

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-point³ 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 cases⁴ of REC and PFC, five standalone loan cases⁵ of REC and two standalone cases⁶ 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

³ 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

⁴ Para 2.1.1 to 2.1.5

⁵ Para 2.1.6 to 2.1.10

⁶ 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 promoters⁷ 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 promoters⁸ 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 projects⁹ of 12 and 25 MW. The project proposal was awarded 50 *per cent* by REC against the experience criteria, even

⁷ M/s RKP and Associates (74 *per cent*) and M/s MCJ and Associates (26 *per cent*)

⁸ 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

⁹ Middle Kolab Small Hydro Electric Project and Lower Kolab Small Hydro Electric Project

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) Limited¹⁰ (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

¹⁰ Promoted by M/s. IBPIL and Arkay Energy (Rameswaram) 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 cases¹¹ of REC and PFC, three standalone loan cases¹² of REC and three standalone cases¹³ 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

¹¹ Para 2.2.1 to 2.2.3

¹² Para 2.2.4, 2.2.6 and 2.2.7

¹³ Para 2.2.5, 2.2.8 and 2.2.9

¹⁴ 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

¹⁵ 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 contributors¹⁶ 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 condition¹⁷ 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

¹⁶ 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

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

¹⁸ Lanco Babandh Power Project and Lanco Vidarbha Power Project

¹⁹ Lanco Amarkantak III&IV, Lanco Vidarbha, Lanco Babandh and LancoTeesta

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 seven²⁰ 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.

2.2.7 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 nine²¹ 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 projects²² would be completed which was accepted by PFC though one of these projects, financed by PFC,

²⁰ (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

²¹ (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

²² 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 net-worth 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 pre-commitment 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 macro-economic 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 rate²³ 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 cases²⁴ pertain to REC and three standalone cases²⁵ pertain to PFC). In all these cases, the levelised generation cost²⁶ was higher than the levelised tariff²⁷ 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.

²³ 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

²⁴ Para no 2.3.1 to 2.3.3

²⁵ Para no. 2.3.4 to 2.3.6

²⁶ Levelised generation cost is the net present value of the cost of electricity per unit over the life time period of the project

²⁷ 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-1²⁸ 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

²⁸ *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 norms²⁹ 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 appraised 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 per cent 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

²⁹ 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 Account³⁰.

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

³⁰ *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 Amarkantak 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 NPA³¹ 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.

³¹ *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 mechanism³² 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:

³² *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 dual 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.