

Rating Criteria for Power Distribution Utilities

February 2018

Criteria contacts

Pawan Agrawal

Chief Analytical Officer – CRISIL Ratings
Email: pawan.agrawal@crisil.com

Ramesh Karunakaran

Director – Rating Criteria and Product Development
Email: ramesh.karunakaran@crisil.com

Somasekhar Vemuri

Senior Director – Rating Criteria and Product Development
Email: somasekhar.vemuri@crisil.com

Manish Kumar Gupta

Director - CRISIL Ratings
Email: manish.gupta@crisil.com

In case of any feedback or queries, you may write to us at Criteria.feedback@crisil.com

Executive summary

Power distribution licensees service customers in a geographically demarcated area. Typically, a distribution licensee purchases power in bulk from a transmission licensee, and supplies the same to a largely retail customer base within its service area. Traditionally, a number of power distribution licensees have been state-owned, while some urban centers do have privately-owned entities.

The credit rating framework for distribution licensees evaluates players on their business, financial and management risks. While the management risk is evaluated as in the case of other corporate entities, the main components of business risk for power distribution utilities are:

- Industry risk
- Regulatory risk
- Market position and service area economics
- Operating efficiency parameters and track record

The financial risk is evaluated critically looking at the capital structure, ability to raise capital, debt coverage metrics and financial flexibility.

Scope

While the broader criteria of manufacturing companies¹ applies to all the firms in the manufacturing sector, this note² brings out the parameters considered by CRISIL in credit ratings, which are specific to power distribution companies.

Business Risk

Industry risk

The industry risk assessment is driven by an appreciation of the overall demand-supply scenario for power, and of the overall policy environment within which entities operate. In CRISIL's opinion, a distribution licensee's ability to provide quality power at a competitive rate is a critical rating determinant. At an industry level, this would eventually shift the balance towards better-performing distribution licensees, who generate a higher quantum of cash from operations, and are better placed to service their obligations towards generation and transmission licensees.

¹ The detailed criteria is present on the CRISIL website under the 'Criteria and Methodology' section - 'Rating Criteria for Manufacturing and Services Sector Companies' and 'CRISIL's Approach to Financial Ratios'

² For accessing previous published document on "Rating Criteria for Power distribution utilities", Kindly follow below mentioned link: https://www.crisil.com/content/dam/crisil/criteria_methodology/utilities/archive/CRISIL-Ratings-criteria-power-distribution-utilities_2007.pdf

Regulatory risk

Distribution licensees are regulated by the State Electricity Regulatory Commissions (SERCs). These SERCs ensure independent and objective criteria for tariff determination, based on adequate recovery of expense to the distribution licensee, subject to its achieving the requisite performance benchmark. CRISIL views this process of tariff setting positively as it is free of external discretions.

Reform legislations also stipulate that each licensee should file annual revenue requirements with an option to file a separate tariff petition, in case a tariff revision is warranted. Although regulations provide for most costs to be passed through, along with reasonable returns on the equity component, regulatory risk emanates from the fact that the SERCs may impose stricter performance standards, or disallow certain cost components stemming from inefficiencies of distribution licensees. SERCs thus, essentially balance out customer interests with what is legitimately due to the distribution licensee.

If information used to support the distribution licensees' rationale for tariff revision is insufficient or under doubt, SERCs have also been known to take a tough stance in not allowing the tariff revisions sought by the licensees. Nature and scope of tariff orders already passed by an SERC are a useful index of its regulatory stance.

Having said that, timeliness and accuracy of filing tariff petitions by discoms is critical. In the absence of which, discoms would report losses as tariffs are not retrospective in nature. Also, electricity is politically sensitive, hence many a time, SERCs defer tariff hikes (at times over multiple years)

Market position and service area economics

Availability of widespread distribution infrastructure and retail reach of such infrastructure are key discriminators of a licensee's market position. Distribution licensees have traditionally operated in exclusive zones though legislation now permits non-exclusive licensees to operate in the same geographical area. Although the mix of customers - residential, commercial, industrial and agricultural - within a service area and their purchasing power, are key considerations, service quality and reliability offered by a distribution licensee are also important determinants of sustainability of such a relationship. While the market may be willing to offer a price premium for a more responsive and reliable licensee, the latter has to maintain this value proposition for the premium to be sustainable.

Growth of a lower-paying customer segment and shifts in better-paying customer segments are other trends that would be appropriately factored in under this parameter. A service area with a higher base of industrial customers registering good growth rates, is seen as a positive, as long as such customer concentration is within acceptable limits. Existence of a depreciated distribution infrastructure within a densely populated urban service area is a key entry barrier and could work to the benefit of incumbent licensees.

Operating efficiency parameters and track record

Given their direct customer interface, distribution licensees have to develop necessary processes, credit guidelines, billing systems and collection mechanisms to ensure that the business is run efficiently. Operating efficiency will ultimately impact the metering, billing and collection (MBC) cycle, which could affect cash flows.

Another parameter covered under operating efficiency is the actual cost of power (whether generated or purchased externally), which, within a given tariff structure, could be the most significant determinant of profitability. Therefore, a distribution licensees' ability to procure sufficient quantum of power, at minimum prices, for supply purposes is a critical rating determinant. This assumes even greater significance in the open access regime where a customer

can choose to buy power from different sources. A distribution licensee with a high power procurement cost would risk losing its customers to more efficient players.

Further, CRISIL views long-term power purchase agreements with an efficient generating entity as a positive. Absence of such agreement can constrain an entity's ability to ensure uninterrupted supply of power to customers, which can have an adverse impact on business prospects.

Transmission and distribution (T&D) losses within the service area are either technical or commercial in nature. Industry benchmarks are available for permissible technical losses at lower voltages. Such benchmarks are a function of voltage stability, and reflect the efforts to minimize distribution transformer losses via regular maintenance. Commercial losses, on the other hand, include leakage of revenue due to non-paying customers or outright theft. Consistent efforts are required to track energy flows in the system to ensure that all the energy being input into the T&D system is also being billed after accounting for system losses.

Moreover, power tariff advised by the regulator assumes specific improvement in performance indicators and hence, a firm's ability to achieve the same is critical for its profitability. Besides T&D and commercial losses, manpower productivity parameters and other administrative expenses will also need to be closely tracked and assessed in relation to regulatory forbearance on these expense levels.

Financial Risk

Existing financial position

A licensee's historical operational results are captured in its current capital structure and profitability parameters. While the rating itself is a forward-looking assessment of the licensee's ability to service its debt, the starting point would be the existing financial statements. The licensee is assessed based on its current debt-servicing ability, which is determined by the debt load on the balance sheet vis-à-vis the cash flows. Delay in preparation of financial statements, which is a generally observed phenomenon, increases information availability risk.

While a distribution licensee's business is inherently more amenable to a larger debt load due to the pass-through nature of cost, this debt load has to be viewed in relation to the licensee's performance capabilities. In a benign regulatory environment, performance parameters may not be very important, but if the regulatory stance is adverse to the licensee's business, the entire cost may not be entirely recovered through tariff revisions. The impact on the rating is determined by materiality of such cost components and frequency of such incidences of non-recovery.

Future financial position

The future assessment is based on material aspects in the business environment, including the regulatory stance, changing market conditions, differential growth rates of various customer segments, tariff levels for various segments and the distribution licensee's growth orientation, all of which translate into financial projections underlying the licensee's future financial performance. Debt service coverage and cash flow coverage of debt are important financial parameters considered in any such assessment of future debt servicing ability.

Cash flow adequacy and financial flexibility

The company's parentage and track record in raising funds from various sources such as banks, capital markets, reflect its financial flexibility. Given that the loss funding is no longer allowed under Ujwal DISCOM Assurance

Yojana (UDAY), financial flexibility of a discom is also dependent on health of the respective state governments. In a steady state operation, a distribution licensee is expected to have minimal capital requirements, essentially to accommodate its maintenance capital expenditure requirements. Capital outlays become substantial when the licensee embarks on acquisitions or seeks to significantly upgrade its physical infrastructure.

A company's ability to raise the required capital would thus have a significant bearing on its rating. A significant amount of cash generation from a demonstrably well-run distribution licensee operation would considerably enhance the company's ability to raise capital (debt and equity) from the markets.

Management Risk

For the analysis of the management risk of power distribution utility companies, CRISIL follows the standard criteria used for all manufacturing companies. This criteria is presented in detail in our publication, 'Rating Criteria for Manufacturing and Services Sector Companies'.

Conclusion

A well-run distribution licensee constantly generates cash, which improves its liquidity and overall financial profile. But the existence of essential systems and a specific assessment on key performance parameters, which will determine the ability to consistently generate cash in future, are critical determinants of the credit rating. Extent of regulatory oversight is a positive feature, though a regulatory directive may also be adverse to a distribution licensee in case of non-performance or inadequate performance.

About CRISIL Limited

CRISIL is an agile and innovative, global analytics company driven by its mission of making markets function better. We are India's foremost provider of ratings, data, research, analytics and solutions. A strong track record of growth, culture of innovation and global footprint sets us apart. We have delivered independent opinions, actionable insights, and efficient solutions to over 100,000 customers.

We are majority owned by S&P Global Inc., a leading provider of transparent and independent ratings, benchmarks, analytics and data to the capital and commodity markets worldwide.

About CRISIL Ratings

CRISIL Ratings is part of CRISIL Limited ("CRISIL"). We pioneered the concept of credit rating in India in 1987. CRISIL is registered in India as a credit rating agency with the Securities and Exchange Board of India ("SEBI"). With a tradition of independence, analytical rigour and innovation, CRISIL sets the standards in the credit rating business. We rate the entire range of debt instruments, such as, bank loans, certificates of deposit, commercial paper, non-convertible / convertible / partially convertible bonds and debentures, perpetual bonds, bank hybrid capital instruments, asset-backed and mortgage-backed securities, partial guarantees and other structured debt instruments. We have rated over 24,500 large and mid-scale corporates and financial institutions. CRISIL has also instituted several innovations in India in the rating business, including rating municipal bonds, partially guaranteed instruments and microfinance institutions. We also pioneered a globally unique rating service for Micro, Small and Medium Enterprises (MSMEs) and significantly extended the accessibility to rating services to a wider market. Over 1,10,000 MSMEs have been rated by us.

CRISIL Privacy Notice

CRISIL respects your privacy. We use your contact information, such as your name, address, and email id, to fulfil your request and service your account and to provide you with additional information from CRISIL and other parts of S&P Global Inc. and its subsidiaries (collectively, the "Company") you may find of interest.

For further information, or to let us know your preferences with respect to receiving marketing materials, please visit www.crisil.com/privacy. You can view the Company's Customer Privacy at <https://www.spglobal.com/privacy>

Last updated: April 2016

Argentina | China | Hong Kong | **India** | Poland | Singapore | UK | USA

CRISIL Limited: CRISIL House, Central Avenue, Hiranandani Business Park, Powai, Mumbai – 400076. India

Phone: + 91 22 3342 3000 | Fax: + 91 22 3342 3001 | www.crisil.com

[in/company/crisil](https://www.linkedin.com/company/crisil) | [t@CRISILlimited](https://twitter.com/CRISILlimited) | [f/CRISILlimited](https://www.facebook.com/CRISILlimited) | [yt/user/CRISILlimited](https://www.youtube.com/user/CRISILlimited)

CRISIL
An S&P Global Company