# Report of the Comptroller and Auditor General of India

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Loans to Independent Power Producers by Rural Electrification Corporation Limited and Power Finance Corporation Limited

for the year ended 31 March 2016

Umion Government (Commercial)
Ministry of Power
Report No. 34 of 2017
(Compliance Audit)

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### **PREFACE**

This Report of the Comptroller and Auditor General of India has been prepared under the provisions of Section 19-A of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971, as amended in 1984. The audit has been carried out in conformity with the Auditing Standards issued by the Comptroller and Auditor General of India.

The Report contains results of audit of 'Loans to Independent Power Producers by Rural Electrification Corporation Limited and Power Finance Corporation Limited'. Rural Electrification Corporation Limited (REC) and Power Finance Corporation Limited (PFC) disbursed loans of ₹47706.88 crore to Independent Power Producers (IPPs) during 2013-14 to 2015-16. During the same period, non-performing assets (NPAs) in respect of such IPPs increased from 2.32 per cent to 13.90 per cent (REC) and 4.28 per cent to 19.86 per cent (PFC). Given its significance, an audit of sanction and disbursement of loans to IPPs by REC and PFC was taken up.

Audit wishes to acknowledge the cooperation extended by REC, PFC and Ministry of Power, Government of India at each stage of the audit process.

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### **EXECUTIVE SUMMARY**

Participation of private sector in power generation grew significantly with the enactment of the Electricity Act, 2003. Rural Electrification Corporation Limited (REC) and Power Finance Corporation Limited (PFC) also participated in these projects as lenders. Over 2013-14 to 2015-16, REC and PFC disbursed loans amounting to ₹47706.88 crore to Independent Power Producers (IPPs).

A significant proportion of loans extended to IPPs became stressed/turned Non-Performing Assets (NPAs). In this context, Audit reviewed the procedures adopted by REC and PFC for appraisal, sanction and disbursement of loans to IPPs during 2013-14 to 2015-16. The audit findings are summarised below:

REC and PFC did not conduct appropriate due diligence during credit appraisal and in the process assumed higher risks on the loan accounts. Both REC and PFC deviated from their internal guidelines and also did not conform to the Reserve Bank of India guidelines in this regard. The experience and ability of the promoters to develop the projects was not assessed objectively. The experience of project promoters were assessed based on individual judgement and promoters who did not have relevant sector experience were found eligible for loans. Audit noticed that many of projects, where the promoter had poor experience, were not completed within schedule.

#### (Paragraph 2.1)

The financial capacity of the promoter to bring in equity for the project in the face of competing demands was not adequately assessed. In the sample selected by Audit, nine projects had to be restructured multiple times which increased the interest during construction by ₹13312.78 crore in six loan cases and resulted in NPAs of ₹3038.44 crore in three loan cases.

#### (Paragraph 2.2)

To ensure viability of projects, the internal guidelines of REC and PFC provided that the debt service coverage ratio (DSCR) should be a minimum of 1, average DSCR should be more than 1.2 and the internal rate of return(IRR) should be more than internal reference rate of interest of REC and PFC for sanction of initial loan. No guidance was provided by REC and PFC in its internal guidelines regarding adoption of tariff rates for assessment of viability of projects for which Power Purchase Agreement had not been signed. Audit observed that REC and PFC estimated a higher tariff at the time of appraisal of loan proposals which resulted in sanction of loans worth ₹8662 crore in six cases. In all these cases, the levelised generation cost was higher than the actual levelised tariff, and thus the viability of the project was doubtful, *ab-initio*.

(Paragraph 2.3)

The guidelines of REC and PFC do not envisage a situation where the contractors engaged by the promoter for implementation of a project are related parties of the promoters. Audit noticed that in seven loan cases, the contractor and the promoter were same/ related entities. In these cases, the loan sanctioned by REC and PFC to the promoter for execution of the project remained with the promoter group and the actual stake of the promoter in implementing the project was difficult to assess. It was also noticed that the credit worthiness of the contractors and their ability to fulfil contractual obligations was not being appraised by REC and PFC.

#### (Paragraph 2.4)

As per the Common Loan Agreement (CLA), loan funds were to be disbursed after fulfilling the pre-disbursement conditions mentioned in the loan agreements. These conditions were incorporated in the loan agreements in order to mitigate the risks perceived at the time of detailed appraisal of the borrowers regarding their ability to bring in required equity funds and for recovery of loan within the prescribed time. Audit, however, observed that the pre-disbursements conditions were relaxed by REC and PFC from time to time in five loan cases. After the first disbursement, subsequent disbursements were often made to save the funds already disbursed, further relaxing the conditions and extending the timelines.

#### (Paragraph 3.1.1 to 3.1.5)

CLA provided for charging of additional interest in case of non-compliance of any of its conditions or conditions set in other financing documents related to the sanction of loans. Audit noticed that REC short recovered additional interest of ₹169.75 crore from four borrowers.

#### (Paragraph 3.1.6)

The loan for a project is sanctioned based on the project financials, including, *inter alia*, the proportion of interest during construction (IDC) in the project cost. Audit noticed that during disbursement of loans amounting to ₹3294.35 crore to M/s Lanco Babandh Power Project, M/s Lanco Vidharbha Thermal Power Project and M/s Lanco Amarkantak Power Project, REC adjusted ₹496.02 crore towards IDC beyond the IDC approved at the time of loan sanction. With these adjustments, the loan account remained 'standard' though no repayment was made by the borrower as per the loan servicing schedule. Had the interest not been adjusted in this manner, these loan accounts would have become NPA in 2013 itself. Audit also noticed such adjustment of IDC after a project was commissioned, which violated the internal guidelines of REC.

#### (Paragraph 3.2.1 to 3.2.4)

As per RBI guidelines (July 2013), financing agencies should not depend entirely on certificates issued by Chartered Accountants but strengthen their internal controls and credit risk management system to enhance the quality of their loan portfolio. However, no policy in REC and PFC was in place to ensure end utilization of funds by the borrower

and both the Companies were solely dependent on Auditors Certificate regarding end use of the funds. Audit noticed siphoning/diversion of ₹2457.60 crore by the borrowers/promoters in the sample reviewed.

(Paragraph 3.5)

RBI guidelines provide that projects should be financially viable at the time of restructuring of loans. For assessing the financial viability of projects during re-structuring, it is to be seen that the levelised tariff is higher than levelised cost of generation and that DSCR and IRR are adequate. Audit noticed that additional loans were sanctioned to seven projects by REC and PFC though these projects were not financially viable at the time of restructuring the loans.

(Paragraph 4.1)

As per the prudential norms of REC and PFC, the promoters/ borrowers should not be in default of servicing existing loans with any financial institution (including REC and PFC) and the core promoter should not have loss/ cash loss/ accumulated loss in its financial statements during the past three years, at the time of restructuring a loan. Apart from this, as per RBI guidelines, the promoter should bring in 100 per cent equity for financing the cost overrun upfront. Audit, however, noticed that REC and PFC sanctioned additional loans for meeting cost overrun in number of cases by relaxing these conditions.

(Paragraph 4.2 to 4.4)

#### **Audit Recommendations:**

- The process of appraisal of loan proposals, their sanction and disbursement may be strengthened. The existing appraisal norms may be revisited to design objective guidelines for assessing financial and technical capabilities of the promoters.
- Compliance with internal guidelines and RBI norms may be ensured at every stage of the loan appraisal, sanction and disbursement.
- Monitoring mechanism may be strengthened to ensure that loans disbursed are used for the specific purpose for which they have been sanctioned and incidence of siphoning/diversion of loan funds are eliminated.
- Particular vigilance is warranted in cases where the promoter or its group companies execute the project as the principal contractor. In such cases, it would need to be ensured that there is no over-pricing and that the money advanced to contractors is actually put to use on execution of the project and not re-designated as project equity.

- Independent verification of data submitted by promoters to ensure its accuracy
  may need to be considered. Information available from independent credit rating
  agencies may also be considered to evaluate the financial capability of the
  promoter/borrower in a realistic manner.
- Cost overrun of the projects vis-à-vis their viability needs to be monitored closely.
   Cost overrun may be allowed only in eligible projects, in compliance with the relevant internal guidelines/RBI norms.

### Chapter-I INTRODUCTION

#### 1.1 Introduction

Rural Electrification Corporation Limited (REC) was incorporated on 25 July 1969 for financing power generation and electrification schemes. REC was declared a Public Financial Institution in 1992 and was registered with Reserve Bank of India (RBI) as a Non-Banking Financial Company (NBFC) in February 1998. REC was accorded 'Mini Ratna' status in 2002 and 'Navratna' status in 2008. RBI classified REC as an Infrastructure Finance Company on 17 September 2010.

Power Finance Corporation Limited (PFC) was incorporated on 16 July 1986 as a dedicated Financial Institution (FI) for the power sector. PFC was declared a Public Financial Institution in 1990 and was registered with RBI as a NBFC in February 1998. PFC was accorded 'Mini Ratna' status in 1998 and 'Navratna' status in 2007. RBI classified PFC as an Infrastructure Finance Company on 28 July 2010.

#### 1.2 Financial and operational highlights

Summary of financial highlights of REC and PFC during the last three years (2013-14 to 2015-16) are at **Table 1.1**.

Table 1.1: Financial highlights of REC and PFC from 2013-14 to 2015-16 (₹ in crore)

| Doutlanland             | 2013-    | -14      | 2014     | l-15     | 2015-16  |          |  |
|-------------------------|----------|----------|----------|----------|----------|----------|--|
| Particulars             | REC      | PFC      | REC      | PFC      | REC      | PFC      |  |
| Authorized Capital      | 1200.00  | 2000.00  | 1200.00  | 2000.00  | 1200.00  | 2000.00  |  |
| Revenue from operations | 17120.80 | 21322.50 | 20388.05 | 24862.37 | 23756.28 | 27473.65 |  |
| Profit Before Tax       | 6531.12  | 7558.31  | 7427.04  | 8378.23  | 8045.21  | 9060.66  |  |
| Profit After Tax        | 4683.70  | 5417.75  | 5259.87  | 5959.33  | 5627.66  | 6113.48  |  |

Operational highlights during last three years (2013-14 to 2015-16) are at **Table 1.2**.

Table 1.2: Operational highlights of REC and PFC from 2013-14 to 2015-16 (₹ in crore)

| Year           | 2013-14            |                   | 2014               | l-15              | 2015-16            |                   |  |
|----------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--|
| Category       | Loan<br>Sanctioned | Loan<br>Disbursed | Loan<br>Sanctioned | Loan<br>Disbursed | Loan<br>Sanctioned | Loan<br>Disbursed |  |
| REC            |                    |                   |                    |                   |                    |                   |  |
| Private Sector | 7868.59            | 6412.70           | 7348.42            | 8320.98           | 2731.13            | 5298.20           |  |
| Others         | 62870.88           | 23115.81          | 53525.03           | 29701.63          | 62739.97           | 36807.64          |  |
| Total          | 70739.47           | 29528.51          | 60873.45           | 38022.61          | 65471.10           | 42105.84          |  |
| PFC            |                    |                   |                    |                   |                    |                   |  |
| Private Sector | 13010.00           | 11259.00          | 17016.00           | 9496.00           | 8403.00            | 6920.00           |  |
| Other Sectors  | 47719.00           | 35903.00          | 43768.00           | 35195.00          | 56638.00           | 39667.00          |  |
| Total          | 60729.00           | 47162.00          | 60784.00           | 44691.00          | 65041.00           | 46587.00          |  |

The private sector loan portfolio covers 17.20 *per cent* and 15.51 *per cent* of the entire loan portfolio of REC and PFC respectively.

#### 1.3 Quality of assets with REC and PFC in the private sector portfolio

Quality of assets has a considerable impact on the financial statements REC and PFC as the prudential norms of RBI do not permit recognition interest till actual realization against loan accounts which have turned Non-Performing Assets (NPA) and requires provisioning against the principal amount of such loans.

Quality of assets is the primary consideration for assessing credit risk. As per RBI norms, a loan asset is categorized depending on servicing of loans by the borrowers. In an NBFC, a loan is considered as 'stressed' when interest or instalment is not paid as per schedule:

- Default up to 30 days are categorized as Special Mention Account (SMA-0) loan accounts
- Default for more than 30 and up to 60 days are categorized as SMA-1 loan accounts
- Default for more than 60 days and above are categorized as SMA-2 loan accounts.

If the period of default is *five* months or more, the loan account becomes a NPA.

Audit noticed that loan accounts of the Independent Power Producers (IPPs) were serviced irregularly and a number of them became 'stressed' (SMA accounts) and subsequently turned NPA. The loan accounts of REC and PFC under SMA categories in respect of IPPs during the period 2014-15 and 2015-16 are at **Table 1.3.** 

Table 1.3: Details of SMA-1 and SMA-2 in respect of IPPs

| Period  |              | SM              | A-1          |                 | SMA-2        |                 |              |                 |  |
|---------|--------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|-----------------|--|
|         | REC          |                 | PFC          |                 | REC          |                 | PFC          |                 |  |
|         | No. of cases | Amount (₹crore) |  |
| 2014-15 | 1            | 389.45          | -            | -               | 7            | 5510.64         | 2            | 628.14          |  |
| 2015-16 | 1            | 467.74          | -            | -               | 5            | 5423.21         | 5            | 6570.22         |  |

A comparative statement showing the year-wise position of NPAs in respect of loans sanctioned to IPPs over 2013-14 to 2015-16 in REC and PFC is at **Table 1.4**.

Table 1.4: Status of NPAs vis-à-vis loans sanctioned

| Year    |            | REC                      |                | PFC           |                          |             |  |  |
|---------|------------|--------------------------|----------------|---------------|--------------------------|-------------|--|--|
|         | Gross      | Gross NPA to outstanding |                | Gross         | Gross NPA to outstanding |             |  |  |
|         | NPA of IPP | IPP loans                | Total<br>loans | NPA of<br>IPP | IPP loans                | Total loans |  |  |
|         | (₹ crore)  | per cent                 | per cent       | (₹ crore)     | per cent                 |             |  |  |
| 2013-14 | 490.40     | 2.32                     | 0.33           | 1227.72       | 4.28                     | 0.65        |  |  |
| 2014-15 | 1421.78    | 5.08                     | 0.74           | 2363.63       | 6.49                     | 1.09        |  |  |
| 2015-16 | 4243.57    | 13.90                    | 2.11           | 7519.04       | 19.86                    | 3.15        |  |  |

NPAs related to IPP loans, in both companies, increased sharply over the three years period (2013-14 to 2015-16). At the end of 2015-16, a total NPA of ₹11762.61 crore for IPP loans was recognized in the books of accounts of REC and PFC, of which ₹10360.39

crore (86 per cent) were NPAs recognized during 2013-14 to 2015-16. Considering that REC and PFC disbursed ₹47706.88 crore to IPPs during the same period (2013-14 to 2015-16), the NPA generation works out to a significant 21.72 per cent of the amount disbursed during 2013-14 to 2015-16.

It may be noted here that recognition of NPA for IPP loans by PFC (₹7519.04 crore as on March 2016) was not as per the prudential norms notified by RBI¹. RBI norms allowed for a single restructuring before scheduled commissioning; additional restructurings would turn the loan account into NPA. PFC norms, however, provide for two restructurings before commissioning date and one restructuring post commissioning. Further, RBI norms allowed classification of restructured loans as standard if the project achieved the scheduled Date of commencement of Commercial Operations (DCCO). PFC had sought the permission of RBI for following its own prudential norms which has been declined by RBI (11 April 2017). With adoption of RBI norms, in 2016-17, PFC reported a Gross NPA of ₹30702.21 crore (12.50 per cent of the total outstanding loans of PFC as on 31 March 2017) in its books. REC has followed the prudential norms of RBI in recognizing its NPAs since 2014-15.

In view of the worsening position of stressed accounts and NPAs pertaining to loan accounts of IPPs, an examination of the mechanism of sanction, disbursement and restructuring of loans by REC and PFC was carried out in audit.

#### 1.4 Scope of audit

The scope of audit included a review of the procedures adopted by REC and PFC for appraisal of loan proposals, sanction and disbursement of loans. Loans sanctioned/disbursed to IPPs during 2013-14 to 2015-16 were examined.

#### 1.5 Audit objectives

The objectives of the audit were to examine whether:

- (i) the guidelines/ controls regarding appraisal of loan applications and sanction/ disbursement of loans are sound and adequate and whether these were adhered to by REC and PFC;
- (ii) the restructuring/rescheduling/renegotiating (R/R/R) of loans were carried out in line with applicable rules/guidelines including those issued by RBI; and
- (iii) the applicable norms/directives issued by RBI/Ministry of Power (MoP) relating to NPAs were followed.

Notification No.DNBS.CO.PD.No.367/03.10.01/2013-14 dated 23 January 2014 read with RBI letter dated 11 June 2014



#### 1.6 Audit criteria

Audit criteria were sourced from the following:

- (i) Internal guidelines/policies/procedures relating to appraisal of loan proposals, sanction of loans, disbursement of funds, recovery of dues and monitoring of physical/financial progress of the projects,
- (ii) Delegation of Powers,
- (iii) Directions/Guidelines/Circulars issued by RBI and MoP,
- (iv) Agenda and minutes of meetings of Board of Directors and its various Sub-Committees, and
- (v) Memoranda of Understanding signed by REC and PFC with MoP for 2013-14 to 2015-16.

#### 1.7 Audit sample

The audit sample was selected in the following manner:

- Loan cases were identified under three categories, viz., fresh sanctions, restructured loans and NPA cases.
- Fresh sanction and restructured loan cases were stratified into two segments, loans with sanctioned amount more than ₹1000 crore and loans with sanctioned amount less than ₹1000 crore.
- For sanctioned loans above ₹1000 crore, 70 per cent cases were selected. For sanctioned loans below ₹1000 crore, 24 per cent cases were selected.
- 100 per cent NPA cases were selected for detailed examination.

The total number of cases under each category and number of loan cases selected from each category are indicated in **Table 1.5** (details of loan are given in Annexure-I).

Table 1.5: Sample selected for audit

| Sl.<br>No. | Particulars     | Number of le<br>2013-14 to | Loans selected |     |     |     |     |
|------------|-----------------|----------------------------|----------------|-----|-----|-----|-----|
|            |                 |                            | Number         |     | %   |     |     |
|            |                 | REC                        | PFC            | REC | PFC | REC | PFC |
| 1.         | Fresh Sanctions | 39                         | 18             | 14  | 05  | 36  | 28  |
| 2.         | Restructuring   | 08                         | 18             | 05  | 09  | 63  | 50  |
| 3.         | NPA             | 08                         | 06*            | 08  | 06  | 100 | 100 |
|            | Total           | 55                         | 42             | 27  | 20  | 49  | 48  |

<sup>\*</sup> This does not include two NPA cases, i.e., (i) M/s Jas Infrastructure and Power Limited and (ii) M/s Swarnajyothi Agrotech and Power Limited (earlier known as M/s Octant Industries Limited), as these loans were covered in earlier audit and observations thereon have been reported in Paragraph 11.2 and 11.3 of Report No.15 of 2016 (Vol. 1) of the Comptroller and Auditor General of India.

MoP, in case of PFC, stated (June 2017) that in five cases<sup>2</sup> the sanction of loans or disbursement or conversion of loan into NPA did not occur during the period 2013-16. However, cost overrun/additional loan in these five cases were sanctioned/disbursed or these loans became NPA during 2013-14 to 2015-16 (as indicated in Annexure I of Report), they were reviewed in Audit.

#### 1.8 Audit methodology

Review of records relating to the selected sample was carried out during August to October 2016 and preliminary observations were issued. Separate draft audit reports were issued to REC and PFC in October 2016. Replies were received from REC in December 2016 and PFC in November 2016. The consolidated draft audit report, duly incorporating the replies of REC and PFC, was issued to MoP in December 2016. MoP furnished replies in respect of REC and PFC in March 2017 and February 2017 respectively. The consolidated draft report was again issued to MoP on 18 April 2017. Replies of MoP were received on 15 June 2017. These replies have been duly considered at the time of finalisation of this Report.

#### 1.9 Audit findings

Audit findings are discussed in the succeeding chapters as mentioned below:

Chapter-II : Sanction of Loans Chapter-III : Disbursement of Loans

Chapter-IV : Restructuring of Loans

Chapter-V : Conclusion and Recommendations

#### 1.10 Acknowledgement

Audit acknowledges the co-operation extended by the managements of REC and PFC and MoP in facilitating the conduct of this audit.

<sup>&</sup>lt;sup>2</sup> (i) M/s RKM Powergen Private Limited,(ii) M/s Lanco Amarkantak Power Limited (III&IV), (iii) M/s Krishna Godavari Power Utilities Limited, (iv) M/s Konaseema Gas Power Project Limited and (v) M/s Ind-Barath Energy Utkal Limited

## Chapter-II SANCTION OF LOANS

Participation of private sector in power generation grew significantly with the enactment of the Electricity Act, 2003. Private equity funds situated overseas also invested in the Indian power sector. REC and PFC participated in these projects as lenders. REC and PFC adopted internal guidelines for entity appraisal, project appraisals and disbursement of loans based on guidelines issued by RBI, Central Electricity Regulatory Commission (CERC), Central Electricity Authority (CEA), different ministries such as MoP, Ministry of Coal etc. and best practices of banks like State Bank of India (SBI), IDBI Bank etc. for sanctioning of these loans.

The project proposals were evaluated on specific quantitative and qualitative criteria and awarded points for each criteria on a six-point<sup>3</sup> scale. A borrower who obtained an overall grade up to 5 was considered eligible for project funding. Thus, an entity/borrower judged average or below average (obtaining a score of 4 or 5), were considered eligible for funding and loans were sanctioned to them.

During review of sanction and disbursement of loans to IPPs during 2013-14 to 2015-16, Audit observed that the companies had deviated from both internal as well as RBI guidelines and had assessed the proposals often on a subjective basis.

Audit observations in this regard are discussed below:

#### 2.1 Capability to develop the project

As per internal guidelines framed by REC and PFC for entity appraisal, capability of the core promoters to develop the proposed project under finance should be assessed. This is done by considering the projects of similar cost, capacity and technology that the promoter has completed in the past and is operating currently.

Audit observed that in 12 loan cases (five common loan cases<sup>4</sup> of REC and PFC, five standalone loan cases<sup>5</sup> of REC and two standalone cases<sup>6</sup> of PFC) loans were sanctioned, though the promoters did not have adequate experience in power sector and/or experience of successful implementation of infrastructure projects of similar scale. The guidelines of REC and PFC did not specify the manner of /benchmark for appraisal of loan proposals against this criteria. As a result, the appraisal was done based on individual judgment.

**2.1.1** The core promoter of M/s Ind-Barath Energy Utkal Limited (IBEUL) formed for setting up 2x350 MW coal-based thermal power project, had an experience of developing nine power projects having an aggregate capacity of 378.25 MW. Though the promoter

Entity appraisal of REC and PFC: Grade 1-Very High, Grade 2-High, Grade 3-Satisfactory, Grade 4-Average, Grade 5-Below Average and Grade 6-Low

<sup>4</sup> Para 2.1.1 to 2.1.5

<sup>5</sup> Para 2.1.6 to 2.1.10

<sup>&</sup>lt;sup>6</sup> Para 2.1.11 to 2.1.12

had an experience of implementing a much lower capacity, the loan proposal was awarded 87.5 *per cent* by REC against the experience criteria and the loan was sanctioned.

- **2.1.2** The core promoters of M/s SPIC Electric Power Corporation Limited (SEPC) formed for setting up 1x525 MW coal-based thermal power plant, had an experience of developing three solar power projects having an aggregate capacity of 105 MW, irrigation and water management, civil construction and power transmission lines. Though the promoters did not have experience of implementing a thermal power project, the loan proposal was awarded 33.33 *per cent* by REC against the experience criteria and the loan was sanctioned.
- **2.1.3** The core promoters<sup>7</sup> of M/s RKM Powergen Private Limited (RPPL) formed for setting up 4x360 MW thermal power project (Phase-I 1x360 MW and Phase-II 3x360 MW), had experience of implementing a bio-mass based power project with a capacity of 25 MW. The project proposal was awarded 100 *per cent* by REC against the experience criteria though the promoters had no experience of implementing any thermal power project and the loan was sanctioned.
- **2.1.4** The promoters of M/s NCC Power Projects Limited (NPPL) formed for setting up a coal based power project having a capacity of 1320 MW (2x660 MW), had experience in civil construction works, road projects, water supply, environmental projects, power transmission lines and real estate developments. Though the promoters did not have any experience in implementing a project of similar technology and capacity, the project proposal was awarded 33.33 *per cent* by REC against the experience criteria and the loan was sanctioned.
- 2.1.5 The core promoter of M/s Lanco Amarkantak Power Limited (LAPL) (III and IV units) formed for setting up coal-based thermal power project of 1320 MW (2x660 MW) capacity had been operating eight power plants (of total capacity of 1487 MW) commissioned between October 2000 and April 2010 with capacities ranging from 3 MW to 368 MW. The project proposal was awarded 75 per cent by REC against the experience criteria though the promoter had no experience in implementation of similar technology / capacity project.
- **2.1.6** Most of the core promoters<sup>8</sup> of M/s Meenakshi Energy Private Limited (MEPL) formed for setting up 600 MW (2x300 MW) thermal power project, were engaged in development of commercial and residential properties, construction of national and state highways and port services. Among the promoters, Meenakshi Power Limited (MPL), alone had executed two small hydro-electric power projects<sup>9</sup> of 12 and 25 MW. The project proposal was awarded 50 *per cent* by REC against the experience criteria, even

Middle Kolab Small Hydro Electric Project and Lower Kolab Small Hydro Electric Project

M/s RKP and Associates (74 per cent) and M/s MCJ and Associates (26 per cent)

<sup>8</sup> M/s Meenakshi Infrastructure Private Limited (MIPL), M/s Meenakshi Power Limited (MPL), M/s Kakinada Seaports Limited, M/s United Ports Services Private Limited, and PTC India Financial Services Limited

though it had no experience in implementation of any thermal power project and the loan was sanctioned.

- **2.1.7** The core promoter of M/s Ind-Barath Power (Madras) Limited<sup>10</sup> (IBPML) formed for setting up 660 MW (1x660 MW) coal-based thermal power plant, had experience of developing eight power projects having an aggregate capacity of 712.50 MW. The project proposal was awarded 50 *per cent* by REC against the experience criteria, even though the promoter had no experience in implementation of similar technology and capacity of project and the loan was sanctioned.
- **2.1.8** The core promoter of M/s Lanco Babandh Power Limited (LBPL) formed for setting up 1320 MW (2x660 MW) thermal power project, had been operating eight power plants (1487 MW) commissioned between October 2000 and April 2010 with capacities ranging from 3 MW to 368 MW. The project proposal was awarded 75 *per cent* by REC against the experience criteria, even though the promoter had no experience in implementing projects of similar technology, cost and capacity and the loan was sanctioned.
- **2.1.9** The core promoter of M/s Lanco Vidharbha Thermal Power Limited (LVTPL) formed for setting up 1320 MW (2x660 MW) thermal power project, had been operating seven power plants (1044 MW) commissioned between October 2000 and October 2009 with capacities ranging from 3 MW to 368 MW. The project proposal was awarded 75 per cent by REC against the experience criteria, even though it had no experience in implementing projects of similar technology, cost and capacity project in the past, and the loan was sanctioned.
- **2.1.10** The core promoter of M/s Corporate Power Limited (CPL) formed for setting up 2x270 MW (Phase-I) coal-based thermal power project, had experience in steel industry, road projects and had set up three power projects having a maximum capacity of 15 MW. The project proposal was awarded 25 *per cent* by REC against the experience criteria, even though it had no experience in implementing similar cost and capacity project in the past, and the loan was sanctioned.
- **2.1.11** The promoters of M/s Jhabua Power Limited (JPL) formed for setting up 600 MW coal-based thermal power plant, had no experience of implementing similar projects. The promoter, M/s Avantha Power and Infrastructure Limited (APIL), was formed by way of divestment of small power generation assets with a total capacity of 95 MW (individual unit capacity ranged between 13 MW and 30 MW) and had implemented a few expansion projects. However, the loan was sanctioned.
- **2.1.12** A coal based power project of 60 MW was to be implemented by M/s Krishna Godavari Power Utilities Limited (KGPUL) which was promoted by three entities, Dr. M. Venkataratnam & Associates (37.50 *per cent*), M/s. PTC India Limited

<sup>10</sup> Promoted by M/s. IBPIL and Arkay Energy (Rameswarm) Limited (AERL)

(52 per cent) and M/s. Kerbs Bio-chemicals and Industries Limited (10.50 per cent). Audit noticed that the promoters had no experience in implementing such projects in the past. The appraisal note indicated that Dr. M. Venkataratnam held various senior positions and served as Chairman of REC, Andhra Bank and Tobacco Board of India. However, no specific experience of Dr. M. Venkataratnam & Associates or their field of operation was indicated. M/s. PTC India Limited was engaged in power trading activities, while the third promoter was engaged in developing commercially viable biotech process with applications in medicine, agriculture and industry. The promoter was awarded Grade-4, i.e., average, and sanctioned loan.

MoP/PFC/REC stated (February, March, and June 2017/November 2016/December 2016) the following:

- (i) Projects were sanctioned keeping in view the experience of the promoter in implementing various projects, level of preparedness of the project and that lack of experience was well reflected in the grade awarded to the borrower. It was also stated that lesser experience was not a qualifying criteria for sanction of loan as per guidelines.
- (ii) In respect of LBPL and LVTPL, the promoter had experience of developing power projects with aggregate capacity of more than 4700 MW including projects with capacity up to 1200 MW.
- (iii) In respect of KGPUL, PTC was engaged in trading of electricity but was not into operating the plants directly by itself but Dr. M. Venkataratnam had served as the Chairman of REC which was considered as a strength.
- (iv) The suggestion of Audit to make experience as a pre-requisite for sanctioning of loans was under consideration of REC in the proposed review of entity appraisal guidelines.

Audit appreciates the response of REC regarding the proposed review of entity appraisal guidelines. The other replies are not acceptable in view of the following:

- (i) Experience of the promoters is critical for successful implementation of a new project and, therefore, must be a pre-requisite for sanctioning a loan. All the 12 projects indicated above could not be completed in time, pointing to the correlation between experience of the promoter and successful implementation of the project.
- (ii) In respect of LBPL and LVTPL, experience of the promoters as pointed out by MoP was obtained only after sanction of the loans and, as such, is not relevant to the observation.

(iii) The appraisal note in case of KGPUL stated that the promoters had no experience in implementing power projects. Awarding Grade-4, even in absence of experience in power sector, lacked justification.

The internal guidelines of both companies need to be reviewed so that evaluation of the entity/promoter on the experience criteria can be carried out objectively, including fixing a minimum score for a project proposal to be eligible for funding.

#### 2.2 Equity funding potential

The internal guidelines of REC for entity appraisal stipulated a pre-condition that a letter expressing interest in contributing equity to the project must be obtained from the identified equity contributors. Further, as per REC and PFC internal guidelines for entity appraisal, there was a need to verify the potential of the promoters for contributing equity to the project. However, Audit observed that nine projects (three common loan cases 11 of REC and PFC, three standalone loan cases 12 of REC and three standalone cases 33 of PFC) were sanctioned by REC and PFC despite the promoters not having sufficient means to contribute equity in the proposed projects.

- 2.2.1 PFC sanctioned (06 January 2010) a loan to Ind-Barath Energy Utkal Limited (IBEUL) for developing a project of 700 MW. As per the appraisal notes, the promoter was implementing four¹⁴ other projects with an aggregate capacity of 1915 MW. However, the appraisal of PFC did not consider the financial commitment of the promoter or means of funding these four other projects. REC also participated in this project subsequently and sanctioned a loan on 02 July 2012 at which point, equity of ₹220 crore remained to be infused. When REC entered the project, the promoter was implementing three¹⁵ other projects with an aggregate capacity of 1910 MW. The appraisal note of REC, also, did not consider the financial commitment of the promoter for its other projects, nor assessed the means of funding them.
- 2.2.2 The promoters of M/s RKM Powergen Private Limited (RPPL) were considered financially capable for implementing the thermal power project of 1440 MW without due consideration of their financial position. The two promoters (M/s RK Powergen Private Limited and M/s Mudjaya Corporation Berhad) were required to infuse equity of ₹1589.50 crore (₹381.40 crore and ₹1208.10 crore) to this project. However, the appraisal notes of REC and PFC did not indicate the means of funding the equity. It was known at the time of appraisal that M/s Mudjaya Corporation Berhad had committed to implementing two highway projects and one power project but the equity commitment of these projects were not considered while assessing the financial capacity of the promoter

<sup>11</sup> Para 2.2.1 to 2.2.3

Para 2.2.4, 2.2.6 and 2.2.7

<sup>13</sup> Para 2.2.5, 2.2.8 and 2.2.9

Ind-Barath (Madras) Limited-1320 MW, Ind-Barath (Karwar) Power Limited-450 MW, Ind-Barath Power gencom Limited-140 MW and Dharmshala Hydro Power Limited II-5 MW

Ind-Barath (Madras) Limited-1320 MW, Ind-Barath (Karwar) Power Limited-450 MW, and Ind-Barath Power gencom Limited-140 MW

to bring in equity for the instant project. The promoters could not bring in the required equity. Even the commissioned units could not be operated due to lack of working capital.

- 2.2.3 As per the project proposal, the two promoters of M/s NCC Power Projects Limited (NPPL), Nagarjuna Construction Company Limited (NCCL) and Gayatri Projects Limited (GPL) were required to contribute ₹1761.72 crore (NCCL-₹831.19 crore and GPL-₹930.53 crore) by October 2014. The promoters were also required to contribute equity in other ongoing projects (₹646.94 crore by NCCL and ₹982.50 crore by GPL) by March 2015. Thus, NCCL had a total equity commitment of ₹1478.13 crore while the commitment of GPL was ₹1913.03 crore. As against this, the appraisal note indicated expected fund inflow to GPL of ₹685.74 crore up to 2014-15. Though the appraisal note indicated adequate expected fund inflow for NCCL, Audit noticed that the company had already (2011) failed to infuse envisaged equity in other projects such as Himachal Sorang power project and KVK Nilachal power project. This indicates that the financial capability of the promoters to fund the equity component of the instant project was not appropriately assessed.
- 2.2.4 The letter expressing interest in contributing equity was not furnished by the equity contributors of M/s KSK Mahanadi Power Company Limited (KMPCL) at the time of preliminary evaluation of loan for implementation of 3600 MW (6x600 MW) thermal power project. As per clause 20.38 of Common Loan Agreement (CLA), compliance with this requirement was a necessary pre-commitment condition for disbursement of the loan. REC, however, disbursed loan instalments since August 2011 without equity commitment of the project promoters. The condition was extended from time to time, and at the time of approving the cost overrun in March 2016, the requirement was deleted. Audit noticed that the project was considerably delayed and the revised project cost increased (March 2016) to ₹27080 crore with equity contribution of ₹8078 crore which was yet to be contributed (September 2016).
- 2.2.5 At the time of sanction of loan to M/s Lanco Amarkantak Power Limited (LAPL) by PFC, the appraisal note indicated that the promoter was executing eight projects and was to contribute equity of ₹3077 crore for these projects (including the project under consideration which had an equity requirement of ₹1721 crore). However, apart from these eight projects, the promoter was also implementing two¹8 power projects of 2640 MW having equity requirement of ₹2773 crore. PFC did not consider the financial commitment of promoters in these projects while assessing the promoter's financial capability. Audit noticed that four¹9 of these projects had not been completed till

17 The obligation of the Lenders to make available the loan pursuant to CLA shall become effective upon the borrower fulfilling these conditions

<sup>18</sup> Lanco Babandh Power Project and Lanco Vidarbha Power Project

<sup>16</sup> KSK Energy Ventures Limited (KSKEVL) - 38 per cent, Gujarat Mineral Development Corporation Limited (GMDC)-13 per cent, Goa Industrial Development Corporation (GIDC)-13 per cent, Neyveli Lignite Corporation Limited (NLC)-12 per cent and IIF-9 per cent. At the time of application, no equity contributor was identified for the remaining 15 per cent

Lanco Amarkantak III&IV, Lanco Vidarbha, Lanco Babandh and Lanco Teesta

May 2017 as the promoter was under financial stress and could infuse an equity of ₹3816 crore only out of the envisaged ₹7772 crore.

- 2.2.6 The promoter (M/s Lanco Infratech Limited) of M/s Lanco Babandh Power Limited (LBPL) for developing 1320 MW capacity thermal power project, had to infuse equity of ₹1386 crore in the project by September 2014. The promoter was also involved in construction of seven<sup>20</sup> other power projects of 5610 MW to be completed between June 2010 and March 2014. The appraisal note presented to the REC Board indicated a requirement of ₹4616 crore up to 2013-14 to be infused by the promoters but did not consider the source of such funding while assessing the financial capability of the promoters. The project was not completed till May 2017.
- REC sanctioned (21 July 2010) a loan to M/s Lanco Vidharbha Thermal Power Limited (LVTPL) for implementation of a thermal power project of 1320 MW. The equity requirement of this project was ₹1387 crore. At the time of appraisal/sanction of the loan, the promoter was also implementing nine<sup>21</sup> other projects requiring equity infusion of ₹6731 crore; the total equity requirement in all projects being ₹8118 crore. The appraisal note of REC indicated that the promoters had the capacity to infuse equity in the project. Audit, however, noticed that ₹727 crore was to be sourced from Qualified Institutional Placements and ₹3561 crore from future profit of the group companies. The future profit projections included profit from own operation (₹1353 crore) and profit from SPV companies (₹2088 crore). However, of the 14 SPV companies of the promoter, only five (capacity of 811 MW) were in operation at the time, the balance (capacity of 6195 MW) being under construction/ implementation. Thus, the projected profits of ₹3561 crore was based on significant assumptions regarding the future business prospects of the promoter. At the time of sanction of the loan (July 2010), the available investible funds with the promoter was only ₹684 crore, while the promoters had outstanding debts of ₹5247 crore. The project was not completed till May 2017.
- 2.2.8 PFC sanctioned (02 April 2013) a loan to M/s GVK Ratle Hydro Electric Power Project Limited (GRHEPPL) for implementation of a power project having capacity of 850 MW. The promoter was required to bring in equity of ₹1568.77 crore in this project. As per appraisal notes, the promoter was highly leveraged and had declining profits. The debt to net-worth ratio of the promoter had increased from 1.86 in 2008-09 to 3.21 in 2011-12 while profit was on a decline (₹185 crore in 2010-11 to ₹105 crore in 2011-12). The projected Profit after Tax, however, indicated significant increase from ₹73 crore (2012-13) to ₹595 crore (2015-16) on the assumption that the ongoing projects<sup>22</sup> would be completed which was accepted by PFC though one of these projects, financed by PFC,

<sup>(</sup>i) Udupi Power, (ii) Lanco Green, (iii) Anpara 'C', (iv) Lanco Teesta, (v) Lanco Amarkantak III&IV, (vi) Lanco Hydro Uttaranchal-Phata Byung, and (vii) Lanco Hydro Uttaranchal-Rambara

<sup>(</sup>i) Udupi Power, (ii) Lanco Green, (iii) Anpara 'C', (iv) Lanco Teesta, (v) Kondapalli Expansion, (vi) Lanco Hydro Uttaranchal-Phata Byung, (vii) Lanco Hydro Energy, (viii) Lanco Amarkantak III & IV Units (ix) Lanco Babandh

<sup>&</sup>lt;sup>22</sup> 37 per cent stake in Mumbai International Airport (2012-13), Commissioning of two power projects of 870 MW, commissioning of a coal mine and Kota expressway (2013-14), Commissioning of Bagodara expressway (2014-15)

was already under restructuring. Subsequently, the assumptions regarding profitability of the promoter did not hold good and the promoter company incurred losses of ₹406.59 crore, ₹420.22 crore and ₹1168.48 crore in 2012-13, 2013-14 and 2014-15 respectively. The project has not been completed till May 2017.

2.2.9 The appraisal note stated that one of the promoters (Dr. M. Venkataratnam & Associates) of M/s Krishna Godavari Power Utilities Limited (KGPUL) was required to contribute 37.50 per cent equity amounting to ₹28.74 crore. The major portion of networth of this promoter was in the form of land and house property, which had no immediate realization prospects. This was identified as the weakness of promoters/project. As per the internal policy of PFC, such promoters should bring in 100 per cent equity upfront which was not insisted upon. The appraisal notes also indicated that the third promoter, viz., M/s Kerbs Bio-chemicals and Industries Limited had reported declining profit after tax since 2003 and losses in 2006. The equity stake of this promoter was taken over (30 May 2008) by Dr. M. Venkataratnam & Associates, increasing their equity commitment to ₹36.78 crore (48 per cent equity). The project went under restructuring and as the equity commitment increased, the promoter could not infuse the desired equity. The project has not been completed till May 2017.

MoP/ PFC stated (February 2017/June 2017 and November 2016) that

- (i) The appraisal of promoters' capabilities was carried out with regard to a specific project and promoters were graded considering the equity commitment for the subject project. The rating model was designed for the project to be financed and not for other ongoing projects of the promoters because a promoter group/promoter might have many projects under consideration at any point of time with varying timelines and varying financial structures.
- (ii) The funds available for infusion as equity comprised existing funds available, projected internal accruals, fresh borrowings and mobilization of additional capital by the promoters. Hence, it was not appropriate to correlate profit after tax for the past period or accumulated reserves with the proposed equity infusion.
- (iii) Major assumptions regarding past financials and projections were considered to arrive at the entity rating of the promoter which were brought out in the agenda/ appraisal note. The order book position of the promoters was considered sufficient to meet the envisaged equity and infusion of equity from sale of investments was also assured by the promoter.
- (iv) The appraisal mechanism factored the net-worth of Dr. M. Venkataratnam & Associates and losses reported by M/s Kerbs Bio-chemicals and Industries Limited. The final entity grading was an investable grade, hence loan was sanctioned.

MoP/REC stated (March 2017/June 2017 and December 2016) that entity appraisal guidelines were under review and added that:

- (i) Appraisal has been carried out as per the extant guidelines and projects where loans were sanctioned had the appropriate investment grade. The equity commitment in other projects was considered in the project appraisal. It was also stated that the order book position of the promoters were considered sufficient to meet the envisaged equity, while they had also assured of infusion of equity from sale of investments.
- (ii) In the case of KMPCL, REC had received approval of Finance Committee of the promoter (KSK Group companies) for contributing 38 per cent equity in the project. Besides, as per the Coal Supply and Investment Agreement, GMDC had agreed for infusion of 13 per cent equity. It was added that REC had stipulated precommitment condition in this regard.
- (iii) In the case of IBEUL, as per the loan application, only two projects, viz., IBEUL and IBPML were under implementation and 100 *per cent* equity requirement for the former project had been infused.
- (iv) In case of LVTPL, LITL was a holding company and they proposed to infuse equity from the consolidated cash flows of the group. The financial stress in LITL was attributable to non-operation of gas-based power plants and other macroeconomic factors.

Audit appreciates the proposed corrective action of REC regarding review of the existing appraisal guidelines. The replies in respect of specific cases are not acceptable in view of the following:

- (i) Appraisal of capacity of the promoter to infuse equity in the project is critical for its success. All the nine projects commented above, had to be restructured and three turned NPAs. These projects have not been completed till May 2017 and multiple restructuring of the loans has resulted in increase in Interest During Construction (IDC) by ₹13312.78 crore in six loan cases and NPA of ₹3038.44 crore in another three loan cases.
- (ii) The contention of Ministry/ PFC that commitments other than the project under consideration are not required to be considered is not acceptable. With a large number of projects competing for equity, the risk to the project under review increases substantially. Hence, it is required to be considered during appraisal.
- (iii) The contention of REC and PFC that the expected fund inflow of the promoters was considered on the basis of their envisaged order book position is not borne out by facts. In case of GPL, the order book position indicated a fund inflow of ₹685.74 crore while the equity commitments were three times of that amount (₹1913.03 crore) and they were unable to infuse equity. Besides, the envisaged cash flow was often based on projects yet to be completed, assuming that they would be successfully completed and earn revenues which was often belied by actual events.

- (iv) In case of KMPCL, a deviation was made from the internal guidelines which provide that a loan application would be considered for processing only when the promoters furnish an undertaking for equity contribution. As per clause 20.38 of CLA, the obligation to fund a project would arise only after this which was deleted in March 2016, by which time REC had already disbursed ₹1547 crore.
- (v) In case of IBMPL, the promoter infused only ₹532.73 crore against envisaged equity of ₹885 crore and the project was stopped due to lack of funds. In the case of Ind-Barath Energy Uttkal Limited, the project was not completed since the promoter was not able to contribute equity post-cost overrun.

#### 2.3 Viability of the projects

In terms of RBI and internal guidelines, a project should be viable to safeguard the repayment of loan during the currency of the repayment period. For this purpose, the internal guidelines provided that the Debt Service Coverage Ratio (DSCR) should be at least 1 and average DSCR should be more than 1.2. Apart from this, Internal Rate of Return (IRR) should be more than the internal reference rate<sup>23</sup> of interest (RRR) of REC and PFC for sanction of initial loan. RBI provides that IRR should be higher than cost of capital by 1 *per cent*, however, no specific percentage has been indicated in the guidelines of REC and PFC.

The internal guidelines did not stipulate the method of arriving at the appropriate tariff to be considered for assessing the viability of projects, for which Power Purchase Agreement (PPA) had not been signed. Audit observed that REC and PFC estimated higher tariff at the time of appraisal of loan proposals, which resulted in sanction of loans of ₹8662 crore in six cases (three standalone cases<sup>24</sup> pertain to REC and three standalone cases<sup>25</sup> pertain to PFC). In all these cases, the levelised generation cost<sup>26</sup> was higher than the levelised tariff<sup>27</sup> and hence the DSCR was negative with IRR lower than RRR.

**2.3.1** REC considered levelised tariff of ₹4.86 per unit and levelised generation cost of ₹4.52 per unit at the time of sanctioning (10 November 2014) a term loan of ₹1166 crore to M/s Ind-Barath Power (Madras) Limited (IBPML) for 660 MW. On this basis, REC worked out a project IRR at 14.19 per cent. Against an interest rate of 13.75 per cent on the loan, the IRR was marginally positive. The minimum DSCR was taken as 1.06, at the time of appraisal of the project.

REC's Reference Rate of Interest (RRR) is the interest rate prevailing/applicable for Grade I category of private sector borrowers for conventional generation (large) projects

<sup>&</sup>lt;sup>24</sup> Para no 2.3.1 to 2.3.3

<sup>&</sup>lt;sup>25</sup> Para no. 2.3.4 to 2.3.6

Levelised generation cost is the net present value of the cost of electricity per unit over the life time period of the project

Levelised tariff is the net present value of the tariff of electricity per unit over the lifetime period of the project/PPA

Audit noticed that the average tariff in the Indian Energy Exchange (IEX) for the year 2014 was ₹3.59 per unit, while under Case-1<sup>28</sup> bidding held in October 2014, the tariff obtained was in the range of ₹3.60 to ₹4.15 per unit. Audit worked out the project IRR to be 4.13 *percent*, considering the maximum prevailing tariff of ₹4.15 per unit with price escalation of 2 *per cent* (as applied by REC) which was lower than the RRR of 13.75 *per cent*. Minimum DSCR and average DSCR were 0.56 and 0.81 respectively which were lower than the benchmark DSCR of 1.00 and 1.20 respectively. The project, therefore, was not eligible for loan even at the time of appraisal.

MoP/REC stated (March 2017/June 2017 and December 2016) that tariff rates under Case-1 bidding was in the range of ₹3.60 per unit to ₹5.73 per unit from 2011 to August 2016. The tariff assumption as envisaged in the Project Information Memorandum had been considered and found to be within the Case-1 bidding rates up to August 2016.

The reply is not acceptable. The Case-1 bidding rates showed a declining trend since 2014 and no PPA had been finalized at or above ₹3.60 per unit during 2014 when the project was sanctioned.

2.3.2 The thermal power project for developing a capacity of 3600 MW by M/s KSK Mahanadi Power Company Limited (KMPCL) was sanctioned (August 2009) a term loan of ₹1547 crore on the condition that weighted average tariff should not be less than ₹2.70 per unit during the currency of the loan. During the project appraisal, it was seen that the levelised generation cost for the project would be ₹2.34 per unit, while the levelised tariff of the project would be ₹2.33 per unit (worked out by REC as per CERC norms) which would render the project unviable. At the same time, PFC (the lead lender) worked out a lower cost of generation @ ₹2.32 per unit and a higher levelised tariff @ ₹2.68 per unit which indicated that the project was viable, on the basis of which, the loan was sanctioned.

Audit noticed that the company had entered (November 2006 for 1010 MW, February 2008 for 1350 MW and January 2009 for 420 MW) into a PPA for supply of 2780 MW (out of 3600 MW) at a weighted average tariff of ₹2.00 per unit. This raises doubts on the assumption of ₹2.68 per unit as levelised tariff. Audit considered the PPA rates of ₹2 per unit for the agreed quantity and the CERC tariff rate (₹2.33 per unit) for the balance quantity of power and arrived at a levelised tariff at ₹2.05 per unit, which indicates the non-viability of the project. Non-viability of the project is also borne out by the fact that two units of the project were commissioned in August 2013 and August 2014, following which the project suffered losses of ₹56.93 crore, ₹173.76 crore and ₹118.26 crore during 2013-14, 2014-15 and 2015-16 respectively.

MoP/REC stated (March 2017/June 2017 and December 2016) that there was a typographical error, wherein levelised cost of generation was inadvertently mentioned as

<sup>28</sup> Procurement of power through competitive bidding where the location, technology or fuel is not specified by the procurer

₹2.32 per unit, while it was ₹2.02 per unit. The average tariff of ₹2.05 per unit worked out by Audit on the basis of current scenario and the short term / power exchange rate cannot be compared with the long term PPA tariffs. Considering the Case-1 bidding between July 2012 and October 2014, the weighted average levelised tariff was ₹4.45 per unit. As such, even after cost overrun, the project was viable.

However, Audit had worked out the levelised tariff based on the agreed tariff under PPA (2780 MW) and the CERC tariff for the balance quantity (558.28 MW) which was known at the time of appraisal.

2.3.3 At time of sanction of loan to M/s Lanco Vidharbha Thermal Power Limited (LVTPL) in July 2010, REC deviated from certain operational norms<sup>29</sup> prescribed by CERC and arrived at an IRR of 12.75 per cent at 85 per cent Plant Load Factor (PLF) and average DSCR of 1.21 for the project. The entity appraisal report also stated that if CERC norms were adhered to, the project would not have been qualified for funding since the average DSCR would be less than 1 and IRR would be less than the cost of debt. The deviations made from the CERC norms and the assumed higher tariff rates (in comparison to the merchant tariff rates, then prevailing), led to the project being termed as viable and loans being sanctioned.

MoP/REC stated (March 2017/June 2017 and December 2016) that this project was not a MOU-based one and, therefore, 45 per cent power was proposed to be sold through merchant tariff. The appraisal was carried out in line with that of the lead lender, and assumptions different from those of CERC norms were considered for certain parameters which were apprised to the competent authority. MoP further stated that the exchange prices were at peak during the period when these projects were conceived and the scenario has changed with exchange prices having come down to its lowest levels. Hence, it was not prudent to compare these scenarios to arrive at the viability of on-going projects.

The reply is not acceptable. As per National Electricity Policy 2005, IPPs were required to obtain Case-1 bidding for 85 per cent and only 15 per cent could be sold through merchant tariff. The assumption that 45 percent power generated from the project would be sold at merchant tariff, therefore violated this policy. Besides, the project became viable only after REC deviated from the CERC operational norms which was not in the interest of REC.

2.3.4 The project proposal of M/s GVK Ratle Hydro Electric Project Private Limited (GRHEPPL) seeking loan from PFC did not consider a set of project costs, (i) water usage charges (financial impact: ₹1.05 per unit), (ii) custom and excise duty, (financial impact: ₹132.41 crore) and (iii) levy of entry tax, sales tax, VAT and other local taxes

<sup>&</sup>lt;sup>29</sup> The following major deviations from CERC norms/REC norms included (i) Moratorium period of 12 months against 6 months, (ii) Structured repayment against equal quarterly installments, (iii) Projection of SHR, O&M, Working Capital, Return on Equity etc. on the lower side compared to CERC norms and (iv) assumption of sale of power at ₹3.25 per unit for 45 per cent of total capacity, while 55 per cent was already tied up through Case-1 bidding at ₹2.70 per unit

(financial impact: ₹255 crore). During appraisal of the project, PFC also did not consider these aspects and sanctioned the loan. If the expenditure on these elements were considered, the project would have turned unviable.

MoP/PFC stated (June 2017 and November 2016) that it carried out an appraisal on the information gathered from various project documents. There was no mention of water usage charges in the Letter of Intent offered by Govt. of Jammu & Kashmir (GoJ&K) to the promoters or in the PPA with GoJ&K. The financial analysis was carried on the basis of capital/operational cost as assessed through project documents like DPR, PPA etc. The matter relating to recovery of loan and rights of PFC for taking action in this regard was sub-judice and any comment at this stage might impair the financial interest of PFC. MoP added (February 2017) that the project was awarded to promote hydro power projects in J&K based on the assurance that no entry tax/water usage charge would be levied on this project. Hence, at the time of appraisal, this was not considered by PFC.

The reply is not acceptable. The State Government had notified levy of water usage charges in February 2011, while Central Board of Excise and Customs notified non-applicability of 'nil' customs and excise duty to this project in September 2012. Sales tax, VAT and other local taxes were prevailing at the time of project appraisal. Therefore, these levies were foreseeable at the time of appraisal. PFC, however, solely depended on the documents /information made available by the promoters and no independent assessment was carried out. The project has not been completed and the loan account has turned NPA (January 2016).

2.3.5 As per the conditions of sanction of loan by PFC to M/s DANS Energy Private Limited (DEPL), a PPA was to be signed within one year from the date of initial drawdown (i.e., by 30 March 2011) or six months before the commissioning (i.e., by December 2011). Since this condition was not complied with, PFC relaxed the timeline multiple times during execution of the project. PPA could not be signed till September 2016. In the absence of PPA, the borrower had to sell power on merchant tariff of approximately ₹2 per unit, against the levelised cost of generation of ₹4.06 per unit (for 15 years). Audit noticed that while sanctioning the project a levelised tariff of ₹2.88 per unit was considered against levelised cost of generation of ₹2.26 per unit which was not realised. The borrower, in lenders' meeting dated 02 August 2016, confirmed that due to sale of power on merchant tariff, cash flow was insufficient to service the debts. Audit further noticed that even with the expected provisional tariff from Uttarakhand Electricity Regulatory Commission of ₹4 per unit, the project would not be able to service the debts.

MoP/PFC stated (June 2017 and November 2016) that the project was at an advanced stage in 2014-15 and was likely to be completed within the financial year 2014-15. Since DEPL were already in talks with various utilities for sale of power, time was extended up to 28 February 2015. Stopping disbursement at that stage would have further delayed the project. Since achievement of commissioning on 30 September 2015, no tender was floated against which the borrower was eligible to apply. The borrower was exploring

various options for entering into long term PPA and timeline was extended till 31 March 2016.

The reply is not acceptable. Though the PPA was to be signed at least six months before the original commissioning date of 30 June 2012, the borrower failed to comply with this condition till September 2016. The borrower had been in talks with various utilities during 2014-15 and failed to finalise the PPA which indicates that the tariff offered by the project was not competitive. Though the power was being sold at ₹2 per unit, PFC assumed a levelised tariff of ₹7.29 per unit in the appraisal note for fourth cost overrun of the project in February 2016.

2.3.6 At the time of sanction (30 July 2001) of loan to M/s Konaseema Gas Power Limited (KGPL), the project was facing uncertainties regarding availability of gas. The project was considered viable based on the PPA with Government of Andhra Pradesh, which provided for recovery of fixed cost at ₹0.96 per unit. These rates, however, were frozen for the tenure of PPA (15 years from actual date of commissioning) and any increase in project cost, interest etc. was not to be considered a pass through in the PPA. Thus, there was a financial risk involved in the project, which could affect project viability, and therefore, the recovery of loan/dues. Eventually, the project faced cost overruns and the project cost increased to ₹2035 crore (June 2009) against the originally approved project cost of ₹1383 crore (July 2001).

MoP/PFC stated (February 2017/June 2017 and November 2016) that, as brought out in the agenda, the PPA was amended to include sale of power of up to 20 *per cent* of the project capacity (89 MW) to third parties either as merchant power or on short term basis. Based on the above, financials were worked out for revised project cost of ₹2035 crore and the project was found to be viable.

The reply is not acceptable. At the time of approval of the project, the viability of the project was not established. Besides, there were significant uncertainties regarding gas supply to the project. Sale of 20 *per cent* on merchant tariff or on short term basis was also in question, the State utilities having moved the Hon'ble Supreme Court in this regard.

#### 2.4 Contractors related to the promoter

The guidelines of REC and PFC do not envisage a situation where the contractors engaged by the promoter for implementation of a project are related parties. Audit noticed that in seven loan cases, the contractor and the promoter were same/ related entities. In these cases, the loan sanctioned by REC and PFC to the promoter for execution of the project remained with the promoter group and the actual stake of the promoter in implementing the project was difficult to assess. It was also noticed that the credit worthiness of the contractors and their ability to fulfil contractual obligations was not being appraised by REC and PFC, as required by the RBI guidelines on Loans and Advances – Statutory and Other Restrictions.

- **2.4.1** M/s RKM Powergen Private Limited (RPPL) awarded the Boiler Turbine Generator, Balance of Plants Package and the contract for civil work to MIPP International Limited (MIPP), a subsidiary of M/s Mudajaya Corporation Berhad, one of the core promoters. MIPP was incorporated in the Republic of Mauritius on 03 May 2007 as a private company to undertake the Engineering and Procurement Contract (EPC) for the first and second phase of this project. Audit noticed that neither REC nor PFC evaluated the credit worthiness of MIPP nor noted the conflict of interest and vetted the contract documents. As per records produced to Audit, no verification was done to ensure use of funds available with MIPP. It was also noticed that this company has been facing enquiry under Prevention of Money Laundering Act since February 2015.
- 2.4.2 REC and PFC sanctioned term loans of ₹2267 crore to M/s SPIC Electric Power Corporation Limited (SEPC). The lenders (REC and PFC), in the meeting held on 02 September 2015, noted that the core promoters (M/s MEIL) had infused ₹331 crore as equity, of which ₹290 crore was given as advance to M/s MEIL who was the EPC contractor of the project. The lenders' meeting decided to evolve a suitable mechanism for disbursement to ensure end utilization of fund. Audit noticed that no specific mechanism in this regard had been established and REC and PFC disbursed (January 2016/ November 2015) ₹90.66 crore to the borrower. Considering that ₹290 crore was available with the contractor, further infusion of ₹90.66 crore as loan, without verifying the status of the equity funds was imprudent. Audit also noticed that the Common Loan Agreement (CLA) did not prescribe any mechanism for mapping the utilization of funds available in Trust and Retention Account<sup>30</sup>.
- 2.4.3 The core promoter, M/s Lanco Infratech Limited (LITL) was itself the turnkey EPC contractor for Lanco Vidharbha Thermal Power Project. REC had disbursed a loan of ₹490.06 crore for this project. The core promoter got a mobilization advance in his capacity as the EPC contractor. Audit noticed that in June 2016, the utilization of about ₹920 crore given as mobilization advance to the EPC contractor was not provided to the lenders. Lenders observed that a chunk of this advance seemed to have been locked as investment in other SPVs of the promoter indicating diversion of funds. This points to poor monitoring of funds given to the EPC contractor, though as per CLA, the same ought to have been examined and confirmed through certificates/feedback from Lenders' Financial Advisor (LFA)/ Lenders' Engineer (LE).
- 2.4.4 The core promoter, M/s Lanco Infratech Limited (LITL) was itself the EPC contractor of Lanco Babandh Power Project. The contract for consultancy services was also awarded to one of the group companies of the promoter, Lanco Power Limited. REC disbursed ₹1000 crore for this project. Minutes of lenders' meeting indicated that there were reconciliation issues between the moneys advanced to the EPC contractor and the

A suitable payment mechanism in the form of an account which shall be opened in the designated bank to ensure all the cash flows of the project are routed through strictly as per the mandate drawn between the lender and the borrower

quantity and value of works carried out by them and hence, the lenders did not allow adjustment of advance given to the EPC contractor.

- 2.4.5 The core promoter, M/s Lanco Infratech Limited (LITL), was itself EPC contractor of Lanco Amarkantak Power Project. The EPC contract was awarded to LITL at ₹5523.70 crore for 1320 MW. REC disbursed ₹1804.29 crore and PFC disbursed ₹1809.77 crore (total: ₹3614.06 crore) to this project. M/s Lanco Amarkantal Power Limited (LAPL), responsible for developing the project, released additional advances to LITL to maintain the pace of work for completion of the project on schedule. The EPC contractor was, however, unable to maintain the mobilization level of resources. Total additional advance paid to LITL as on 11 August 2015 stood at ₹636.70 crore, which had to be adjusted by 31 August 2016. However, the status of adjustments were not made available to audit.
- 2.4.6 M/s GVK Projects and Technical Services Limited, one of the group companies of the promoter of M/s GVK Ratle Hydro Electric Project Private Limited (GRHEPPL) was the EPC contractor of the project. PFC released ₹264.72 crore to EPC contractor, though many of the stipulated conditions were not complied with and work at the project site did not commence. Since the funds released to the EPC contractor were neither used for the project activities nor were refunded, the NPA<sup>31</sup> Committee of PFC recommended (March 2016) that the entire loan granted to the project be recalled and the corporate guarantee of ₹264.72 crore be invoked if the borrower fails to liquidate all obligations of PFC within 15 days and adopt RBI circular regarding wilful default against the promoter/borrower. No action, however, had been taken by PFC, even after a lapse of six months (September 2016).
- 2.4.7 M/s Meenakshi Energy Private Limited (MEPL) had contracted out the project work in various packages to individual contractors. The contractor appointed for Boiler works and BoP was financially constrained and the project work stalled. The overall progress was 71.61 per cent only (31 May 2016) against the envisaged project completion by August 2012. REC, despite being the lead lender, did not take effective action to ensure that the project activities were completed within the scheduled commissioning date. This also highlights a need for contractor evaluation by REC before they are being appointed in a project funded by it.

MoP/REC noted (March 2017/ December 2016) the observation regarding evaluation of EPC contractor and assured that this would be considered at the time of revising the internal guidelines. MoP/REC further stated (June 2017/ December 2016) that:

(i) In case of MEPL, the project was being monitored quarterly by Lenders' Engineer who reported delay in project completion only in November 2015.

<sup>31</sup> Non-Performing Assets

- (ii) In case of RPPL, Phase-I has been successfully completed and Phase-II has been completed up to 95.51 per cent. The project was delayed mainly due to fund constraints.
- (iii) In case of Lanco Babandh Power Project, the CLA prescribed a monitoring mechanism<sup>32</sup> and REC had processed every claim only after receipt of Lenders' Confirmation Notice with relevant certificate.
- (iv) REC has devised a monitoring payment mechanism in one of the lending cases where the promoter was the EPC contractor and requested lead, PFC, for implementing the mechanism. REC would insist for following similar mechanism wherever promoters and contractors are same in the projects.

MoP/PFC stated (February 2017/ June 2017 and November 2016) that:

- (i) In case of GRHEPPL, based on assurance (01 January 2015) of GoJ&K to provide all cooperation and consequent request (21 January 2015 and 25 March 2015) of the borrower for release of funds, PFC approved the release of ₹314.57 crore for kick starting the works at site. MoP added (February 2017) that a condition to obtain corporate guarantee of ₹264.72 crore was also stipulated. The release of the fund was not unjustified as the same was made with bonafide intention of resuming the project works. As the case was sub-judice at this stage, any comment by Audit on the role of PFC may impair the financial interests of PFC or may thwart its efforts for revival of the project.
- (ii) In case of M/s RKM Powergen Limited, all contract packages awarded to MIPP were reviewed by LE and end-use of funds had been continuously monitored by LFA.
- (iii) In case of SEPC, utilisation certificate for the advanced amount of ₹290 crore was obtained from LFA prior to subsequent disbursement from PFC. The monitoring mechanism was proposed and discussed in Lenders' Meets held on 14 September 2016 and 19 April 2017 and was to be put in place prior to the third disbursement.

Audit appreciates that REC will consider the highlighted issue in the proposed revision of internal guidelines. The other replies are not acceptable in view of the following:

As per the CLA (Clause 9.3.4: Certificate of LE, Condition precedent to Each Drawdown), the Lender's Agent (Lead Bank ICICI) would issue a lending confirmation notice (LCN) only after certification that each of the previous drawdown (release of fund) is in accordance with the base case business plan and reflects the actual physical progress of the project

In addition to above as per Clause 9.3.7 of CLA, the borrower shall provide certification of auditor that the end use of proceeds of the previous drawdown have been utilized only for the purposes of project cost as permitted under this agreement

As per the CLA (Clause 9.3.11: Condition precedent to Each Drawdown), the lenders' Agent ICICI should have received project progress reports containing information that the expenditure incurred by the project is in accordance with estimated project costs, project schedule and construction budget delivered prior to initial drawdown date

- (i) In case of MEPL, the first lenders meeting to discuss the slow progress of works relating to Boiler and BoP was held only in December 2015, four years and nine months after disbursement to the project.
- (ii) In case of RPPL, the fund constraints of the promoter affected the contractor (being a subsidiary of the core promoter) adversely which led to delay in project implementation.
- (iii) The monitoring mechanism highlighted in the reply regarding Lanco Babandh Power Project, does not address the concern regarding actual utilisation of funds made available to promoter/other group companies.
- (iv) In case of GRHEPPL, release of funds despite non-compliance of the stipulated conditions lacked justification. PFC was aware of the previous history of fund diversion by the promoters and should not have released funds to the promoter/group companies unless there was clear indication of resumption of works. There was undue delay on the part of PFC in invoking corporate guarantee.
- (v) In case of SEPC, payments to the EPC contractor needed to be mapped to ensure end utilisation of loan. The RBI guidelines also mandate strengthening of internal controls and credit risk management system for enhancing the quality of the loan portfolio.

#### 2.5 Deviations from guidelines in PFC

Audit noticed that PFC also deviated from their own internal guidelines as indicated below:

2.5.1 PFC sanctioned (02 April 2013) a loan of ₹4706 crore against the estimated project cost of ₹6274.77 crore, underwriting the entire debt portion to M/s GVK Ratle Hydro Electric Project Private Limited (GRHEPPL). PFC Capital Advisory Services Limited, a subsidiary of PFC, was to arrange prospective lenders for down selling a portion of the loan. PFC signed the loan agreement in August 2013 and made the first disbursement of ₹816.90 crore (hold portion of ₹433.97 crore and down selling portion of ₹382.93 crore) in September 2013 without ensuring that other lenders/FIs participated in this project. Audit noticed that PFC could not find other lenders (other banks/FIs) so far (September 2016) due to continuing losses of the promoter company. By signing the loan agreement and commencing the disbursement, PFC committed to the project as the sole lender, which was not permitted as per internal guidelines of PFC.

MoP/PFC stated (February 2017/June 2017 and November 2016) that the loan was sanctioned in line with its internal policy, which permitted underwriting of total debt of the project subject to the exposure limits. As per this policy, if PFC disburses against the down selling portion, an additional interest of 0.50 *per cent* was to be charged over and above the applicable interest rate, which was done in this case. As per policy, PFC had to

make all efforts to down sell the underwritten debt and continuous efforts have been taken in this regard. Therefore, PFC has not violated any of its internal guidelines.

The reply is not acceptable. Committing to a capital intensive project as a sole lender was not a judicious measure. As a prudent measure, PFC should have tied up with other lenders before disbursement. The maximum permissible exposure limit as per RBI guidelines/ internal guidelines of PFC was 50 *per cent* of project cost. However, PFC had committed to support the entire project cost, which was in contravention of its internal/RBI guidelines.

2.5.2 The Board agenda (30 July 2001) proposing sanction of loan to M/s Konaseema Gas Power Limited (KGPL) indicated that Ministry of Petroleum and Natural Gas (MoP&NG) had suggested that the power plant at Konaseema should be built on dual fuel capability so that it would not depend on natural gas alone in view of uncertain gas availability. The project company had a PPA with Government of Andhra Pradesh which stipulated that the state utility would procure power from the project only if gas was used as fuel. At the time of appraisal of the loan, PFC did not weigh the consequences of not having dual fuel capability and the uncertainty over power sale in case of power generation using alternate fuel. PFC sanctioned the loan and subsequently, shortage of gas affected the commercial operation of the project. The project was implemented in 2006 but the loan account turned NPA in October 2011 in the absence of gas supply.

MoP/PFC stated (February 2017/June 2017 and November 2016) that though MoP&NG stipulated duel fuel capability, the PPA with Government of Andhra Pradesh was for gas-based power generation alone. The lead lender (IDBI Bank) stipulated that the PPA be amended to include power generation from alternate fuel. Though the PPA had been amended for power generation from alternate fuel, the same was deleted subsequently in October 2008.

The project could not be operated finally even after its completion and the loan account turned NPA.

# Chapter-III DISBURSEMENT OF LOANS

As per the Common Loan Agreement (CLA), loan funds were to be disbursed after fulfilling the pre-disbursement conditions mentioned in the loan agreements. These conditions were incorporated in the loan agreements in order to mitigate the risks perceived at the time of detailed appraisal of the borrowers regarding their ability to bring in required equity funds and for recovery of loan within prescribed time. Audit, however, observed that the pre-disbursement conditions were relaxed by REC and PFC from time to time. After the first disbursement, subsequent disbursements were often made to save the funds already disbursed, further relaxing the conditions and extending timelines. Illustrative cases of such non-compliance of pre-disbursement conditions by the promoters/borrowers and relaxation by REC and PFC are discussed in the succeeding paragraphs.

#### 3.1 Non Compliance with CLA

3.1.1 As per clause no. 2.2.4 of Common Loan Agreement with M/s Ind-Barath Power (Madras) Limited (IBPML), 'after the initial drawdown date, the borrower shall, prior to the next drawdown date, furnish to each of the lenders, a certificate from its auditors certifying the utilization/end use of all amounts borrowed from each lender, failing which the next drawdown shall not be made. Provided, however, that such certification in case of last drawdown shall be furnished within 90 (ninety) days of end of such drawdown'. IBPML had incurred a total expenditure of ₹632.08 crore up to 31 August 2014 (funded through equity: ₹478.24 crore, debt: ₹153.84 crore). PFC had disbursed ₹442.26 crore by August 2014. The loan amount of ₹288.42 crore (₹442.26 − ₹153.84 crore) was lying in cash and bank balance in the borrowers accounts. Despite this, REC disbursed (February 2015) ₹416.21 crore without ensuring the utilization of the loan previously disbursed by other lenders including PFC.

MoP/REC stated (March 2017/June 2017 and December 2016) that the disbursement was made on the basis of Lending Confirmation Notice from lead lender (PFC).

The reply is not acceptable. As per Common Loan Agreement, REC should have made the disbursement only after receipt of confirmation regarding utilization of funds already available with the borrower.

**3.1.2** REC and PFC relaxed various pre-disbursement conditions of the Common Loan Agreement with SPIC Electric Power Corporation Limited (SEPC), which, *inter-alia*, included assignment of security over coal supply and transportation agreement (CSTA), land lease agreement (LLA) and concession management agreement (CMA). Though these conditions were to be complied with before first disbursement (10 November 2015), REC and PFC allowed time up to March 2016 for fulfilling these conditions.

REC stated (December 2016) that the relaxation was granted based on the decision of the lead lender (PFC). PFC replied (November 2016) that time till 31 March 2016 was

allowed for signing these agreements. Since security creation hinged upon signing of LLA and CMA, time extension for security creation was also proposed. MoP stated (February 2017) that timelines for compliance of these conditions were relaxed as per laid down procedures of PFC.

Audit noticed that promoters were yet to comply with the above pre-disbursement conditions (October 2016).

3.1.3 As per Common Loan Agreement of PFC with M/s NCC Power Project Limited (NPPL), the promoter was to sign PPAs for sale of power within 12 months of initial drawdown, *i.e.*, by 30 December 2012. This condition was relaxed from time to time, the last extension was given up to 30 September 2016. Audit noticed that the promoter could not finalize PPA. Though the promoter participated in Case-1 bids, it could not win as the tariff it offered was high; the bids being L4 (₹3.684 per unit) in 2011, L13 (₹6.425 per unit) in 2012, L2 (₹4.35 per unit) in 2014, L7 (₹4.407 per unit) in 2016.

MoP/PFC stated (February 2017/June 2017 and November 2016) that initially NPPL had a memorandum of agreement with PTC. However, the same did not materialize as the end user cancelled its agreement with PTC. It was also stated that the project company had been participating in bids and initiated discussion with other power producers who had PPAs. It was added that since the lead lender extended the timelines for compliance of this condition till 30 September 2016, the same was extended by PFC also.

The reply is not acceptable. Continued disbursal of loan instalments and further extensions of timelines lacked justification as no PPA has been executed even after a lapse of four years from the stipulated time.

3.1.4 M/s Coastal Power Limited, the core promoter holding 74 per cent equity in M/s Jal Power Corporation Limited (JPCL), informed (05 August 2013) that it had sold 21.92 per cent of its stake in the project to two other private investors; M/s FIL Capital Management (FIL) and M/s Sequoia Capital Growth Investment Holdings (Sequoia) in September 2012 due to liquidity crisis. The project underwent cost overrun (01 July 2014) and as project cost increased, additional equity capital of ₹208.86 crore was required. The new private investors did not contribute to the equity. The promoter, M/s Coastal Power Limited, could not bring in additional equity due to its poor financial condition. This placed an additional risk on PFC, the lead lender of the project. PFC has disbursed ₹386.23 crore on the project till August 2016. With the promoter unable to bring in additional equity, the project turned NPA in January 2015.

MoP/PFC stated (February 2017/June 2017 and November 2016) that the new promoters participated in the project in the capacity of investors and not as promoters. Hence, CPL remained as the core promoter of the project who had already furnished undertaking of further equity infusion in the event of cost overrun. Considering the equity infused till that time vis-à-vis the equity contribution envisaged, the change in equity was approved.

The reply is not acceptable. While approving the change in equity, PFC was aware of the financial crunch being faced by the core promoter and hence admission of new investor ought to have been viewed vis-à-vis the risks to project completion.

3.1.5 In August 2004, PFC realized the shortage of gas for the power projects including the project of M/s Konaseema Gas Power Limited (KGPL), and approached MoP seeking intervention of the Ministry to find a solution to this crisis. PFC had initially suggested that further disbursements to this project be stopped, pending a solution to the fuel supply. Audit, however, noticed that PFC continued disbursement of the loan amounting to ₹329.27 crore from December 2004 to July 2016, though availability of gas was not ensured.

MoP/PFC stated (June 2017/November 2016) that at the time of first disbursement in June 2004, the consolidated Gas Supply Agreement with GAIL was in place. MoP stated (February 2017) that the availability of gas was taken up by PFC and borrower/promoters with the State Government and GAIL, and it was assessed that gas would be available by January 2007. Accordingly, the disbursements were done, based on the decision of the consortium.

The reply needs to be viewed against the concerns already expressed by PFC (August 2004) regarding shortage of gas. Further disbursements ought to have been based on firm availability of gas to the project.

**3.1.6** Common Loan Agreement provided for charging of additional interest in case of non-compliance of any of its conditions or conditions imposed in any other financing documents relating to the sanction of loans. Additional interest was to be levied at one *per cent* above normal interest, if disbursements were made in cash and at 2 *per cent*, if disbursements were made against Letter of Comfort (LoC). Audit observed that REC did not levy additional interest from project companies for non-compliance of pre-disbursement conditions as given in **Table 3.1**.

Table 3.1: Cases where additional interest was not levied as per loan agreement

| Name of the project                 | Audit observation   | REC reply  |
|-------------------------------------|---|--|
| Corporate<br>Power Limited<br>(CPL) | As per the sanction letter to CPL, the borrower was to create a mortgage on the land in favour of lenders within one year from the date of first disbursement (June 2010). REC granted extension till September 2013 for mortgage of the balance land (52.90 acres), but the same was not complied with. No extension was allowed post March 2016. However, REC did not charge additional interest till it was pointed out by Audit in March/April 2016. Subsequently, REC levied interest of ₹49.29 crore for the period from June 2010 to March 2016. | Following the audit observation, additional interest was recognized. However, as the loan account had already turned NPA, income was not recognized. |

| Meenakshi<br>Energy Private<br>Limited<br>(MEPL)          | MEPL entered (February 2010) into an agreement for long-term sale of 600 MW with Power Trading Corporation but back-to-back PPA was not signed. Neither was any long/short term PPA signed for the balance power (required as per clause 5.2(x) of loan agreement).  Audit noticed that REC levied interest for part-period from March 2011 to December 2013; no interest was levied from January 2014 to December 2015 and full interest was levied from January 2016 onwards. This resulted in short levy of additional interest of ₹21.49 crore during March 2011 to December 2015.   | The conditions were to be complied with by 23 March 2012 and after that date, interest was charged on all disbursements made against LoC for non-compliance of PPA condition. Since no cash disbursement was made between 23 March 2012 and 09 July 2012, no interest was charged. The condition regarding finalizing PPA was amended in July 2012 and time for compliance of this condition was extended up to 30 June 2017. Hence, no additional interest was charged thereafter. |
|---|--|---|
| KSK<br>Mahanadi<br>Power<br>Company<br>Limited<br>(KMPCL) | The borrower was required to create a mortgage on the project land and assign the same within six months from the date of first disbursement (30 August 2011). PPA for 1260 MW was to be executed and assigned within 12 months from the date of first disbursement. REC extended the time limit for complying with these conditions up to March 2017 and did not charge additional interest of ₹18.35 crore for the period from 31 August 2011 to 06 May 2014 (date of compliance) for noncreation of mortgage of project land, and ₹62.43 crore for the period from 31 August 2011 to 30 June 2016 (date of compliance) for not signing PPA. | No condition was stipulated for charging additional interest towards non-execution of PPA and REC does not have a policy for charging the same. The borrower was granted time till 30 June 2014 for creation of security (mortgage and assignment of project land). Hence, no additional interest was charged till that period.   |
| Ind-Barath<br>Energy Utkal<br>Limited<br>(IBEUL)          | As per clause 5.2 (iii) b of loan agreement, IBEUL was to assign PPA before the first drawal (September 2012) of the loan amount. Assignment of PPA and creation of security thereon was complied with only in July 2016. However, additional interest was charged up to February 2014 and thereafter, additional interest of ₹18.19 crore from March 2014 to June 2016 was not charged.   | Additional interest was charged in January 2014 for non-creation of security since PPA and Fuel Supply Agreement were not assigned. Since next disbursement was made in May 2014 and time extension was accorded during this period, no additional interest was charged thereafter.   |

As can be seen from these cases, the provisions of loan agreement were not enforced consistently in all loan cases:

- Additional interest was charged for non-compliance of PPA condition in respect of MEPL for the entire period of default, but was charged for limited periods in respect of KMPCL and IBEUL.
- Though extension for compliance of pre-disbursement conditions was granted to CPL, additional interest was charged for non-compliance during the extended period. However, additional interest was not charged to MEPL, KMPCL and IBEUL. In the case of MEPL, additional interest was charged only for disbursement against LoC and no interest was charged for disbursement made in cash.

In fact, interest should have been charged for all disbursements and not on the incremental disbursements alone. Additional interest was to be levied for the entire period irrespective of the mode of payment, disbursement in cash or against LoC. The extension of time for compliance of conditions does not provide for non-levy of additional interest, particularly as REC would bear additional risk on these loans.

MoP further added (June 2017) that rational charging of additional interest in all the projects for non-compliance of conditions shall be taken care in future.

Audit appreciates the assurance which would be reviewed in future audits.

#### 3.2 Adjustment of interest during construction

The loan for a project is sanctioned based on the project financials, including inter alia, the proportion of interest during construction (IDC) in the project cost. Audit noticed that during disbursement of loans, REC adjusted a higher proportion of loan against IDC than approved during loan sanction. With these adjustments, the loan account remained 'standard' though no repayment was made by the borrower as per the loan servicing schedule. Audit noticed four such instances in the sample audited.

- **3.2.1** As per the Board agenda for sanction of loan to M/s Lanco Babandh Power Limited (LBPL), total IDC of the project was ₹844 crore, *i.e.*, 15.22 *per cent* of the total debt of ₹5544 crore. Audit noticed that REC adjusted ₹271.10 crore as against ₹152.20 crore towards IDC from June 2013 to February 2016. Since REC disbursed ₹1000 crore up to February 2016, IDC adjusted by REC worked out to 27.11 *per cent*. Had the interest not been adjusted in this manner, the loan account would have become NPA in September 2013.
- **3.2.2** As per the entity appraisal of M/s Lanco Vidharbha Thermal Power Limited (LVTPL), the total IDC of the project was ₹761.76 crore, *i.e.*, 10.97 *per cent* of the total debt. Audit noticed that REC adjusted ₹181.62 crore towards IDC from June 2013 to February 2016. Since REC disbursed ₹490.06 crore up to February 2016, IDC worked out to 37.06 *per cent*. Had the interest not been adjusted in this manner, the loan account would have become NPA in December 2013.
- 3.2.3 As per the entity appraisal of M/s Lanco Amarkantak Power Limited (LAPL), the total IDC of the project was ₹2495.18 crore, *i.e.*, 32.48 *per cent* of the total debt. Audit noticed that REC adjusted ₹835.29 crore towards IDC from November 2012 to August 2016. Since REC disbursed ₹1804.29 crore up to August 2016, IDC adjusted worked out to 46.29 *per cent*. Had the interest not been adjusted in this manner, the loan account would have become NPA in June 2013.
- 3.2.4 At the time of sanction of fifth cost overrun to M/s Alaknanda Hydro Power Company Limited (AHPCL), the project had already achieved commissioning (21 June 2015). Despite this, REC sanctioned ₹24.86 crore for funding of IDC. The internal

guidelines of REC do not permit sanction of loan for IDC funding after the project achieves commissioning, particularly when the borrower was in default.

MoP/REC stated (March 2017/December 2016) that interest adjustment was done as per provisions of common loan agreement after the receipt of Lenders Confirmation Note from the lead bank. REC added that sanction of loan for IDC funding in case of AHPCL was based on the joint decision taken by all lenders. The conditions in the internal guidelines were relaxed by the competent authority. MoP assured (June 2017) that continuous IDC adjustment in a project shall be avoided and shall be taken up in the Joint Lenders Forum for a resolution.

#### 3.3 Delays in loan processing and disbursement

Considerable time gap was noticed between the receipt of loan application and sanction of the loan, and between sanction of the loan and first disbursal. Since the projects considered for funding are capital intensive, such a time gap increases capital costs and impacts the viability of projects adversely. The internal policy of REC and PFC was silent on this aspect. Audit observed abnormal delays between receipt of application, sanction and first disbursement of loan in two instances, detailed below. Both loan accounts eventually turned into NPAs.

3.3.1 The loan application of M/s Krishna Godavari Power Utilities Limited (KGPUL) was received in August 2004 and the loan was sanctioned after two and a half years in March 2007. The loan documentation was completed in October 2008 and the first disbursement was made in November 2009. Thus, there was a gap of more than five years since the receipt of loan application and the first disbursement. Audit noticed that the project viability was not re-assessed, given the considerable time-gap between the receipt of loan application and first disbursement. The project underwent cost overrun in July 2013 and since the promoter could not bring in required equity for cost overrun funding, the project activities stopped and the loan became NPA.

MoP/PFC stated (February 2017/June 2017 and November 2016) that project cost was generally reviewed at the time of disbursement only in case of major changes observed in the project cost. Lenders' Engineer had reviewed the project cost as a part of its due-diligence before commencement of disbursement and had certified that there was no cost overrun in the project. MoP added that 84 *per cent* of the project cost was on firm package contract and sufficient contingency was built in as part of the project cost for escalation and for any unforeseen cost overrun.

The reply is not acceptable. PFC approved cost overrun in July 2013, increasing the project cost by ₹76 crore. Details indicated that cost revision occurred in package contract also, indicating that it was not firm. The project cost further increased in May 2016, registering an overall increase of ₹160 crore from the original estimated cost.

3.3.2 PFC received the loan application of M/s SPIC Electric Power Corporation Limited (SEPC) in October 2012, sanction was accorded in June 2013, and first disbursement was made in November 2015. In REC, the application was received in April 2013, loan was sanctioned in January 2014 and first disbursement was made in January 2016. REC and PFC did not revisit the project cost and its viability or the financial capability of the promoters for meeting the enhanced project cost, before actually committing to funding the project. As per Lenders' Meeting held on 07 October 2016, it was observed that value of the EPC contract of the project had increased from the original sanctioned level by 19 per cent.

PFC stated (November 2016) that the loan was sanctioned in June 2013 and as per request of the borrower, loan validity was extended up to June 2014, since sanction for balance debt was expected to take some more time. Documentation was done within the timeline prescribed in internal guidelines. MoP stated (February 2017) that the time lapse between sanction and documentation was normal in large infrastructure projects and to mitigate the risk of cost overrun, condition requiring funding of cost overrun without recourse to lenders was also stipulated.

In view of the significant changes noticed in the project cost, there is a case for reassessing the project cost in case of large time gaps between sanction and disbursement of loan.

#### 3.4 Hasty disbursal

3.4.1 During the period between the loan sanction (August 2011) and first disbursement (July 2012) to M/s Jas Infrastructure and Power Limited, significant events occurred, which warranted a cautious approach towards the loan disbursals. On 01 June 2012, ten months after sanction of the loan, a CBI investigation was instituted against the promoters for fraudulently obtaining a coal block and an FIR was filed against the promoters on 03 September 2012. However, REC went ahead with the first disbursement of ₹30.95 crore in July 2012 and second disbursement of ₹2.23 crore in November 2013. Audit noticed that the chances of recovering the funds were remote. The valuer had assessed (February 2016) the market value of this project at ₹143.35 crore against the disbursement of ₹2697.66 crore by all lenders. In this report, the valuer assessed the value of plant and machinery as zero against the expenditure of ₹1549.07 crore. The promoter has not submitted the details of capital work in progress/advances of ₹2286 crore since 05 February 2014.

REC stated (December 2016) that after disbursement of ₹30.95 crore on 14 July 2012, keeping in view the progress of project, it was decided not to disburse further loan and issue regarding CBI enquiry was discussed in a consortium meeting dated 13 September 2012. MoP added (March 2017) that after compliance of applicable pre disbursement conditions of envisaged securities in favour of consortium lenders, REC had made disbursement based on the Lenders' Confirmation Note issued by the lead lender.

The reply is not acceptable. Against the backdrop of CBI investigation and uncertainties surrounding the project, REC's decision to disburse the loan was not justified. The common loan agreement also empowered (clause 13.15) lenders to withhold disbursement at any point of time, irrespective of whether any disbursement was made by the lead lender / other lender(s), if in its opinion, any event that adversely affects the viability of the project had occurred.

Audit had commented on PFC funding this project which was reported in Paragraph 11.2 of Report No.15 of 2016 (Vol. I) of the Comptroller and Auditor General of India.

#### 3.5 Diversion of funds

Trust and Retention Accounts (TRA) is a payment mechanism in the form of an account opened in the designated bank to ensure all the cash flows of the project are routed through this account as per the mandate drawn between the lender(s) and the borrower. In order to ensure end use of loan funds and control over the loan TRA, the loan agreements provided for obtaining utilisation/end use certificate from the auditors of the lenders prior to disbursements. Before making each disbursement, REC and PFC was required to obtain a certificate from the Chartered Accountants of the promoter/borrower stating that the funds disbursed till then had been spent on project activities.

RBI guidelines (July 2013) advised that the financing agencies should not depend entirely on certificates issued by the Chartered Accountants, but strengthen their internal controls and credit risk management system to enhance the quality of their loan portfolio. The guidelines also provided that appropriate measures in ensuring end-use of funds should form a part of their loan policy document. The following were stipulated:

- (a) Meaningful scrutiny of quarterly progress reports/operating statement/balance sheets of the borrowers;
- (b) Regular inspection of borrowers' assets charged to the lenders as security; and
- (c) Periodical scrutiny of borrowers' books of accounts and the 'no-lien' accounts maintained with other banks.

In addition, the entrepreneurs/promoters of companies where banks/ FIs had identified siphoning/diversion of funds, misrepresentation, falsification of accounts and fraudulent transactions should be debarred from institutional finance from the scheduled commercial banks, FIs and NBFCs".

Audit observed that no specific measures were adopted by REC and PFC to ensure end utilization of funds by the borrowers. They remained solely dependent on Auditors' Certificate regarding the end use of funds. The operations of Trust and Retention Accounts (TRA) of funded projects were not regularly monitored to ensure that loan funds from all the lenders were used for the project activities alone. Further, details of non-lien bank accounts of borrowers, if any, were not regularly obtained and monitored to ensure that no funds were transferred from TRAs to these accounts. Instances of loan

funds being invested in fixed deposits without obtaining prior approval of the lenders were also noticed. This eventually resulted in siphoning/diversion of funds of ₹2457.60 crore in following five cases:

**3.5.1** REC sanctioned (10 November 2014) a loan of ₹1166 crore and disbursed ₹416.21 crore to M/s Ind-Barath Power (Madras) Limited (IBPML). The promoters of the project company kept the lenders' fund of ₹573.99 crore in fixed deposits (FDs) of ₹548.25 crore with Bank of India and ₹25.74 crore with UCO Bank. The promoter availed loans on these FDs during the period 2013 to 2015. The FDs were renewed from time to time to meet the shortfall in cash flows of other group companies. As per RBI guidelines, if any funds borrowed from banks/FIs are utilised for purposes unrelated to the operations of the borrower, it would be treated as 'siphoning of funds'. The promoter admitted (August 2016) mis-utilisation of funds in the Joint Lenders' Meeting (JLM). REC was yet to take action against the borrower (October 2016).

MoP stated (March 2017) that REC has given consent for legal action against the borrowers and the TRA banker for failure to perform its obligation under TRA.

3.5.2 Diversion of about ₹700 crore was noticed in January 2014 in the case of M/s KSK Mahanadi Power Company Limited (KMPCL). The funds were lent to three SPV<sup>33</sup>companies of the promoters implementing the support infrastructure like water, rail-coal transport etc. The works being executed by these SPVs were not part of the project of KMPCL, but were funded by another set of lenders with the responsibility of infusion of equity by the promoters of KMPCL. It was decided (December 2014) to merge two of the SPVs with KMPCL and bring back ₹125 crore invested in the third SPV to TRA prior to subsequent disbursement towards cost overrun. Audit noticed that despite KMPCL not fulfilling these conditions, REC disbursed ₹571.69 crore from March 2015 to May 2016 and participated (March 2016) in cost overrun with additional loan of ₹1355 crore. Continued disbursements of funds despite non-adherence to stipulated conditions in the face of known diversion of funds by the borrower were imprudent.

MoP/REC stated (March 2017/December 2016) that the two SPVs would be merged and ₹125 crore would be brought back to TRA by September 2016 and no further disbursement would be made beyond this date. It was informed that the process of merger of two SPVs and recovery of amount invested in SPV were in progress.

**3.5.3** REC sanctioned (November 2009) a loan to M/s Corporate Power Limited (CPL) and disbursed ₹830.39 crore. The EPC contract of this project was awarded to one of the promoters, M/s Abhijeet Projects Limited (APL). APL, in turn, awarded a contract for supply of equipment and services for erection of Boilers, Turbine and Generator (BTG) package to Bharat Heavy Electricals Limited (BHEL). As per drawal notice for Phase-I, as on 30 June 2012, the total construction budget was ₹2900.07 crore, which included ₹2047.98 crore towards EPC cost. Almost the entire budgeted cost had been expended by

Raigarh-Champa Rail Infrastructure Private Limited (RCRIPL), KSK Water Infrastructure Private Limited (KWIPL) and KSK Mineral Resources Private Limited (KMRPL)



16 October 2012, with an expenditure of ₹2867.16 crore (98.87 per cent of original project cost). However, ₹786.10 crore payable to BHEL remained unpaid. BHEL served legal notice to CPL and APL for recovery of ₹1109.15 crore (including interest of ₹323.05 crore). Non-payment of BHEL's liability, even after major chunk of loan disbursement, indicates that loan funds were not utilized for the intended purpose. Audit noticed that REC had neither declared the borrower as a willful defaulter nor filed FIR against the borrower till September 2016.

MoP/REC stated (March 2017/December 2016) that the proceeds of Trust and Retention Accounts (TRA) were utilized for payment to the EPC contractor. However, due to non-payment of dues of various subcontractors/vendors including BHEL by the EPC contractor, the site was demobilized. It was also added that though M/s Deloitte was appointed on behalf of the lenders to conduct a special audit to analyse this aspect, the same could not be carried out due to non-availability of documents. Further course of action and recovery strategy was being steered by ARCIL, the present lead institution.

3.5.4 M/s Alaknanda Hydro Power Company Limited (AHPCL) had opened an account with HDFC Bank, a non-consortium bank, without taking permission from the lenders. The borrower obtained dues of ₹187.77 crore from Uttar Pradesh Power Corporation Limited (UPPCL) in this account (with HDFC Bank) and utilized it for unauthorized purposes. The Joint Lenders Meeting (04 April 2016) determined that diversion of funds by the borrower had resulted in non-servicing of its dues.

MoP/REC stated (March 2017/December 2016) that Punjab National Bank (PNB) informed in December 2016 that there was no fund diversion and presently the cash flow from UPPCL were being routed through the account maintained with the lead bank. It was assured that the payment mechanism would be further strengthened, and the same would be made part of appraisal guidelines after its review.

Audit appreciates the assurance of REC. However, in the case of AHPCL, the auditor appointed by PNB had verified the utilization of above funds and reported that transactions for ₹170.87 crore only could be examined in its audit. PFC did not offer any comments.

3.5.5 PFC disbursed ₹816.90 crore in September 2013 to M/s GVK Ratle Hydro Electric Project Private Limited (GRHEPPL). The project activities were stopped in July 2014. Audit noticed that, around ₹380.61 crore out of the loan disbursed was lying idle in TRA or was invested in fixed deposits with other banks (other than the bank which maintained TRA) and the promoter did not submit the non-encumbrance certificate for these fixed deposits. Audit also noticed that in December 2014, after this came to notice of PFC, the promoter paid ₹2 crore to one of its group companies as advance without routing the same through the TRA. The borrower neither took prior approval of PFC for such diversion nor did PFC monitor the use of funds. Since PFC was the only lender in this project, the principal responsibility of monitoring transactions in TRA and utilization

of loan funds rested with it. Repeated diversion of loan funds by the promoter points to poor monitoring by PFC.

MoP stated (June 2017) that PFC shall review its policy in this regard so as to have better control on the project funds and further strengthen the monitoring operation of TRA.

Audit appreciates that PFC will consider the highlighted issue in the proposed review of its policy.

## Chapter-IV RESTRUCTURING OF LOANS

A restructured loan account is one where the lender, for economic or legal reasons relating to the borrower's financial difficulties, grants concessions to the borrower that it would not have otherwise considered. Restructuring would normally involve modification of terms of the advances/ securities including alteration of repayment period/ repayable amount/ the amount of instalments/ rate of interest. Restructuring of loans also occurs due to sanction of additional loan for meeting cost overruns due to cost escalations, delayed implementation of projects, increased scope of the project etc. The prudential norms of REC and PFC stipulate guidelines that are to be followed when a loan account is restructured.

REC carries out entity and project appraisals at the time of restructuring of loans/funding of cost overruns as is being done at the time of sanction of a new loan. The only change at the time of restructuring/funding of cost overruns is that the promoter is required to bring 100 per cent equity required for funding the cost overrun upfront, i.e., before any disbursement against funding of cost overrun.

PFC, on the other, does not carry out entity and project appraisal at the time of restructuring/funding of cost of overruns. Financial viability of the project is, considered however, keeping in view increased project cost. As is being done by REC, PFC also stipulates that

#### Case Study: Loan sanctioned by PFC without entity appraisal

PFC participated in the project of M/s Jhabua Power Limited at the time of first cost overrun without entity appraisal and sanctioned (25 April 2014) a loan of ₹250 crore. The capability of the promoters in implementing the project were not, therefore, examined before sanctioning the loan. Audit noticed that the promoters had incurred losses during 2011-12, 2012-13 and 2013-14 (up to December 2013).

MoP/PFC stated (June 2017/November 2016) that the policy for funding cost overrun was at formulation stage. Hence, no entity appraisal was carried out.

the promoter brings 100 per cent equity required for funding the cost overrun upfront.

The common parameters considered by REC and PFC at the time of approval of restructuring/cost overrun include (i) financial viability of the project, (ii) default of promoters/borrowers with FIs/banks including REC/PFC, and (iii) upfront equity required for cost overrun. REC also considers 'losses/accumulated loss of promoters/borrowers' at the time of restructuring. REC/PFC may also incorporate additional conditions to be complied with by the promoter/borrower.

RBI guidelines issued in January 2014 stipulated that no account will be taken up for restructuring by non-banking financial institutions unless the financial viability is established and there is a reasonable certainty of repayment by the borrower. Any restructuring done without looking into cash flows of the borrower and assessing the

viability of the project/ activity financed, therefore, would be treated as an attempt at ever greening a weak credit facility. Though RBI directed that the above guidelines were to be suitably adopted, the existing internal guidelines of REC and PFC were not modified, nor were they discussed in the meeting of Board of Directors till November 2016. Meanwhile, a number of loans were restructured and cost overruns were sanctioned during January 2014 to March 2016 without applying the RBI guidelines.

Scrutiny of loan cases selected for detailed examination indicated that REC and PFC did not adhere to their internal guidelines and that of RBI. Relaxations were granted in respect of key financial parameters and benchmarks, overlooking the extant guidelines/norms. These contributed to continue financing of ineligible and unviable projects. Audit findings in this regard are discussed in the succeeding paragraphs.

#### 4.1 Financial viability of the projects

Financial viability of a project is its ability to generate adequate funds so that it can sustain its operation and service its debts. For projects to be financially viable, levelised tariff should be more than the levelised cost of generation, debt service coverage ratio

Levelised tariff is the net present value of the tariff per unit over the lifetime of the project/tenure of loan/tenure of PPA

Levelised generation cost is the net present value of electricity cost per unit over the lifetime of the project/ tenure of loan/ tenure of PPA (DSCR) should be above the minimum benchmark and internal rate of return (IRR) should be above the benchmark of 12 *per cent*. Since the DSCR and IRR are dependent on the gap between levelised tariff and levelised cost of generation, changes in

levelised tariff/ levelised cost of generation are critical to financial viability of the project. The viability assessment of seven projects, (one common loan case<sup>34</sup> of REC and PFC, one standalone loan case<sup>35</sup> of PFC and five standalone cases<sup>36</sup> of REC) at the time restructuring/cost overruns were analysed. Audit noticed that in all the seven cases, the levelised tariff assumed by REC/ PFC was higher vis-à-vis the levelised tariff worked out on the basis of actual tariff existing at the time of sanction of additional loans/ cost overrun. The individual cases are discussed below:

| Name of project | Levelise<br>conside<br>(₹) | THE PERSON NAMED IN COLUMN | Levelised<br>generation<br>cost (₹) |  |
|-----------------|----------------------------|----------------------------|-------------------------------------|--|
|                 | REC/<br>PFC                | Audit                      |                                     |  |
| RNPL            | 4.17                       | 3.23                       | 3.86                                |  |
| AHPCL           | 4.96                       | -                          | 3.89                                |  |
| EPML            | 3.96                       | 2.94                       | 3.80                                |  |
| LVTPL           | 4.79                       | 3.60                       | 4.37                                |  |
| MEPL            | 5.35                       | 4.31                       | 4.83                                |  |
| NPPL            | 4.00                       | 3.60                       | 3.70                                |  |

**4.1.1** The project implemented by M/s RattanIndia Nasik Power Limited (RNPL) experienced cost overrun. For sanctioning additional loan of ₹333.33 crore to the project, REC considered (February 2014) levelised tariff of ₹4.17 per unit and levelised cost of generation of ₹3.86 per unit. Audit noticed that the levelised tariff of ₹4.17 per unit had been worked out considering tariff of ₹3.42 per unit

based on the PPA (950 MW) and merchant tariff of ₹3.95 per unit (400 MW), applying

<sup>34</sup> Para 4.1.3

<sup>35</sup> Para 4.1.4

<sup>36</sup> Para 4.1.1, 4.1.2, 4.1.5, 4.1.6 and 4.1.7

an escalation of 3.42 *per cent* per annum. However, the weighted average merchant tariff for the period February 2013 to January 2014 was ₹2.79 per unit and had been declining since 2008. Considering this, the levelised tariff worked out by Audit was ₹3.23 per unit which was lower than the levelised cost of generation.

MoP/REC stated (March 2017/ December 2016) that tariff as per Case-1 bidding was in range of ₹3.60 to ₹5.73 per unit during 2011-16 and that REC had considered their approved project appraisal guidelines and project information memorandum of lead lender.

The reply is not acceptable. The tariff indicated in the reply is not relevant since the project company already had PPA for 70 *per cent* of project capacity. If the actual tariff was considered, the project would not be considered viable at the time of sanctioning additional loan.

- **4.1.2** REC sanctioned (August 2012) a loan of ₹475 crore to M/s Alaknanda Hydro Power Company Limited (AHPCL) for funding the second cost overrun of the project. The project was considered viable at a levelised tariff of ₹4.96 per unit and levelised cost of generation of ₹3.89 per unit. Levelised tariff of ₹4.96 per unit was not realistic in view of the following:
  - Power generation up to 12 per cent of the project capacity (39.20 MW) was to be supplied 'free of cost' to Government of Uttaranchal.
  - Though the project company had (June 2006) a PPA for 88 per cent of the project capacity (i.e., 287.50 MW), the PPA did not stipulate any tariff over the tenure of 30 years, stating that it would be decided by Uttar Pradesh Electricity Regulatory Commission (UPERC) after the project was completed.
  - The initially approved project cost (2007) increased from ₹2068.92 crore to ₹4192 crore in 2012. REC considered that the applicable tariff would be based on the increased cost while sanctioning the additional loan. However, such increase in cost was not approved by UPERC at the time of sanction of loan.

MoP/ REC stated (March 2017/December 2016) that the loan was sanctioned after detailed due diligence and was approved by the competent authority. The funding of the project was as per its financing policy.

The reply is not acceptable. The screening committee highlighted a tariff risk and stated that the power generated from the project would have to be procured by Uttar Pradesh Power Corporation Limited (UPPCL) at a levelised tariff of ₹4.96 per unit which had not been agreed to. After commissioning the project, the power was sold to UPPCL at a mutually agreed tariff of ₹4 per unit, pending approval of final tariff by UPERC, against the levelised generation cost of ₹5.79 per unit.

- 4.1.3 PFC approved additional loan of ₹370 crore (May 2014) against second cost overrun and ₹592 crore (June 2016) against third cost overrun to M/s Essar Power MP Limited (EPML). Audit noticed that:
  - Sanction of additional loan was made for second cost overrun even though the minimum DSCR was 0.11 as against benchmark requirement of 1.10.
  - Sanction of addition loan was made for third cost overrun even though the project IRR was 11.05 per cent as against the benchmark level of 12 per cent.

REC also sanctioned (August 2016) additional loan of ₹532 crore for meeting third cost overrun to this project. REC considered the project viable at a levelised tariff of ₹3.96 per unit, considering sale of 88 per cent of power from the project at levelised merchant tariff of ₹4.08 per unit. Audit noticed that the actual merchant tariff during 2015-16 was much lower (₹2.20 to ₹2.25 per unit) which would work out to a levelised tariff of ₹2.94 per unit for the project, lower than the levelised cost of generation at ₹3.80 per unit.

MoP/PFC stated (February 2017/June 2017 and November 2016) that the lower DSCR was brought out in the agenda and to mitigate the risk, a pre-disbursement condition was stipulated to bring in funds for meeting debt service. At the same time, the 12 per cent benchmark for IRR was relaxed.

MoP/REC stated (March 2017/December 2016) that the assessments of a third party as reviewed by the lead bank formed the basis for their decision. It was also stated that the assumption and its basis were part of the Board agenda and were apprised to the Board.

The reply does not address the fact that the incorrect assumption has rendered the project unviable at the time of sanction of additional loan. Though the borrower had a PPA for sale of power at ₹3.75 per unit, power was sold actually at ₹2.80 per unit. The relaxations, thus, were not in the best interests of REC and PFC.

4.1.4 PFC approved additional loan and cost overrun to M/s Lanco Amarkentak Power Limited, relaxing the requirements of maintaining average and minimum DSCR. At the time of sanction (09 March 2012) of additional loan of ₹607.70 crore for funding first cost overrun, the average DSCR was 1.13 against the requirement of 1.20. At the time of sanction (27 February 2015) of third cost overrun, the average DSCR had reduced further to 1.11.

MoP/PFC stated (June 2017/November 2016) that the relaxations were approved by the Board. MoP stated (February 2017) that the relaxations were allowed during approval of cost overruns due to continuous losses of the promoter company which was under corporate debt restructuring and had defaulted in servicing loans from other lenders.

The replies confirm that the promoter/borrower was not eligible for additional loans as per internal guidelines of PFC. The relaxations did not protect the interests of PFC.

**4.1.5** M/s Lando Vidharbha Thermal Power Limited entered (25 September 2008) into a PPA with Maharashtra State Electricity Distribution Company Limited (MSEDCL) for 680 MW out of project capacity of 1320 MW. However, the PPA was terminated (20 September 2014) by MSEDCL as the agreed tariff rate (levelised tariff-₹3.03 per unit for 25 years) was unviable.

While sanctioning additional loan of ₹378 crore for meeting cost overrun on the project (March 2015), REC considered the project to be viable with levelised tariff of ₹4.79 per unit and cost of generation at ₹4.37 per unit. Audit, however, noticed that the weighted average merchant rate was ₹3.55 per unit during 2014-15, while the tariff under Case-1 bidding held in November 2014 was ₹3.60 per unit. REC also did not consider the impact of non-receipt of 'Mega Power' status to the project. While the 'Mega Power' status was to be obtained by November 2012, it had not been obtained even at the time REC approved the additional loan in March 2015.

MoP/REC stated (March 2017/December 2016) that the date for obtaining Mega Power status had been extended up to November 2016 and that lenders have been discussing the efforts taken by borrower in all the lenders' meet to arrive at a suitable resolution.

Audit noticed that the project could not obtain 'Mega Power' status in the absence of long term PPA, the timeline for which expired in November 2016. Further, the reply was silent on considering higher rate for sale of power at the time of sanctioning additional loan.

**4.1.6** REC sanctioned (September 2014) additional loan of ₹363 crore to M/s Meenakshi Energy Private Limited for meeting cost overrun on its 700 MW project. REC considered the project viable with levelised tariff of ₹5.35 per unit (merchant tariff of ₹5.03 per unit for 100 MW with escalation of 2.50 *per cent* and PPA for 600 MW with Power Trading Corporation Limited at ₹3.94 per unit with escalation of 3.88 *per cent*) against levelised cost of generation at ₹4.83 per unit.

Audit noticed that the weighted average merchant tariff was ₹3.09 per unit between August 2013 and July 2014. As against permissible escalation of 2 per cent in case of PPA and no escalation on merchant tariff, REC considered an escalation of 3.88 per cent in PPA and 2.50 per cent for merchant tariff respectively. Audit worked out the levelised tariff for the project at ₹4.31 per unit at the time of sanction of additional loan which was lower than the levelised cost of generation, turning the project un-viable.

MoP/REC stated (March 2017/December 2016) that levelised tariff of ₹5.35 per unit was arrived at assuming a tariff of ₹5.03 per unit for 90.86 MW (14.29 per cent of net power) on the basis of short-term PPA for 2014-15 and tariff for balance quantity (85.71 per cent

A thermal plant of capacity of (i) 1000 MW or more and (ii) 700 MW or more in North Eastern Region or Jammu & Kashmir. This plants are eligible for tax benefits such zero custom duty, deemed export benefit and certain income tax benefit

of net power) was assumed based on the weighted average tariff of the recent Case-1<sup>38</sup> bidding in Rajasthan and Uttar Pradesh.

The reply is not acceptable. The estimation of merchant tariff or its escalation was neither realistic nor as per permissible norms.

**4.1.7** REC sanctioned (April 2015) additional loan of ₹714.73 crore to M/s NCC Power Projects Limited for its project of 1320 MW. REC considered an average DSCR of 1.30 with levelised tariff of ₹4 per unit and cost of the generation at ₹3.70 per unit. Audit noticed that the weighted average merchant tariff for the year 2014 was ₹3.59 per unit and the tariff under Case-1 bidding in November 2014 was ₹3.60 per unit. Considering the prevailing tariff as per Case-1 bidding, the DSCR would be less than one as the cost of generation would be higher than the Case-1 tariff.

MoP/REC stated (March 2017/December 2016) that efforts of Government of India like 'Power for all' and 'Make in India' would increase the demand of electricity and tariff rates would also be improved. RBI guidelines stipulated that viability be assessed on the basis of acceptable benchmarks and as per REC appraisal norms, the project was viable.

The reply is not acceptable. That the cost of generation of the project was more than the levelised tariff based on the Case-1 bidding held before the sanction of additional loan ought to have been considered. Future improvement in electricity demand and consequent rise in tariff cannot be the basis for appraisal of cost overrun of a specific project.

#### 4.2 Defaults with Financial Institutions/Banks

As per the prudential norms of REC and PFC, the promoters/ borrowers should not be in default of servicing existing loans with any financial institutions (including REC and PFC) at the time of restructuring. Audit noticed that in the following loan cases, REC and PFC sanctioned a cost overrun even though the promoters/borrowers were in default. These relaxations increased the credit risk of REC and PFC in the projects. The instances noticed in the sample studied by Audit are summarised below:

- REC sanctioned (18 March 2016) additional loan of ₹1355 crore to M/s KSK Mahanadi Power Company Limited (KMPCL) in March 2016. At the time of sanction of the loan, the promoter of KMPCL was in default of ₹27.66 crore. KMPCL too was in default of ₹354.39 crore.
- REC sanctioned (10 February 2016) additional loan of ₹188.40 crore to M/s RKM Power Projects Limited for funding the third cost overrun. At the time, it was known that the project company was in default of ₹3774.13 crore to financial institutions including REC.
- REC sanctioned (March 2015) additional loan of ₹505 crore to M/s Lanco Babandh
   Power Limited and ₹378 crore to M/s Lanco Vidharbha Thermal Power Limited for

Procurement of power through competitive bidding where the location, technology, or fuel is not specified by the Procurer

meeting cost overruns. The promoter of these projects was in default in 91 accounts as per the report of CIBIL Limited. Besides, project companies were in default of ₹188.69 crore with REC for more than 90 days at the time of sanctioning additional loan.

- REC sanctioned (01 April 2015) an additional loan of ₹714.73 crore to M/s NCC Power Projects Limited for meeting cost overrun. Audit noticed that four credit facilities of the core promoters of this project were classified (08 October 2014) as 'other than standard' by CIBIL<sup>39</sup>. Further, in Annexure to the Auditor's Report to Financial Statements for 2013-14, the auditors had reported instances of outstanding default on the date of Balance Sheet and instances of delays/defaults and restructuring/rescheduling in the previous four financial years.
- REC sanctioned (March 2016) additional loan of ₹507.63 crore to M/s RattanIndia Nasik Power Limited for meeting the cost overrun. As on 31 December 2015, the project company was in default to its lenders as per report of CIBIL Limited as well as the undertaking submitted by the company.
- At the time of sanction of second and third cost overruns by REC and PFC, three promoter companies of M/s Essar Power MP Limited, viz., M/s Essar Steel India Limited, M/s Bhander Power Limited and M/s Essar Power Limited were in default with other financial institutions/debenture holders. Besides, two group companies (M/s Essar Power Transmission Company Limited and M/s Vadinar Power Company Limited) of the core promoter were in default with PFC. There was also a downgrade (January 2014) of rating<sup>40</sup> of M/s Essar Power Limited, the core promoter, by CARE from A<sup>+</sup> to BBB for long term bank facilities.
- REC sanctioned an additional loan of ₹29.50 crore for meeting fourth cost overrun
  in March 2015 and ₹24.86 crore for meeting fifth cost overrun in September 2015
  to M/s Alaknanda Hydro Power Company Limited (AHPCL). PFC also sanctioned
  additional loan of ₹29.50 crore to this project for meeting fourth cost overrun in
  February 2015. Audit noticed that the core promoter of this project was in default of
  ₹211.67 crore to financial institutions including REC.
- PFC approved (July 2014) cost overrun (without additional funding) to M/s Jal Power Company Limited. At this time, the borrowers of this project were in default of ₹36.30 crore as on 31 March 2014 with PFC and the promoter was under corporate debt restructuring.
- REC sanctioned (August 2014) an additional loan of ₹227 crore for meeting second cost overrun to M/s Ind-Barath Energy Utkal Limited. As per appraisal note, the borrower was a 'Special Mention Account' (SMA)' in PFC's books and 'SMA-other

41 Means borrower was in default for more than 60 days

CIBIL Limited, formerly known as Credit Information Bureau (India) Limited, which provide information and tools for granting a clear understanding of credit history and financial reputation of business entities

The rating derive strength from the established track record and experience of the promoters in implementing and operating power plants, ability of Essar group to infuse the required equity into various ongoing projects, firm off take arrangement by way of PPAs for majority of generation capacity

- than Standard' as per Credit Information Bureau (India) Limited (CIBIL) report (03 July 2014).
- PFC approved (27 May 2014) an additional loan of ₹629.73 crore for meeting the second cost overrun to M/s Lanco Amarkantak Power Limited. As per Board agenda, the promoter and borrower were in default with financial institutions. Auditors of the financial statement reported that the borrower was in default of ₹102.02 crore at the time of sanction of additional loan. The promoters of the project company were also in default of ₹460.26 crore. As a result, 'No Default Certificate' could not be furnished.

MoP/REC (March 2017/June 2017 and December 2016) and MoP/PFC (February/June 2017 and November 2016) stated that

- The facts were highlighted in the agenda presented to the Boards, which approved restructuring of the loans.
- The relaxations were in line with the decision taken in Joint Lenders' Forum.
- Promoters had infused envisaged/full equity at the time of restructuring/cost overrun.
- The interest of the project was considered. Insistence of fulfilment of conditions would have delayed project execution.
- Moratorium was allowed for a year for floods considered in AHPCL.

The replies are not acceptable in view of the following:

- The relaxation was not in the interest of REC/PFC as in four cases, the accounts have eventually turned bad.
- Infusion of full equity was a required clause quite distinct from checking against default. Satisfaction of one condition does not preclude the need to satisfy the other.
- Moratorium was not applicable in the case of AHPCL as the moratorium was for one year, up to June 2014 while the additional loans were sanctioned in 2015.

#### 4.3 Loss/accumulated loss at the time of cost overrun

As per the guidelines of RBI and prudential norms of REC, the core promoter should not have loss or cash loss or accumulated loss in their financial statements during the past three years at the time of restructuring a loan. Audit noticed that in the following eight loan cases selected in audit, though the promoters reported loss/ cash loss/ accumulated loss, REC sanctioned restructuring/cost overrun, in violation of the applicable norms.

 At the time of sanction of third cost overrun to M/s RKM Powergen Private Limited (RPPL), REC (February 2016) relaxed the stipulation of not having loss or cash loss or accumulated loss in the past three years.

- M/s Lanco Vidharbha Thermal Power Limited (LVTPL) had accumulated losses of ₹1891.65 crore in 2013-14, yet the condition was relaxed (March 2015) by REC at the time of sanctioning additional loan for meeting cost overrun.
- At the time of sanction (April 2015) of cost overrun to M/s NCC Power Projects Limited (NPPL), one of the core promoters, M/s Gayatri Projects Limited, had incurred losses of ₹64.97 crore in 2013-14.
- The core promoter of M/s RattanIndia Nasik Power Limited (RNPL) had an accumulated loss of ₹226.24 crore as on 31 March 2015 and had incurred cash losses for three financial years up to 2014-15. Yet the second cost overrun was sanctioned (March 2016).
- The core promoter of M/s Essar Power MP Limited (EPML) had incurred losses of ₹834 crore and ₹574.36 crore in 2012-13 and 2013-14 respectively on consolidated basis. Yet, additional loan of ₹592 crore in June 2016 by PFC and ₹532 crore in August 2016 by REC were sanctioned.
- At the time of sanction of fifth cost overrun in September 2015, the promoter of M/s Alaknanda Hydro Power Company Limited (AHPCL) was in loss for the past three years.
- At the time of sanction of additional loan of ₹1355 crore in March 2016 by REC, the core promoter of M/s KSK Mahanadi Power Company Limited (KMPCL) was in loss of ₹162.88 crore and ₹320.18 crore during 2013-14 and 2014-15 respectively.
- At the time of sanction of additional loan of ₹641.14 crore by REC in March 2015, the core promoter of M/s Lanco Amarkantak Power Limited (LAPL) had been suffering losses consistently; loss of ₹112.03 crore, ₹1073.29 crore and ₹2273.88 crore during 2011-12, 2012-13 and 2013-14 respectively.

REC (December 2016) and PFC (November 2016) stated that their Board approved the relaxations in line with economic conditions, distress in power sector and the decision in the Joint Lenders Forum with a view to achieve commissioning of the project, which was of utmost importance to save their interest, as the original loan had already been disbursed. MoP added (March/ June 2017) that the loss of promoters as stated by Audit in respect of NPPL pertained to 2013-14, while original appraisal was done in December 2010.

The replies are not acceptable. REC and PFC relaxed the core condition relating to financial capability of the promoter that indicated their ability to service the loans. The relaxations were made knowing the poor project fundamentals of the promoters/borrowers and therefore, was not in the best financial interest of REC and PFC. Audit has commented on the appraisal at the time of restructuring (2015), rather than appraisal of the original project (2010).

#### 4.4 Upfront equity for cost overrun funding

As per the prudential norms of both REC and PFC, the promoter should bring in 100 per cent equity for financing cost overrun upfront. Further, as per norms in PFC, source and quality of funds for equity infusion should also be ascertained for sanction of cost overrun. Audit, however, noticed that these conditions were not adhered to at the time of sanction of cost overrun in the following eight loan cases.

- REC allowed the promoter of M/s KSK Mahanadi Power Company Limited (KMPCL) to bring in their equity contribution of ₹4469 crore out of ₹7707 crore for implementing the last two units of the project by October 2017 and December 2017 respectively.
- REC and PFC, at the time of sanction (February 2016/January 2016) of third cost overrun to M/s RKM Powergen Private Limited (RPPL), relaxed the condition of bringing in upfront 100 per cent equity of ₹705.88 crore for meeting the cost overrun.
- At the time of sanctioning cost overrun in March 2015 to M/s Lanco Babandh Power Limited (LBPL) and M/s Lanco Vidharbha Thermal Power Limited (LVTPL), REC agreed to the promoter bringing in the balance equity (50 percent) as 'last mile equity', six months prior to commissioning instead of 100 per cent upfront equity.
- PFC, while sanctioning the third cost overrun in February 2015 to M/s Lanco Amarkantak Power Limited (LAPL), relaxed the requirement of infusion of 100 per cent upfront equity. The promoter was allowed to bring in ₹955 crore out of ₹2372 crore as 'last mile' equity six months prior to commissioning of the project.
- PFC, at the time of approval of first cost overrun in October 2014 to M/s GMR Chhattisgarh Energy Private Limited, stipulated pre-disbursement condition of 100 per cent upfront equity of ₹1226 crore. At the time of sanction of second cost overrun in September 2016, this condition was relaxed since the promoter was not able to infuse required equity of ₹207.81 crore (including ₹57.81 crore of first cost overrun).
- PFC sanctioned second cost overrun to M/s RattanIndia Nasik Power Limited (RNPL) in February 2016. REC also sanctioned second cost overrun to this project in March 2016. The requirement of 100 per cent upfront equity for meeting cost overrun was relaxed by both the companies and the promoter was allowed to bring in 30 per cent, i.e., ₹147.70 crore of total equity of ₹492.33 crore required for meeting the second cost overrun.
- PFC, at the time of sanction of third cost overrun in June 2016 to M/s Essar Power MP Limited (EPML), relaxed the condition of 100 per cent upfront equity by the promoter. The promoter was allowed to infuse an equity of ₹400 crore only in proportion to the loan disbursements against the mandated upfront equity infusion of ₹2684 crore.

MoP/REC/PFC stated (June 2017/December 2016/November 2016) that the Board of PFC/REC had approved the relaxations in line with economic conditions, distress in power sector and the decision in the Joint Lenders Forum (JLF), in better interest of the project and to facilitate project commissioning. MoP added (February 2017) that the third cost overrun of EPML was in line with the Comprehensive Financing Plan approved by the JLF where proportionate disbursement of loan for cost overrun funding was envisaged. MoP further added (June 2017) that in the latest notification issued in May 2017, RBI has stated that the decisions agreed upon by a minimum of 60 *per cent* of creditors by value and 50 *per cent* of creditors by number in the JLF would be considered as the basis for deciding the corrective action plan, and would be binding on all lenders.

#### 4.5 Other relaxations

4.5.1 As per internal prudential norms of PFC, third restructure before commissioning was not permitted. However, PFC approved (November 2013) the third cost overrun of ₹108 crore to M/s DANS Energy Private Limited (DEPL) subject to approval of revised prudential norms that would permit three or more reschedules. DEPL, subsequently, requested (February 2014) the approval of PFC for availing bridge loan of ₹108 crore in lieu of PFC funding, to achieve financial closure for the third cost overrun. PFC granted 'in-principle' approval for the bridge loan and entered (19 June 2014) into a tripartite agreement with DEPL and Indian Renewable Energy Development Agency Limited. The project achieved commissioning on 30 September 2015 and PFC took over (01 October 2015) the bridge loan of ₹108 crore as the third cost overrun. Audit also noticed that before approval of third cost overrun, DEPL had made two principal repayments aggregating to ₹12.16 crore. However, upon approval of the third cost overrun, PFC adjusted this amount towards interest dues, thereby giving retrospective effect to the restructuring (effective 27 November 2013). This was in violation of RBI guidelines, which stipulates that NBFCs cannot reschedule loan accounts with retrospective effect.

MoP/PFC stated (February 2017/ June 2017 and November 2016) that the present proposal was considered as third re-schedulement and a special condition was stipulated to make the loan sanction effective only after approval of prudential norms permitting three or more restructuring before commissioning. This was done to avoid violation of the prudential norms. MoP further added that as time was of essence and to avoid further delays, PFC permitted DEPL to obtain bridge loan for financial closure.

However, as per internal prudential norms of PFC, the loan account was not eligible for third restructure before commissioning and in order to circumvent the extant norms, the borrower was permitted to bring in funds by way of bridge loan. Further, retrospective restructuring by adjusting the principal repayments towards interest dues, was in violation of RBI guidelines.

**4.5.2** As per internal guidelines of PFC, entities/ projects had to achieve a minimum Integrated Rating (IR) of IR-4 for under-writing debt. Audit noticed that in case of M/s Jal Power Corporation Limited (JPCL), PFC underwrote the entire debt of ₹475.81 crore

at the time of approval of first cost overrun in July 2014, despite the fact that the rating of the project was downgraded to IR-5 at that time as against stipulated IR-4. Though the internal guidelines of PFC limits its exposure in any single project to 50 *per cent* of the project cost, PFC approved funding to the tune of ₹863.46 crore (₹ 387.65 crore original loan + ₹ 475.81 crore first cost overrun) in the project implemented by JPCL, costing ₹1455.03 crore. Thus, 59 *per cent* of the project cost was being financed by PFC as against the stipulated maximum exposure of 50 *per cent*.

MoP/PFC stated (February 2017/ June 2017 and November 2016) that the relaxation was clearly brought out in the agenda and the same was approved by competent authority. MoP also stated (June 2017) that there was proposal for underwriting of ₹475.81 crore which consisted hold portion of ₹121.61 crore and earmarked for down selling of ₹354.20 crore and same was approved by BoD. Considering hold portion of ₹121.61 crore, the total loan amount for PFC was ₹509.26 crore, which was around 35 per cent of the revised project cost of ₹1455.03 crore, which was less than 50 per cent exposure allowed as per policy.

The reply is not acceptable since the policy of PFC provided for underwriting of debt subject to the exposure limit of 50 *per cent*.



#### 5.1 Conclusion

Participation of private sector in power generation grew significantly with the enactment of the Electricity Act, 2003. REC and PFC extended loans to the Independent Power Producers (IPPs). A significant proportion of these loan accounts have become stressed or turned non-performing. In this context, Audit took up a review of the sanction, disbursement and restructuring of loans extended by REC and PFC to IPPs.

Audit noticed that REC and PFC did not conduct appropriate due diligence during credit appraisal and assumed higher risks on the loan accounts. Both REC and PFC deviated from their own internal guidelines and failed to conform with RBI guidelines applicable to Non-Banking Financial Companies (NBFCs). The experience of the promoters to develop the project was not objectively assessed. The financial capacity of the promoter to bring in equity for the project in the face of competing demands was not ensured. Due diligence regarding viability of the project or conflict of interest, in the event the promoter also functions as principal contractors, was also not done. This led to loans being sanctioned to financially weak and technically inexperienced promoters who failed to implement the projects in time, resulting in time and cost overruns.

To safeguard the interest of the lenders, pre-disbursement conditions were stipulated in the loan agreements which need to be fulfilled before the loan can be disbursed. Audit observed that these conditions were relaxed on multiple occasions by both REC and PFC. Instances of adjustment of loan towards interest during construction, to keep the loan account 'standard' were also noticed. End use of funds disbursed was not ensured and instances of diversion of loans were noticed (diversion of funds of ₹2457.60 crore over the three year period, 2013-14 to 2015-16), without commensurate action by the lenders.

The projects faced cost over-runs and the loans had to be restructured. Such cost overruns/ loan restructures were often sanctioned by both REC and PFC, without suitable due diligence. Higher tariff was assumed to improve the financial viability of the projects in the face of increasing cost of generation. That the borrowers were already in default with other banks/financial institutions was not considered while sanctioning additional loans. Though the promoters often failed to bring in the required equity, additional loans were sanctioned by REC and PFC. All this added to lenders' risk.

There was a sharp rise in NPAs in both REC and PFC during the last three years ended on 31 March 2016. At the end of 2015-16, gross NPAs of ₹11762.61 crore for IPP loans was recognized in the books of accounts of both companies accounting for 13.90 per cent and 19.86 per cent of the outstanding loans in REC and PFC respectively. With adoption of RBI restructuring norms in 2016-17, the gross NPA of PFC as on 31 March 2017 stood at ₹30702.21 crore (12.50 per cent of total outstanding loans of PFC).

#### 5.2 Recommendations

Audit suggests the following recommendations in order to address the issues highlighted in this report:

- The process of appraisal of loan proposals, their sanction and disbursement may be strengthened. The existing appraisal norms may be revisited to design objective guidelines for assessing financial and technical capabilities of the promoters.
- Compliance with internal guidelines and RBI norms may be ensured at every stage of the loan appraisal, sanction and disbursement.
- Monitoring mechanism may be strengthened to ensure that loans disbursed are used for the specific purpose for which they have been sanctioned and incidence of siphoning/diversion of loan funds are eliminated.
- Particular vigilance is warranted in cases where the promoter or its group companies execute the project as the principal contractor. In such cases, it would need to be ensured that there is no over-pricing and that the money advanced to contractors is actually put to use on execution of the project and not re-designated as project equity.
- Independent verification of data submitted by promoters to ensure its accuracy may need to be considered. Information available from independent credit rating agencies may also be considered to evaluate the financial capability of the promoter/borrower in a realistic manner.
- Cost overrun of the projects vis-à-vis their viability needs to be monitored closely. Cost overrun may be allowed only in eligible projects, in compliance with the relevant internal guidelines/RBI norms.

MoP was generally in agreement with the recommendations (June 2017).

New Delhi

Date: 10 July 2017

(NAND KISHORE)

Deputy Comptroller and Auditor General and Chairman, Audit Board

Countersigned

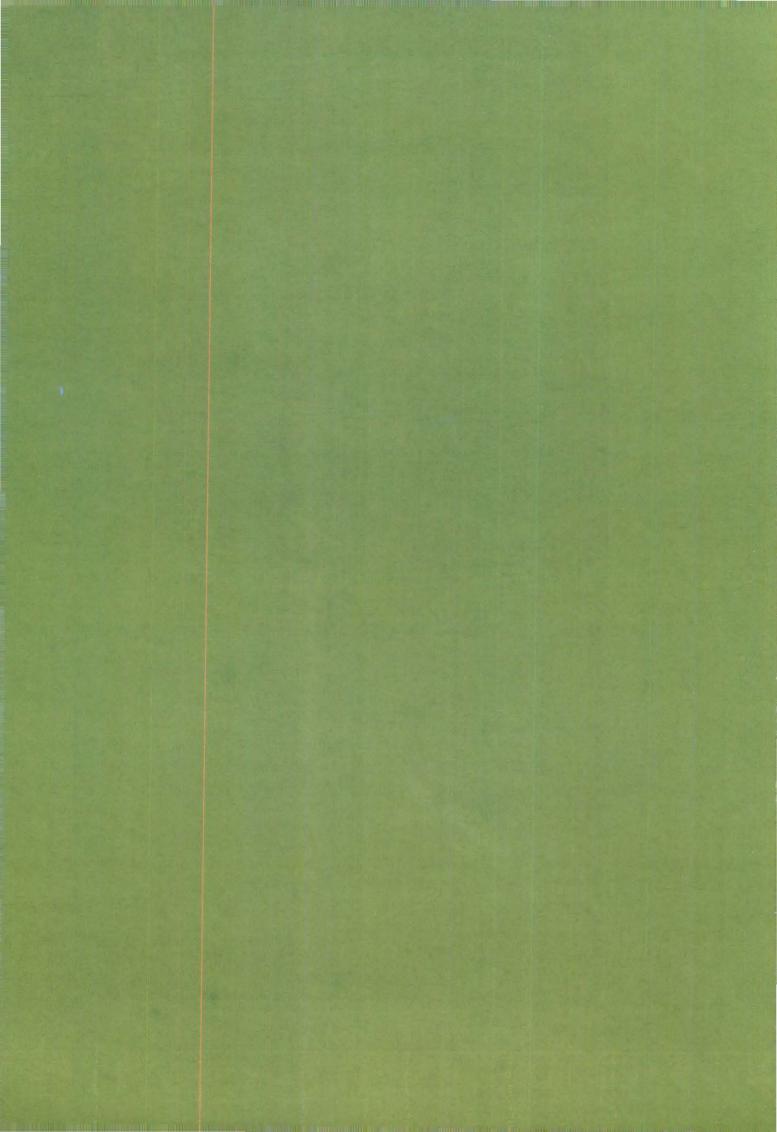
New Delhi

Date: 11 July 2017

(SHASHI KANT SHARMA)

Comptroller and Auditor General of India

# Annexure



Annexure-I (Referred to in Paragraph 1.7)

#### (A) Loans selected for examination in audit - Rural Electrification Corporation Limited

| SI.<br>No. | Name of the Lender                           | Origina | al sanction | Cost<br>overruns | Date of sanction of cost       | Total loan sanctioned | Total<br>loan<br>disbursed | Original date of commiss- | Revised<br>date of<br>commiss- | Loan<br>outstanding<br>(30.09.2016) |
|------------|--|---------|-------------|------------------|--------------------------------|-----------------------|----------------------------|---------------------------|--------------------------------|-------------------------------------|
|            |  | ₹crore  | Date        | ₹crore           | overruns                       | ₹crore                | ₹crore                     | ioning                    | ioning                         | ₹crore                              |
| Fresh      | sanctions                                    |         |             |                  |                                |                       |                            |                           |                                |                                     |
| 1          | M/s NCC Power Projects<br>Limited            | 1700.00 | 11.01.2011  | 714.73           | 01.04.2015                     | 2914.73               | 2710.00                    | 01.10.2014                | 30.11.2016                     | 2710.09                             |
| 2          | M/s Ind-Barath Energy<br>Utkal Limited       | 550.00  | 02.07.2012  | 227.00           | 12.08.2014                     | 777.00                | 777.00                     | 31.03.2012                | 31.03.2015                     | 777.00                              |
| 3          | M/s Meenakshi Energy<br>Private Limited      | 750.00  | 09.04.2010  | 363.00           | 17.10.2014                     | 1113.00               | 683.85                     | 31.08.2012                | 31.03.2018                     | 683.85                              |
| 4          | M/s Ind-Barath Power<br>(Madras) Limited     | 1166.00 | 10.11.2014  | -                | -                              | 1166.00               | 416.21                     | 01.12.2013                | 30.06.2016                     | 416.21                              |
| 5          | M/s KSK Mahanadi<br>Power Company Limited    | 1547.00 | 31.08.2009  | 1355.00          | 18.03.2016                     | 2902.00               | 1947.00                    | 1.01.2014                 | 31.12.2017                     | 1947.00                             |
| 6          | M/s Alaknanda Hydro<br>Power Company Limited | 475.00  | 21.08.2012  | 54.36            | 13.03.2015<br>to<br>28.09.2015 | 587.68                | 572.90                     | 31.07.2011                | 21.06.2015                     | 572.90                              |
| 7          | M/s Lanco Babandh<br>Power Limited           | 1000.00 | 29.04.2010  | 505.00           | 23.03.2015                     | 1505.00               | 1000.00                    | 08.09.2014                | 01.04.2017                     | 1000.00                             |
| 8          | M/s Lanco Vidharbha<br>Thermal Power Limited | 750.00  | 21.07.2010  | 378.00           | 13.03.2015                     | 1128.00               | 490.06                     | 01.09.2014                | 01.09.2017                     | 490.06                              |
| 9          | M/s Lanco Amarkantak<br>Power Limited        | 1250.00 | 25.09.2010  | 641.14           | 13.03.2015                     | 1891.14               | 1804.29                    | 01.03.2014                | 31.12.2016                     | 1804.29                             |
| 10         | M/s KSK Mahanadi<br>Power Company Limited    | 1547.00 | 31.08.2009  | 1355.00          | 18.03.2016                     | 2902.00               | 1947.00                    | 1.01.2014                 | 31.12.2017                     | 1947.00                             |

| 11    | M/s SPIC Electric Power<br>Corporation Limited | 1125.00 | 06.01.2014 | -       | -                              | 1125.00 | 44.99   | 31.12.2016 | 30.10.2018 | 44.99   |
|-------|--|---------|------------|---------|--------------------------------|---------|---------|------------|------------|---------|
| 12    | M/s RattanIndia Nasik<br>Power Limited         | 1689.82 | 12.05.2010 | 840.96  | 27.02.2014<br>to<br>18.03.2016 | 2530.78 | 2023.15 | 01.05.2013 | 31.03.2017 | 2023.15 |
| 13    | M/s DB Power Limited                           | 700.00  | 25.06.2013 | -       | -                              | 700.00  | -       | _          |            | -       |
| 14    | M/s Himgiri Hydro<br>Energy Private Limited    | 587.67  | 06.03.2014 | -       | -                              | 587.67  | -       | -          |            | -       |
| Restr | ructured loans                                 |         |            |         |                                |         |         |            |            |         |
| 15    | M/s Lanco Vidharbha<br>Thermal Power Limited   | 750.00  | 21.07.2010 | 378.00  | 13.03.2015                     | 1128.00 | 490.06  | 01.09.2014 | 01.09.2017 | 490.06  |
| 16    | M/s Lanco Amarkantak<br>Power Limited          | 1250.00 | 25.09.2010 | 641.14  | 13.03.2015                     | 1891.14 | 1804.29 | 01.03.2014 | 31.12.2016 | 1804.29 |
| 17    | M/s RattanIndia Nasik<br>Power Limited         | 1689.82 | 12.05.2010 | 840.96  | 27.02.2014<br>to<br>18.03.2016 | 2530.78 | 2023.15 | 01.05.2013 | 31.03.2017 | 2023.15 |
| 10    | M/s RKM Powergen<br>Private Limited (Phase-I)  | 270.00  | 10.03.2008 | 122.00  | 18.02.2012<br>to<br>10.02.2016 | 392.00  | 335.71  | 31.05.2012 | 30.11.2015 | 335.71  |
| 18    | M/s RKM Powergen<br>Private Limited (Phase-II) | 1150.00 | 14.09.2009 | 526.40  | 13.12.2013<br>to<br>10.02.2016 | 1910.00 | 1910.00 | 31.08.2013 | 30.06.2016 | 1910.00 |
| 19    | M/s KSK Mahanadi<br>Power Company Limited      | 1547.00 | 31.08.2009 | 1355.00 | 18.03.2016                     | 2902.00 | 1947.00 | 1.01.2014  | 31.12.2017 | 1947.00 |
| NPA   | loans  |         |            |         |                                |         |         |            |            |         |
| 20    | M/s Corporate Power<br>Limited                 | 650.00  | 25.11.2009 | 196.00  | 14.02.2013                     | 846.00  | 830.39  | 07.12.2012 | -          | 830.39  |
| 21    | M/s Jas Infrastructure and<br>Power Limited    | 1150.00 | 24.08.2011 | -       | -                              | 1150.00 | 33.24   | 01.10.2014 | -          | 33.24   |
| 22    | M/s Prakash Industries<br>Limited              | 280.10  | 19.07.2010 | -       | -                              | 280.10  | 280.10  | 09.03.2011 | 09.03.2012 | 217.78  |

| 23 | M/s Shalivahana Wind Energy Ltd.       | 26.16   | 06.06.2012 | -      | -                              | 26.16   | 26.16   | 19.08.2011 | -          | 22.35   |
|----|--|---------|------------|--------|--------------------------------|---------|---------|------------|------------|---------|
| 24 | M/s Facor Power                        | 397.68  | 14.08.2007 | 120.22 | 06.06.2013<br>to<br>15.10.2014 | 517.90  | 510.98  | June 2011  | 28.03.2015 | 510.98  |
| 25 | M/s Essar Power MP<br>Limited          | 1000.00 | 11.06.2007 | -      | e-                             | 1902.00 | 1370.00 | 24.11.2011 | 31.12.2016 | 1320.00 |
| 26 | M/s Starwire (India)<br>Vidyut Pvt Ltd | 36.44   | 11.11.2011 | 4.66   | 08.03.2013                     | 41.10   | 41.10   | 03.05.2013 | +          | 32.78   |
| 27 | M/s Ind-Barath Energy<br>Utkal Limited | 550.00  | 02.07.2012 | 227.00 | 12.08.2014                     | 777.00  | 777.00  | 31.03.2012 | 31.03.2015 | 777.00  |

#### (B) Loans selected for examination in audit – Power Finance Corporation Limited

| SI.<br>No. | Name of the Lender   | Origin | al sanction | Cost overruns | Date of sanction of cost       | Total loan sanctioned | Total<br>loan<br>disbursed | Original date of commiss- | Revised<br>date of<br>commiss- | Loan<br>outstanding<br>(30.09.2016) |
|------------|--|--------|-------------|---------------|--------------------------------|-----------------------|----------------------------|---------------------------|--------------------------------|-------------------------------------|
|            |  | ₹crore | Date        | ₹crore        | overruns                       | ₹crore                | ₹crore                     | ioning                    | ioning                         | ₹crore                              |
| Fres       | h sanctions  |        |             |               |                                |                       |                            |                           |                                |                                     |
| 1          | M/s Jai Prakash Power<br>Ventures Ltd                      | 1500   | 24.10.2013  | -             | -                              | 1500.00               | 1500.00                    | 13.09.2011                | 26.05.2011                     | 0.00                                |
| 2          | M/s SPIC Electric Power<br>Corporation Limited             | 1142   | 03.05.2013  | -             | -                              | 1142.00               | 45.67                      | 31.12.2016                | 30.10.2018                     | 45.67                               |
| 3          | M/s Jhabua Power<br>Limited                                | 250    | 25.04.2014  | 515.40        | 20.07.2015<br>to<br>27.09.2016 | 765.40                | 325.00                     | 01.04.2013                | 31.03.2015                     | 323.93                              |
| 4          | M/s Amravati Power<br>Transmission Company<br>Ltd          | 138.08 | 04.07.2013  | -             | -                              | 138.08                | 138.08                     | 20.03.2015                | 20.03.2015                     | 129.67                              |
| 5          | M/s GVK Ratle Hydro<br>Electric Project Private<br>Limited | 4706   | 02.04.2013  | -             | -                              | 4706.00               | 816.90                     | 01.01.2019                | #/                             | 816.90                              |
| Resti      | ructured loans   |        |             |               |                                |                       |                            |                           |                                |                                     |
| 6          | M/s Lanco Amarkantak<br>Power Limited                      | 1250   | 19.02.2010  | 1024.33       | 09.03.2012<br>to<br>27.02.2015 | 2274.33               | 1874.70                    | 01.12.2013                | 31.12.2016                     | 1874.70                             |
| 7          | M/s NCC Power Projects<br>Limited                          | 1650   | 17.01.2011  | 698.50        | 03.06.2015                     | 2848.50               | 2441.00                    | 01.10.2014                | 30.11.2016                     | 2441.00                             |
| 8          | M/s GMR Chhattisgarh<br>Energy Private Limited             | 715    | 13.10.2010  | 375.00        | 31.10.2014<br>to<br>01.09.2016 | 1090.00               | 1090.00                    | 31.03.2014                | 31.03.2016                     | 1090.00                             |
| 9          | M/s RKM Powergen<br>Private Limited (Phase-I)              | 520    | 02.08.2007  | 606.26        | 08.05.2012<br>to<br>15.01.2016 | 1126.26               | 1126.00                    | 31.05.2012                | 30.11.2015                     | 1126.00                             |
| 10         | M/s RKM Powergen<br>Private Limited (Phase-II)             | 1480   | 10.03.2010  | 2047.26       | 19.02.2013<br>to<br>15.01.2016 | 3527.26               | 3520.76                    | 31.08.2013                | 30.06.2016                     | 3125.91                             |

| 11  | M/s DANS Energy Private<br>Limited              | 218    | 25.03.2009 | 254.80  | 20.07.2011<br>to<br>16.02.2016 | 472.80  | 472.80  | 30.06.2012 | 30.09.2015                   | 468.58  |
|-----|---|--------|------------|---------|--------------------------------|---------|---------|------------|------------------------------|---------|
| 12  | M/s Indiabulls Power Ltd                        | 1000   | 03.03.2009 | 1380.04 | 07.08.2013<br>to<br>10.03.2015 | 2380.04 | 2342.74 | 13.03.2015 | 13.03.2015                   | 1906.47 |
| 13  | M/s RattanIndia Nasik<br>Power Limited          | 1800   | 26.03.2010 | 2446.92 | 15.10.2013<br>to<br>09.02.2016 | 2707.98 | 2355.62 | 01.05.2013 | 31.03.2017                   | 2355.62 |
| 14  | M/s Konaseema Gas<br>Power Limited*             | 275    | 09.08.2001 | 131.12  | 07.03.2007<br>to<br>09.10.2013 | 406.12  | 405.74  | 30.09.2006 | 30.06.2010                   | 618.26  |
| NPA | loans   |        |            |         |                                |         |         |            | and the second of the second |         |
| 15  | M/s KVK Nilachal Power Private Limited          | 405    | 15.05.2007 | -       | -                              | 405.00  | 398.59  | 21.12.2011 | 31.12.2016                   | 398.60  |
| 16  | M/s Jal Power Corporation<br>Limited            | 387.65 | 23.10.2009 | -       | -                              | 387.65  | 386.23  | 30.06.2013 | 30.06.2016                   | 386.23  |
| 17  | M/s Krishna Godavari<br>Power Utilities Limited | 76.63  | 30.03.2007 | -       | -                              | 76.63   | 76.63   | 09.11.2011 | 31.10.2012                   | 76.63   |
| 18  | M/s Ind-Barath Energy<br>Utkal Limited          | 1100   | 06.01.2010 | 267.91  | 01.03.2012<br>to<br>17.06.2014 | 1367.91 | 1367.91 | 31.03.2012 | 31.03.2015                   | 1367.91 |
| 19  | M/s Essar Power MP<br>Limited                   | 1000   | 31.01.2008 | 962.00  | 27.05.2014<br>to<br>14.06.2016 | 1962.00 | 1369.55 | 24.11.2011 | 31.12.2016                   | 1344.55 |
| 20  | M/s Alaknanda Hydro<br>Power Company Limited    | 470    | 20.09.2012 | 93.42   | 13.05.2014<br>to<br>27.02.2015 | 563.42  | 563.42  | 31.07.2011 | 21.06.2015                   | 563.42  |

<sup>\*</sup> The loan outstanding is different from the amount disbursed since overdue of principal and interest on Rupee term loan and foreign currency loan up to March 2014 was converted into loan in October 2013.

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### GLOSSARY OF TECHNICAL TERMS

| Sl.<br>No. | Term                                    | Description   |
|------------|---|---|
| 1          | Case- 1 bidding                         | Procurement of power through competitive bidding where the location, technology, or fuel is not specified by the Procurer.  |
| 2          | Coal Supply or Fuel<br>Supply Agreement | An agreement entered / to be entered into by the borrower for the supply of coal as the primary fuel for the running and operation of the plant.  |
| 3          | Concession<br>Management<br>Agreement   | A negotiated contract between a company and a government that gives the company the right to operate a specific business within the government's jurisdiction, subject to certain conditions. |
| 4          | Debt Service<br>Coverage Ratio          | It indicates a company's ability to service its obligations<br>both principal and interest, through earnings generated<br>from operations.  |
| 5          | Down selling                            | Portion of the loan initially sanctioned by a lender, to be passed on to prospective other lenders for funding.   |
| 6          | Entity appraisal                        | Detail analysis of the promoters' technical and financial ability to execute the project along-with status of its debts defaults.   |
| 7          | Hold portion                            | It refers to the portion of the loan to be funded by the lender concerned as per the pro-rata share in the consortium for funding the total debt required for a project.                      |
| 8          | Independent Power<br>Producer           | An independent power producer or non-utility generator is an entity, which is not a public utility, but which owns facilities to generate electric power for sale to utilities and end users. |
| 9          | Internal Rate of<br>Return              | The interest rate at which the net present value of all the cash flows (both positive and negative) from a project equal zero. It evaluates the attractiveness of a project.                  |
| 10         | Interest during construction            | It refers to the financing charges incurred during the execution of the project or acquisition of assets such as property, plant, and equipment.  |
| 11         | Last mile equity                        | Last Mile Equity means equity to be infused at last in the project after complete disbursement of loans.  |
| 12         | Lender's Engineer                       | An independent engineer to be appointed by the lender's agent on behalf of the lenders.   |

| 13 | Lender's Financial<br>Advisor    | A firm of chartered accountants appointed or to be appointed by the lender's agent on behalf of the lenders.  |
|----|----------------------------------|---|
| 14 | Lending<br>Confirmation Notice   | A notice issued by lenders agent, after ensuring the compliance of drawdown conditions mentioned in loan agreement, to all lenders of consortium for disbursement of loan.  |
| 15 | Levelised tariff                 | The average tariff for sale of electricity over the entire<br>term of power purchase agreement after adjustment of<br>permitted inflation.  |
| 16 | Loan life ratio                  | A ratio commonly used in project finance. It is defined as: Net Present Value of Cash flow available for Debt Service / Outstanding Debt in the period.   |
| 17 | Mega power                       | A thermal plant of capacity of (i) 1000 MW or more and (ii) 700 MW or more in NER or J&K. is called mega power plant.   |
| 18 | Merchant tariff                  | Merchant Tariff means price of short-term transactions of electricity   |
| 19 | Non-Banking<br>Financial Company | A Non-Banking Financial Company (NBFC) is a company registered under the Companies Act engaged in the business of loans and advances, acquisition of shares/stocks/bonds/debentures/securities issued by Government or local authority. When a company's financial assets constitute more than 50 per cent of the total assets and income from financial assets constitute more than 50 per cent of the gross income will be registered as NBFC by RBI. |
| 20 | Non-Performing<br>Asset          | A loan asset in respect of which interest or instalment remained overdue for two quarters or more is an NPA,  |
| 21 | Plant Load Factor                | A measure of the output of a power plant compared to the maximum output it could produce.   |
| 22 | Power Purchase<br>Agreement      | PPA shall mean the power purchase agreement(s), entered/ to be entered into between the borrower and the off takers, as amended from time to time, for the sale of the power generated from the project.  |
| 23 | Pre commitment condition         | The obligation of the Lenders to make available the loan<br>pursuant to loan agreement shall become effective upon<br>the borrower by fulfilling conditions of loan agreement.  |

| 24 | Refinancing                               | Banks/FIs may refinance existing infrastructure and project loans by way of full or partial take-out financing, even without a pre-determined agreement with other banks / FIs, and fix a longer repayment period.   |
|----|---|--|
| 25 | Restructuring                             | Restructuring involve modification of terms of the advances / securities, which would generally include, among others, alteration of repayment period / repayable amount/ the amount of instalments / rate of interest (due to reasons other than competitive reasons).                |
| 26 | Scheduled<br>Commercial<br>Operation Date | Scheduled Commercial Operation Date shall mean the date(s) of commercial operation of a generating station or generating unit or block thereof as indicated in the Investment Approval.  |
| 27 | Share Purchase<br>Agreement               | It is the definitive agreement that finalizes all terms and conditions related to the purchase and sale of the shares of a Company.  |
| 28 | Special Mention<br>Account                | The account created to identify incipient stress in the account before a loan account turns into a non performing asset.   |
| 29 | Station Heat Rate                         | Station Heat Rate means the heat energy input in k.Cal required to generate one kWh of electrical energy at generator terminals of a thermal generating station. The heat rate is the inverse of the efficiency: a lower heat rate is better.  |
| 30 | Stratified Random Sampling Method         | A method of sampling that involves the division of a population into smaller groups known as strata. In stratified random sampling, the strata are formed based on members' shared attributes or characteristics. These subsets of the strata are then pooled to form a random sample. |
| 31 | Trust and Retention<br>Account            | A payment mechanism in the form of an account which shall be opened in the designated bank to ensure all the cash flows of the project are routed through strictly as per the mandate drawn between the lender and the borrower.   |
| 32 | Upfront equity                            | Upfront equity means equity to be infused by the promoters before any disbursement of Loan.  |
| 33 | Zero Coupon Bonds                         | A bond that is issued at a deep discount to its face value but pays no interest.   |

### LIST OF ABBREVIATIONS

| Sl. No. | Term used | Description   |
|---------|-----------|---|
| 1       | AHPCL     | Alaknanda Hydro Power Company Limited                         |
| 2       | APIL      | Avantha Power and Infrastructure Limited                      |
| 3       | APL       | Abhijeet Power Limited  |
| 4       | APSPDCL   | Andhra Pradesh Southern Power Distribution Company<br>Limited |
| 5       | CEA       | Central Electricity Authority                                 |
| 6       | CERC      | Central Electricity Regulatory Commission                     |
| 7       | CLA       | Common Loan Agreement   |
| 8       | CMA       | Concession Management Agreement                               |
| 9       | COD       | Commercial Operation Date                                     |
| 10      | COR       | Cost Overrun  |
| 11      | CPL       | Corporate Power Limited                                       |
| 12      | CSTA      | Coal Supply and Transportation Agreement                      |
| 13      | DEPL      | DANS Energy Private Limited                                   |
| 14      | DISCOMs   | Distribution Companies  |
| 15      | DSCR      | Debt Service Coverage Ratio                                   |
| 16      | EPML      | Essar Power MP Limited  |
| 17      | EPC       | Engineering, Procurement and Construction                     |
| 18      | FI        | Financial Institution   |
| 19      | FSA       | Fuel Supply Agreement   |
| 20      | GEVPL     | Gayatri Energy Ventures Private Limited                       |
| 21      | GPL       | Gayatri Projects Limited                                      |
| 22      | GRHEPPL   | GVK Ratle Hydro Electric Power Project Limited                |
| 23      | IBEUL     | Ind-Barath Energy Utkal Limited                               |
| 24      | IBPML     | Ind-Barath Power (Madras) Limited                             |
| 25      | ICB       | International Competitive Bidding                             |
| 26      | ICRA      | Investment Information and Credit Rating Agency               |
| 27      | IEX       | Indian Energy Exchange  |
| 28      | IPCL      | India Power Corporation Limited                               |
| 29      | IPPs      | Independent Power Producers                                   |

| Sl. No. | Term used | Description   |
|---------|-----------|---|
| 30      | IRR       | Internal Rate of Return   |
| 31      | JPCL      | Jal Power Corporation Limited                                   |
| 32      | JPL       | Jhabua Power Limited  |
| 33      | KGPL      | Konaseema Gas Power Limited                                     |
| 34      | KGPUL     | Krishna Godavari Power Utilities Limited                        |
| 35      | KMPCL     | KSK Mahanadi Power Company Limited                              |
| 36      | LAPL      | Lanco Amarkantak Power Limited                                  |
| 37      | LBPL      | Lanco Badandh Power Limited                                     |
| 38      | LVTPL     | Lanco Vidharbha Thermal Power Limited                           |
| 39      | LCN       | Lending Confirmation Notice                                     |
| 40      | LE        | Lender Engineer   |
| 41      | LFA       | Lenders Financial Advisor                                       |
| 42      | LITL      | Lanco Infratech Limited   |
| 43      | LLA       | Land Lease Agreement  |
| 44      | LLR       | Loan life ratio   |
| 45      | MEIL      | Megha Engineering and Infrastructures Limited                   |
| 46      | MEIPHL    | Meenakshi Energy and Infrastructure Holdings Private<br>Limited |
| 47      | MEPL      | Meenakshi Energy Private Limited                                |
| 48      | MIPL      | Meenakshi Infrastructure Private Limited                        |
| 49      | MoEF      | Ministry of Environment and Forests                             |
| 50      | MoP       | Ministry of Power   |
| 51      | MPL       | Meenakshi Power Limited   |
| 52      | MSEDCL    | Maharashtra State Electricity Distribution Company Limited      |
| 53      | MW        | Mega Watt   |
| 54      | NBFC      | Non-Banking Financial Company                                   |
| 55      | NCCL      | Nagarjuna Construction Company Limited                          |
| 56      | NPPL      | NCC Power Projects Limited                                      |
| 57      | NCD       | Non-Convertible Debentures                                      |
| 58      | NPA       | Non-Performing Assets   |
| 59      | O&M       | Operation and Maintenance                                       |
| 60      | PAT       | Profit After Tax  |

| Sl. No. | Term used | Description  |
|---------|-----------|--|
| 61      | PFC       | Power Finance Corporation Limited                  |
| 62      | PIL       | Public Interest Litigation                         |
| 63      | PLF       | Plant Load Factor                                  |
| 64      | PPA       | Power Purchase Agreement                           |
| 65      | PTC       | Power Trading Corporation                          |
| 66      | R/R/R     | Restructuring/Rescheduling/Renegotiating           |
| 67      | RRR       | Reference Rate of Return                           |
| 68      | RBI       | Reserve Bank of India                              |
| 69      | REC       | Rural Electrification Corporation Limited          |
| 70      | RPPL      | RKM Powergen Private Limited                       |
| 71      | RNPL      | RattanIndia Nasik Power Limited                    |
| 72      | ROE       | Return on Equity                                   |
| 73      | SEPC      | SPIC Electric Power Corporation Limited            |
| 74      | TANGEDCO  | Tamil Nadu Generation and Distribution Corporation |
| 75      | TRA       | Trust and Retention Account                        |
| 76      | UERC      | Uttarakhand Electricity Regulatory Commission      |
| 77      | UPPCL     | Uttar Pradesh Power Corporation Limited            |
| 78      | UPERC     | Uttar Pradesh Electricity Regulatory Commission    |

