	• Some stranded costs exist. • Stranded costs are sometimes recovered. • Frequent writedowns. • Takes considerable time to recover costs.
Poor	Frequent significant writedowns	• Significant stranded costs exist. • Stranded costs are not fully recovered. • Significant writedowns occur. • Significant regulatory lag associated with the recovery.

Consideration 8: Rate Freeze

Definition		
A rate freeze refers to a fixed retail rate that is charged to customers during a period of time (more than two years) set by a regulator. DBRS Morningstar does not typically penalize a utility for rate freezes that are part of an acquisition settlement agreement, as they are temporary in nature and only for a set period. During the rate-freeze period, utilities are exposed to increases in operating and energy costs. The longer the rate-freeze period or the more frequency with which a rate freeze occurs within a jurisdiction, the riskier it is for the utility.		
Score	**Item**	**Definition**
Excellent	Never	• Rates are never frozen.
Good	Potential	• Rates have the potential to be frozen.
Satisfactory	Occasional	• Rates are occasionally frozen. • The frozen period is fewer than three years.
Below Average	Frequently	• Rates are frequently frozen. • The frozen period is fewer than three years.
Poor	Rate freeze	• Rates are currently frozen. • The frozen period is three years and longer.

Appendix 2: Independent System Operators

Independent System Operators (ISO) are typically not-for-profit organizations[2] responsible for managing the electricity market within a jurisdiction. The role of an ISO typically includes (1) balancing the demand and supply of electricity, (2) dispatching power from facility owners, and (3) planning for the system's future transmission and generation needs.

DBRS Morningstar considers ISOs to have two important similar characteristics as a regulated utility: (1) ISOs provide an essential service and (2) operating costs of an ISO are recovered through tariffs approved by a regulator and charged to participants in the electricity market. Unlike a regulated utility, however, the business of an ISO is not capital intensive and, as they are not-for-profit organizations, operate on a cost-recovery basis. As such, when assessing the FRA of an ISO, DBRS Morningstar does not focus on the primary FRA metrics.

DBRS Morningstar also takes into consideration the independence of the ISO from governmental and political interference. If DBRS Morningstar determines an ISO receives support from the government (i.e., financial support or major legislative directives), DBRS Morningstar will apply the *DBRS Morningstar Criteria: Guarantees and Other Forms of Support*, and the ratings of the ISO could then be uplifted to, or capped by, the ratings of the corresponding government.

When evaluating an ISO, DBRS Morningstar assesses, among other criteria, the major factors outlined below.

2. This appendix only applies to not-for-profit ISOs.

BRA Factors

Regulation/Legislation – In assessing the regulatory and legislative framework for an ISO, DBRS Morningstar focuses on the ability of the ISO to pass on all costs to market participants and the timeliness of the recovery. To determine the BRA for regulation/legislation, DBRS Morningstar reviews five considerations (see Appendix 1) to assess the regulatory/legislative framework in which the ISO conducts its business. The five considerations include the following: (1) CCR and OCR, (2) COS versus IRM, (3) political interference, (4) stranded cost recovery, and (5) rate freeze.

AA	A	BBB	BB/B
• Highly supportive regulatory/legislative framework with the majority of relevant key regulatory risk factors in Appendix 1 considered to be "excellent."	• Supportive regulatory/legislative framework with the majority of relevant key regulatory risk factors in Appendix 1 considered to be "good" or better.	• Reasonable regulatory/legislative framework with the majority of relevant key regulatory risk factors in Appendix 1 considered to be "satisfactory" or better.	• Poor regulatory/legislative framework with the majority of relevant key regulatory risk factors in Appendix 1 considered to be "below average" and/or "poor."

Franchise and Customer Mix – As the operating costs of an ISO are recovered from market participants, DBRS Morningstar assesses the economic strength of an ISO's jurisdiction as well as the number of customers in order to determine the likelihood of the ISO's being able to recover its costs. Jurisdictions with a higher proportion of residential and commercial customers also possess the ability to better weather economic downturns than those with a greater number of industrial customers, which are more inclined to seek lower-cost or more reliable suppliers and are prone to economic cyclicality.

AA	A	BBB	BB/B
• Economically vibrant service territory, with income that is significantly above the national average. • ISO has a significant customer base (i.e., large metropolitan area or province/state). • Customer and load mix predominantly residential and commercial.	• Economically strong service territory, with income above the national average. • ISO has a sizable customer base. • Customer and load mix heavily weighted toward residential and commercial.	• Economically stagnant service territory, with income that is in line with the national average. • ISO has a reasonably sized customer base. • Customer and load mix a balance of residential and commercial versus industrial.	• Economically weak service territory, with income that is below the national average. • ISO has a shrinking customer base. • Customer and load mix weighted toward cyclical industrials.

FRA Factors

In assessing the FRA of an ISO, DBRS Morningstar focuses on the liquidity in place for the ISO's day-to-day operations. DBRS Morningstar also reviews the annual surplus and deficit of an ISO to determine if it is consistently under-collecting from market participants, as (1) costs are then not fully recovered from market participants and (2) the accumulated deficit may become stranded and will have to be absorbed by the ISO.

Appendix 3: FRA Ratio Definitions and Common Adjustments for the Regulated Electric, Natural Gas, and Water Utilities Industry

The primary FRA metrics cited in the table above are defined below, with a discussion of common adjustments that are made for the regulated electric, natural gas, and water utilities industry. For related definitions and a broader discussion of the common adjustments made to the accounting data to permit ratio comparability between issuers, please refer to *DBRS Morningstar Criteria: Common Adjustments for Calculating Financial Ratios*.

CASH FLOW-TO-DEBT = CASH FLOW FROM OPERATIONS/TOTAL DEBT

Cash flow from operations = core net income + depreciation + amortization + deferred taxes + other noncash items from income statement (before changes in noncash working capital items).

Total debt = short-term debt + long-term debt + hybrid debt portion + capital leases.

DEBT-TO-CAPITAL = TOTAL DEBT/TOTAL CAPITAL

Total capital = total debt (as defined above) + total preferred equity + total common equity + minority interest.

EBIT-TO-INTEREST = EBIT/GROSS INTEREST EXPENSE

EBIT = revenue – cost of goods sold – selling, general, and administrative expenses – depreciation – amortization.

Gross interest expense = all interest expense + debt hybrid interest expenses + capitalized interest.

DBRS Morningstar may adjust certain inputs used in the calculation of the primary FRAs in order to better assess such metrics relative to an issuer's peers. In the regulated electric, natural gas, and water utilities industry, DBRS Morningstar typically adjusts debt and interest expense amounts for operating leases, notwithstanding that these amounts are generally not material. Additionally, in rare cases, DBRS Morningstar also considers net debt amounts in the case of large companies with a long history of maintaining significant cash or equivalents on the balance sheet.

About DBRS Morningstar

DBRS Morningstar is a full-service global credit ratings business with approximately 700 employees around the world. We're a market leader in Canada, and in multiple asset classes across the U.S. and Europe.

We rate more than 3,000 issuers and nearly 60,000 securities worldwide, providing independent credit ratings for financial institutions, corporate and sovereign entities, and structured finance products and instruments. Market innovators choose to work with us because of our agility, transparency, and tech-forward approach.

DBRS Morningstar is empowering investor success as the go-to source for independent credit ratings. And we are bringing transparency, responsiveness, and leading-edge technology to the industry.

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