

# Rating Methodology for Private Power Producers

The ongoing liberalisation process has made private investment in the power sector attractive and such investment is expected to go up substantially in the near future. Power projects are capital intensive and for funding them, recourse to publicly issued debt would be necessary. CARE has developed a rating methodology for debt issues of Power Producers (PPs). 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 PPs.

## 1. Overview of the project

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

- The nature of power project - hydel, thermal nuclear or non-conventional - and its technical characteristics.
- Generation capacity.
- Promoters.
- Location of the project.
- Economic considerations.
- Infrastructure requirements for operations and the extent to which infrastructure has to be developed by the power producer.
- Fuel requirement and sources thereof.
- 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 looks at the minimum off-take of power committed by the purchaser and the incentives and penalties based on the cut-off Plant Load Factor (PLF) to be achieved. The demand-supply situation in the area to be serviced is assessed. CARE also evaluates the terms and conditions to be met before commissioning of the project, clearances and agreements with different agencies and consequences of non-fulfillment 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 PP at the minimum performance level and at higher levels of performance.

## **3. 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.

## **4. Management Evaluation**

CARE 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.

## **5. 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 analyses the following factors in this regard:

- Extent of tie-up for finance.

- Capability of the PP 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 and selection of best possible equipment increases the chances of successful and timely implementation of a project.

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

## **6. Credit Assessment of Power Purchaser**

Revenue generation for a PP depends on the financial strength of the buyer(s) of power and often determines the maximum rating a PP can obtain. The assessment of the power purchaser is, therefore, an integral part of the rating of a PP. Various credit support mechanisms 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.

## **7. 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
- Fuel supply arrangements:
  - dedicated fuel linkages to the power plant;
  - proximity of the plant to fuel sources;
  - reliability of the transportation system to carry fuel from the source to the plant;
  - flexibility of the plant to use alternative fuels; and
  - in case of hydro electric power plants, the variability of rainfall in the catchment area and its impact on capacity utilisation.
- O&M Arrangements

- Fuel cost risk - this arises when the PP is unable to pass on the rising cost of fuel to the purchaser, especially in case of fixed tariff PPAs.

## **8. Financial Analysis of Projected Operations**

An in-depth analysis of the projected operations is undertaken to get a clear insights on the PP'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. The financial analysis takes into account the following factors:

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

CARE 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.

## **Conclusion**

The rating outcome is ultimately an assessment of the fundamentals and the probabilities of change in the fundamentals. CARE analyses each of the above factors and their linkages to arrive at the overall assessment of credit quality, by taking into account the industry's cyclicality.

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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