Rating Methodology - Private Power Producers

[In supersession of "Rating Methodology - Private Power Producers" issued in June 2017]

The Private / Independent Power Producers have continued to remain an important component of power generation capacity in India. As per CEA, the total installed capacity of electricity is 343.9 GW with 155.5 GW (i.e 45%) of the same is being contributed by private power producers as of June 30, 2018. Power projects are capital intensive in nature and for funding them, recourse to publicly issued debt would be necessary.

CARE Ratings has developed a rating methodology for debt issues of Independent Power Producers (IPPs). The rating procedure is designed to facilitate appropriate credit risk assessment, keeping in view the characteristics of the Indian power sector. CARE's rating looks at a time horizon over the life of the debt instrument being rated and covers the following areas while rating IPPs.

1. Overview of the project

CARE Ratings examines the broad parameters of the project based on the detailed project report submitted by the client. The major areas covered are:

- Promoters
- The nature of power project -hydel, thermal, nuclear or non-conventional - and its technical characteristics.
- Generation capacity.
- Location of the project.
- Economic considerations viz. cost efficiency, return on capital etc.
- Infrastructure requirements for operations and the extent to which infrastructure has to be developed by the power producer.
- Fuel/ water requirement and sources & arrangements to procure the same
- Technical arrangements and collaborators.
- Implementation schedule.
- Selling and distribution arrangements.

2. Evaluation of Power Purchase Agreement

Power Purchase Agreement (PPA) is a crucial document outlining the rights and responsibilities of the power producer and evaluation of the same forms a critical part of the rating exercise. CARE Ratings looks at the tenor of the contract to assess the horizon of revenue visibility. Long-term PPAs may be executed on cost-plus basis or may be awarded on the basis of competitively bid tariff. Long term PPAs carry low sales risk with pre-agreed pricing and generally leading to lesser volatility in revenues. On the other hand, short term contracts are exposed to the vagaries of price fluctuation as well as quantum of power off-taken in merchant sales.

CARE Ratings also evaluates the terms and conditions to be met before commissioning of the project, clearances and agreements with different agencies and consequences of non-fulfilment of stipulated conditions. The funding pattern, construction schedule, penalties for late completion, achievement of projected capacity and the role of the operating company with regard to plant operation and fuel arrangements are studied. The tariff rates are critically analysed to determine their adequacy to ensure the profitability and debt servicing capability of the IPP at the minimum performance level and at higher levels of performance.

3. Fuel Supply Risk

Around 60% of the total generating capacity in India is based on coal/gas. These plants face the challenges of mining output and logistic issues which makes fuel supply a significant risk. Hence assessment of the same has to be rigorous. CARE Ratings evaluates the adequacy of fuel supply so as to declare the capacity at normative levels. CARE Ratings also analyses the extent of tie-up of the fuel requirement through long term arrangements, tenor of the arrangement, the level of current despatch from the vendor, proximity of the plant to the mines, mode of transport and associated costs. The fuel cost pass through risk is assessed by analysing the escalation in energy charge quoted in the Power Purchase Agreement. A plant, having full fuel cost pass through is perceived to be less risky than one which has partial/no cost pass through.

4. Capital Structure of Power Project

The ability to meet debt service obligations in time depends critically on the financing plan of the project. CARE studies the technical aspects of the project, financial structure, the funding profile in terms of maturity, proportion of foreign currency loans & rupee loans and the hedging strategies to be used for covering exchange risk. Any covenants in the debt documents or PPA, which can impair debt servicing capability, are also evaluated critically.

5. Management Evaluation

The evaluation of quality of management is an essential part of all rating assessments. CARE Ratings evaluates the management from different perspectives like financial capabilities, experience in the industry, track record in implementing and operating large projects and availability of technical manpower.

6. Project Implementation Risk

Project implementation risks assume significance in a power project due to the long gestation period and large investments involved in such projects. CARE Ratings analyses the following factors in this regard:

- Extent of tie-up for finance.
- Capability of the IPP to raise additional resources in case of cost overruns.
- Contractor capability, based on technical and financial strengths as well as past experience
- Political risks.
- Environmental issues.
- Cushion provided in the financing plan and construction schedule for possible delays.
- Appointment of reputed contractors at fixed price and date contract and selection of best possible equipment increases the chances of successful and timely implementation of a project.
- Provision to levy liquidated damages in case of delay and under-performance of project contractor.

During project implementation, CARE Ratings would monitor the progress vis-a-vis the initial cost and time estimates to determine the effect of variations rom schedule on the ability to meet debt servicing obligations.

7. Credit Assessment of Power Purchaser

Revenue generation for an IPP depends on the financial strength of the buyer(s) of power. The assessment of the power purchaser is, therefore, an integral part of the rating of an IPP. While assessing the counterparties (which largely are state discoms) CARE Ratings evaluates trends in cost coverage, level of AT&C losses, timeliness of receipt of subsidies from State Govt., timely revision in retail tariff etc. Also various credit support mechanisms offered by off taker such as revolving letters of credit, escrow accounts, dedicated revenue allocations, guarantees and counter-guarantees would normally improve the quality of the issue and its rating.

8. Operating Risk

Operating risk covers the ability of the project to achieve the performance as envisaged. The following factors are considered in this regard:

- Technology
- O&M Arrangements
- Fuel Supply arrangement- adequacy, price, logistics , flexibility to use alternative fuel etc
- Power evacuation arrangement
- Operational metrics like auxiliary consumption, station heat rate etc affects variable cost. Plants having lower variable and fixed cost have competitive edge over its counterparts which is considered credit positive.
- Plant availability (a function of the factors mentioned above) which increases the fixed cost recovery and thus cash accruals of the plant.
- Regulatory risk – extent of under recovery of cost over the time may impact cash accrual and realization of receivables which may affect the ability debt serviceability.

9. Financial Analysis of Projected Operations

An in-depth analysis of the projected operations is undertaken to get a clear insights on the IPP's ability to service debt. The analysis would involve critical examination of the underlying assumptions, location of possible stress points and the extent of flexibility available to tide over difficulties. CARE Ratings evaluates the strength of key assumptions and trends in the projected free cash flow to arrive at a base case cover against the scheduled debt payment. It also sensitizes the projected free cash flow through stress scenarios to assess the extent of buffer available for debt coverage.

The financial analysis takes into account the following factors:

- Financial Structure and Leverage;
- Earning Capacity;
- Cash Flow Adequacy;
- Debt Service Coverage; and
- Collection efficiency
- Financial Flexibility.

CARE Ratings analyses each of the above factors and their linkages to arrive at the overall assessment of credit quality. Peer comparisons are carried out as an integral part of the financial analysis.

Mitigation of credit risk due to any credit enhancement provided is carefully evaluated before assigning the final rating.

10. Force Majeure Risk

The impact of force majeure event is usually higher for infrastructure projects including power projects given the single asset nature of the operations. This may be mitigated to a large extent through insurance or adequate provisions in contractual agreements. In case of insurance cover, the extent of coverage, quantum of admissible claim and timely receipt of claim proceeds is evaluated.

11. Structural Risk

CARE Ratings evaluates the structural features and covenants of the instrument being rated which may provide cushion to the lenders. The stipulation and compliance of maintenance of designated accounts (viz debt service reserve account to tide temporary cash flow mismatch, escrow accounts , TRA for maintaining priority in payment etc), is seen positively in credit analysis.

Conclusion

The rating outcome is ultimately an assessment of the fundamentals and the probabilities of change in the fundamentals. CARE Ratings analyses each of the above factors and their linkages to arrive at the overall assessment of credit quality, by taking into account the industry scenario. While the methodology encompasses comprehensive technical, financial, commercial, economic and management analysis, credit rating is an overall assessment of all aspects of the issuer.

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