# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 18/RP/2015 <u>in</u> Petition No. 197/GT/2013

Coram:

Shri Gireesh B. Pradhan, Chairperson Shri A.K. Singhal, Member Shri A.S. Bakshi, Member Dr. M.K. Iyer, Member

Date of Hearing: 17.11.2015 Date of Order: 14.03.2016

#### In the matter of

Review of Commission's order dated 10.7.2015 in Petition No.197/GT/2013 regarding approval of generation tariff for Circulating Fluidized Bed Consumption (CFBC) Technology based Barsingsar Thermal Power Plant (2 X 125 MW) of Neyveli Lignite Corporation Limited for the period from the COD of Units-I and II till 31.3.2014.

#### And

#### In the matter of

Neyveli Lignite Corporation, Neyveli House, 135 EVR Periyar Road, Kilpauk, Chennai -600 010

...Petitioner

Vs

- Jodhpur Vidyut Vitran Nigam Ltd, New Power House, Heavy Industrial Area, Jodhpur, Rajasthan
- 2. Jaipur Vidyut Vitran Nigam Ltd. Vidyut Bhawan, Janpath, Jaipur, Rajasthan 302 005
- 3. Ajmer Vidyut Vitran Nigam Ltd. Old Power House Hathi Bhata, Jaipur Road, Aimer, Rajasthan

...Respondents

# Parties present:

Shri M.G. Ramachandran, Advocate, NLC Ms. Anushree Bardhan, Advocate, NLC Shri Rakesh Kumar, NLC Shri R. Mohan, NLC Shri K. Nambirajan, NLC Ms. Akansha Wadhwa, NLC Shri Dinesh Mittal, NLC



### **ORDER**

This application has been made by the petitioner, NLC for review of order dated 10.7.2015 in Petition No.197/GT/2013 whereby the Commission had determined the tariff of Barsingsar Thermal Power Plant (2 X 125 MW) in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (the 2009 Tariff Regulations).

- 2. Aggrieved by the said order, the petitioner has sought review of the said order dated 10.7.2015 on the ground of error apparent on the face of the order and has raised the following issues:
  - (i) Decision as to the consequence of delay of 16 months for Unit-I and 18 months for Unit-II during the construction period till synchronization of the respective units;
  - (ii) Disallowance of the delay of 21 months for Unit-I and 13 months for Unit-II from the date of synchronization to the date of actual COD;
  - (iii) Reduction in capital cost by ₹88.23 crore after adjustment of the value of infirm power and fly ash sales;
  - (iv) Considering the liquidated damages adjustment of an amount of ₹129.88 crore based on the quantum of the bank guarantee of ₹61.52 crore;
  - (v) Wrong calculation of IDC without considering the deferred deployment of the debt and implication thereof;
  - (vi) Arithmetical mistakes in the tables pertaining to calculation of gross normative equity, gross notional loan and opening gross block.
- 3. The petition was heard on 25.8.2015 and the Commission by interim order dated 31.8.2015 admitted the review petition on the said issues and ordered notice on respondents. The parties were also directed to complete pleadings in the matter. The respondents have filed common reply vide affidavit dated 12.10.2015 and the petitioner has filed its rejoinder to the same. Thereafter, the Commission after hearing the parties on 17.11.2015 reserved its order in the petition.
- 4. Heard the learned counsel for the parties and the documents available on record has also been examined. We therefore, proceed to consider the issues raised by the petitioner in the petition as stated in the subsequent paragraphs.

Decision as to the consequence of delay of 16 months for Unit-I and 18 months for Unit-II during the construction period till synchronization of the respective units; AND Disallowance of the delay of 21 months for Unit-I and 13 months for Unit-II from the date of synchronization to the date of actual COD

- 5. Both the issues have been clubbed together and examined as it relates to time overrun. Against the Scheduled COD of 15.12.2008 for Unit-I and 15.6.2009 for Unit-II as per Investment Approval dated 15.12.2004, the actual COD of Unit-I is 20.1.2012 and 29.12.2011 for Unit-II, thereby resulting in time overrun of 37 months for Unit-I and 30.5 months for Unit-II. Accordingly, the Commission after considering the submissions of the parties had examined the issue of time overrun involved in the COD of the units of the generating station and disposed of the same as under:
  - "18. .....The reasons for delay in completion of the project as submitted by the petitioner can be categorized as under:
    - (a) Delay of 16 months for Unit-I and 18 months for Unit-II for the period during construction till the synchronization of the respective units; and
    - (b) Delay of 21 months for Unit-I and 13 months for Unit-II from synchronization to actual COD of the respective units.
  - 19. The major reasons for the delay of 16 months for Unit-I and 18 months for Unit-II in construction of the project till synchronization of the units is mainly due to increased work quantum specific to CFBC boiler as compared to conventional boilers of same capacity in respect of tonnage erection (two times), site welding joints (there times) and refractory application etc. It is also noticed that there were recurring problems in CFBC like failure of fluidised bed heat exchanger tubes, differential temperature problem in turbine top and bottom casings. Accordingly, the petitioner has submitted that the reason for such failures is on account of the fact that CFBC boilers are being installed for the first time by the petitioner and are different from the conventional pulverised fuel boilers used in other power plants. It is observed that the petitioner had adopted the CFBC technology keeping in view its suitability for low grade fuel like lignite apart from other advantages like the technology being environment friendly and highly reliable, simplified fuel preparation and feeding with compact plant design and sustainability under cyclic loading. The petitioner having adopted a clean and new technology considering its merits and advantages derived (which outweigh limitations) in the form of higher efficiency, lower environmental pollution and cheaper power and having engaged M/s BHEL which is the largest and reliable indigenous manufacturer with experience in manufacture, supply and erection of CFBC boiler as EPC contractor and fixed the time schedules accordingly, cannot, in our view, be held fully responsible for the delay in completion of the project on account of various problems faced during design, engineering and manufacturing stage and also in stabilization of CFBC boiler under Indian conditions. According to us, the problems faced in the construction stage could not have been foreseen considering the fact that the development of the technology, apart from being new, is still at a very early stage. It is noticed that the Commission in its order dated 22.8.2013 in Petition No. 28/2011, pertaining to Sipat STPS-I of NTPC had condoned the time overrun considering various factors associated with the execution of the project based on super critical technology. Applying the said principle for this case, we find that the delay of 16 months for Unit-I and 18 months for Unit-II (i.e. during the construction of the project till the synchronization of the units) is for reasons associated with the adoption of new technology. Accordingly, we are inclined to condone the said delay on this count.



- 20. It is observed that the delay of 21months for Unit-I and 13 months for Unit-II from the synchronization of the units till the actual COD of the units as stated by the petitioner is on account of the frequent and long shutdown of the units due to frequent cyclone chokes in both the units, HP casing temperature differential problems, Evaporator coil rifled tubes failure, PA fan 2A vibration problem. Also, being a new technology, the cause analysis and remedial measures attempted by M/s. BHEL (by trying successive attempts) has consumed more time leading to outages for longer periods. It is further noticed that other problems like frequent shearing of polymer liners, refractory damages in both the units, Emergency boiler feed pump failure, VFD drive problem in ID fans, frequent failure of SA Fans, failure of excitation over voltage protection, turbine speed measurement problem, compressors problem, over loading of SA fans, super heater problems. main ejector flange gasket failure, plate heat exchanger chocking, DMCW vibration, HFO pump failure etc. have also contributed to the delay in the commissioning of the units. Accordingly, the petitioner has submitted that in order to facilitate the modification / rectification of defects, various measures / repairs were undertaken in both the units by M/s. BHEL and in all occasions, BHEL had to fix up a suitable agency which took considerable time in mobilizing the manpower from their sub-vendors. It is evident from the said submissions of the petitioner that the delay from synchronization of units till actual COD of the units is on account of a long time taken by the agency for fixing the problems and also the delay in fault rectification. Though this can be attributed to the use of new technology and the exposure of manpower available with petitioner and M/s. BHEL with lesser expertise, a considerable extent of delay could have been avoided if there was proper planning and project management with better co-ordination between the contractor and sub-contractors involved in the project. The delay due to lack of project management, co-ordination, planning, un-organized work structure during the execution of project is not beyond the control of the petitioner and the petitioner cannot escape responsibility for the said delay. In our view, the problems resulting in delay cannot be said to be associated with the execution of new technology in the project. Accordingly, we find no reason to condone the time overrun of 21 months for Unit-I and 13 months for Unit-II in the execution of the project.
- 21. From the discussions above, it emerges that the problems faced by the petitioner in design, construction and manufacture stage and in stabilization of CFBC boilers was on account of adoption of new environment friendly technology which was intended for better utilization of the scarce resources. As the development of this technology was still at an early stage, these problems could not have been foreseen by the petitioner. However, the factors such as the delay in supply of equipments, execution of work and slow progress of erection works by the main plant contractor faced during the commissioning of the units and the time taken for fixing/rectifying the defects by the contractors/sub-contractors were attributable to the petitioner. The reasons such as the adoption of new technology by the petitioner which was still in an early stage coupled with the lack of co-ordination with the contractors /sub-contractors leading to delay in execution of the project when examined in the background of the judgment of the Tribunal dated 27.4.2011 as stated above, lead us to the conclusion that the situation does not fall under the principles laid down in para 7.4 (i) and (ii) of the said judgment. Hence, the principle laid down in situation (iii) of the said judgment is applicable in the present case. Accordingly, the impact of time and cost overrun of 37 months for Unit I and 31 months for Unit II along with LD and Insurance proceeds are required to be shared equally by the petitioner and the respondents. We hold accordingly."
- 6. The petitioner in the review application has submitted as under:
  - (i) In so far as the delay upto the synchronization i.e during the period of construction till synchronization, the Hon'ble Commission had come to a clear and unequivocal finding in paragraph 19 to the effect that the delay was on account of reasons associated with the adoption of new technology and therefore is required to be condoned. Despite the above, the Hon'ble Commission has proceeded to hold in para 21 that read with para 38 that NLC should be entitled to only 50% of the IDC etc for the period beyond the Scheduled Commercial Operation Date;
  - (ii) The Hon'ble Commission has failed to appreciate that in regard to the first phase of time overrun of 16 months for Unit No.1 and 18 months for Unit No.2 i.e upto the date of synchronization, the justification for the delay had been duly analyzed in Para 19 and decision is made namely the delay should be condoned and therefore the effect would be the cost overrun

for such delays should be allowed in full. The conclusion contained at the end of Para 19 is "Accordingly, we are inclined to condone the said delay on this count." The entire delay including on the design and supply of material, slow progress of erection work, extra work to be carried out were all on account of the new technology and such delay has been accepted by the Hon'ble Commission to be justified in Para 19. Accordingly, in so far as the period upto the synchronization is concerned, there is no justification for attributing in Para 21 any part of the time overrun to any act or omission or commission on the part of NLC. In the circumstances, the Hon'ble Commission ought to have considered and allowed IDC for the first phase of time overrun upto the date of synchronization in accordance with the principles laid down by the Appellate Tribunal for Electricity in the judgment dated 27.4.2011 in Appeal No.72/2010 [(MSPGCL v MERC at Para 7.4 (ii)].

(iii)In so far as the second phase is concerned, namely, from the date of synchronization to the date of actual COD, the Hon'ble Commission has failed to appreciate that on the same reasoning as contained in Para 19, non achievement of COD of the respective units was solely on the adoption of new technology. In fact, the implications of the new technology adoption for which time for the first phase has been duly condoned, applies more so, if not equally, in regard to the period from the date of synchronization upto the actual COD. On the face of it, once synchronization had been done, there was no reason whatsoever for NLC to further delay the COD. The COD got delayed on account of the assimilation of the new technology which had been in the early stage of development..."

- 7. During the hearing, the learned counsel for the petitioner submitted that time overrun for the first phase, i.e 16 months for Unit-I and 18 months for Unit-II from construction stage upto the date of synchronization was solely on account of adoption of new technology and as such beyond the control of the petitioner. He further submitted that the disallowance of time overrun do not relate to the work undertaken from the date of synchronization till the actual COD. Accordingly, the learned counsel submitted that there is error apparent on the face of the record in considering the entire time overrun of 37 months for Unit-I and 31 months for Unit-II upto the actual COD.
- 8. The learned counsel for the respondents (discoms of Rajasthan) vide its reply affidavit dated 12.10.2015 has submitted that the petitioner is liable to bear the additional cost towards time overrun as it was aware of the fact that the CFBC is a new technology and should have accounted for eventualities with an action plan and with specialized personnel to deal with specific issues while providing the schedule for commissioning. He further submitted that there has been lack of labour management and imprudence in planning on the part of the petitioner and hence, the petitioner is liable for time overrun. The learned counsel also added that the petitioner cannot claim further relaxation of time overrun due to the acts of M/s BHEL as they have already accounted for the same by accepting the LD. In response, the petitioner in its

rejoinder affidavit dated 23.10.2015 has reiterated its submissions made earlier and has submitted that there was no reason whatsoever for NLC or the contractor or any other agency to further delay the COD.

- 9. The matter has been examined. The learned counsel for the petitioner has argued that the Commission having arrived at the conclusion in Para 19 of the order that the delay on account of adoption of new technology is to be condoned, should have condoned the time overrun of 16 months for Unit-I and 18 months for Unit-II upto the date of synchronization as factors beyond the control the generating station instead of attributing in Para 21 any part of the time overrun to any act or omission or commission on the part of the petitioner. We are in agreement with the submissions of the petitioner. From the observations of the Commission in para 19 of the order dated 10.7.2015 (as quoted above) it is noticed that the Commission by a conscious decision had decided to condone the delay of 16 months for Unit-I and 18 months for Unit-II (during construction of project till synchronization) for reasons associated with the adoption of new technology, after recognizing the fact that the various problems faced during design, engineering and manufacturing and in stabilization of CFBC boiler in the construction stage could not have been foreseen considering the fact that the development of new technology was still at a very early stage. This aspect had also been examined in the light of the Commission's order dated 22.8.2013 in Sipat-I of NTPC allowing time overrun of the project based on super critical technology and the principle applied therein was adopted in the instant case of the petitioner for condonation of the delay. According to us, the observations in para 21 of the order does not truly reflect the decision in para 19 of the order to condone the delay based on new technology (from construction stage till synchronization) and accordingly, is an error apparent on the face of the order and is required to be reviewed. In view of this, we allow the prayer of the petitioner for condonation of delay of 16 months for Unit-I and 18 months for Unit-II from construction stage till synchronization.
- 10. The petitioner has submitted that the implications of adoption of new technology for which the delay has been condoned prior to the date of synchronisation equally apply in regard to the period after the date of synchronization upto the actual COD. The petitioner has further submitted

that the synchronization having been done, there was no reason for the petitioner to delay the COD of the project except on account of the problems encountered in adoption of new technology which is beyond the control of the petitioner. The petitioner has also submitted that reasons like lack of project management, coordination, planning and unorganized work structure during the execution of the project cannot be cited as the reasons for gap between the date of synchronization and actual COD of the generating station and therefore, the delay for the said period should be condoned. We are unable to accept the submissions of the petitioner. Problems were encountered in the CFBC boiler before the synchronization and the equipments were synchronized after rectification of the defects by EPC contractor. The petitioner and its contractor were expected to ensure that all defects were rectified before synchronization of the boiler. Keeping in view the fact that for the problems arising out of adoption of new technology, the Commission has fully condoned the delay upto the date of synchronization. However, after the synchronization when the defects were noticed, OEM took unusually long time to rectify the defects. There is nothing on record to show that the petitioner has diligently pursued with the OEM to rectify the defects in the shortest period of time. In the background of these facts, we hold that the impact of time overrun of 21 months for Unit-I and 13 months for Unit-II (from date of synchronization upto the actual COD) should be equally shared by the parties. Accordingly, the prayer of the petitioner for review of order dated 10.7.2015 on this count is allowed in terms of the above and tariff shall be revised at the time of truing-up in terms of Regulation 6 of the 2009 Tariff Regulations.

## Adjustment of the value of infirm power and fly ash sales

11. The Commission in order dated 10.7.2015 had deducted an amount of ₹88.23 crore towards revenue earned from the sale of infirm power and fly ash, from the capital cost as on COD of the generating station, subject to truing up. The relevant portion of the order is extracted as under:

"28. The petitioner vide affidavit dated 16.3.2012 has submitted that the value of infirm power and fly ash is ₹88.23 crore. In response to the directions of the Commission to provide the details of revenue earned from sale of infirm power after accounting for the fuel expenses and from sale of fly ash separately from the date of synchronization up to COD of the generating station, the petitioner vide affidavit dated 20.7.2012 has submitted that infirm power bills of August, 2010, December, 2011 and January, 2012 are yet to be paid by the respondent discoms and the details



will be furnished after receipt of payment of infirm power bills and excess rebate availed by the respondents. In view of this, the revenue earned from sale of infirm power and fly ash amounting to ₹88.23 crore has been deducted from the capital cost of the generating station as on COD of the generating station subject to truing-up. The petitioner is directed to furnish the details of revenue earned from infirm power and fly ash (unit-wise) at the time of revision of tariff based on truing-up exercise in terms of Regulation 6(1) of the 2009 Tariff Regulations"

12. The petitioner in the review application has submitted as under;

"In Paragraphs 24, 28 and 31 of the Order dated 10.7.2015, the Hon'ble Commission has, inter alia, considered the adjustment of Rs 88.23 Cr. as the value of infirm power to be deducted from the gross value of the capital assets. In the proceedings before the Hon'ble Commission, NLC had submitted that the infirm power value for the entire period is not available. However an amount of ₹60.93 Cr. which was clearly known was duly accounted for by reduction in the capital cost and the amount of ₹1750.64 Cr referred to in Para 26 of the Order was after such deduction. A certificate from the auditor in regard to the adjustment of Rs 60.93 Cr. while computing the capital cost including IDC of ₹1750.64 Cr. is attached hereto. In view of the above there has been a double adjustment of the amount of ₹60.93 Cr. It is also clarified that the amount of ₹1750.64 Cr. of the capital cost including IDC referred to in Para 26 of the Order dated 10.7.2015 does not include the cost of infirm power in excess of ₹60.93 Cr. The cost of such additional infirm power needs to be adjusted at the time of truing up."

- 13. The respondents have submitted that the submissions of the petitioner cannot be sustained as the said quantum must be reduced from the gross value of the capital asset and not at the time of truing-up as the sale of infirm power occurred at the time of setting up of the said project even though the inflow occurred later. It has also submitted that if the accounting for the same is left at the time of truing-up then it will result in double benefit accruing to the petitioner in as much as the quantum will get added to the capital cost resulting in inflated figure of capital cost.
- 14. The matter has been considered. From the documents available on record, it is noticed that the petitioner, in response to the directions of the Commission, had submitted vide affidavit dated 20.7.2012 that infirm power bills of August, 2010, December, 2011 and January, 2012 are yet to be paid by the respondent discoms and the details will be furnished after receipt of payment of infirm power bills and excess rebate availed by the respondents. Based on this, the Commission in para 28 of the order dated 10.7.2015 had adjusted the amount of ₹88.23 crore as the value of infirm power from the gross block of the capital assets of the generating station, subject to truingup. The petitioner has now submitted that an amount of ₹60.23 crore had been accounted for in the by reduction in the capital cost and the amount of ₹1750.64 crore referred to in para 26 of the order dated 10.7.2015 was after such deduction. It has also submitted Auditor certificate dated 24.7.2015 indicating that the adjustment of ₹60.23 crore while computing the capital cost

including IDC of ₹1750.64 crore. Considering the fact that the amount of ₹88.23 crore deducted from capital cost in order dated 10.7.2015 is subject to truing-up and that the petitioner has now furnished details of the amount adjusted towards infirm power etc., we are inclined to consider the Audited certificate dated 24.7.2015 and the revenue earned from sale of infirm power/fly ash will be adjusted at the time of revision of tariff of the generating station based on truing-up exercise in terms of Regulation 6 of the 2009 Tariff Regulations. Accordingly, there is no error apparent on the face of the record and the review on this count is disposed of in terms of the above.

# **Adjustment of Liquidated Damages**

- 15. As stated, the Commission in order dated 10.7.2015 had decided that the cost overrun on account of time overrun in declaration of COD of the generating station is to be equally shared by the parties (on 50:50 basis) in terms of the judgment of the Tribunal dated 27.4.2011. Accordingly, in terms of the submissions of the petitioner vide affidavit dated 20.7.2012 in the main petition that ₹129.88 crore had been recovered from M/s BHEL on account of the delay, the Commission, in para 30 & 31 of the order dated 10.7.2015 permitted the petitioner to retain only 50% of the amount (50% of ₹129.88 crore) recovered as Liquidated Damages (LD) from the contractor M/s BHEL.
- 16. The petitioner in this petition has submitted that a sum of ₹108.20 crore has been recovered by NLC towards LD for delay in all packages (including the above against BHEL) in the form of cash and a sum of ₹3.50 crore is available in the form of Bank Guarantee. It has also submitted that some of the contractors had disputed the levy of LD and had initiated Arbitration proceedings and the Arbitrators have awarded a refund of LD of ₹3.80 crore. The petitioner, in this petition has stated that the LD amount should be apportioned on the basis of ₹108.20 crore and not ₹129.88 crore. It has also submitted that the adjustment of 50% of LD of ₹64.54 crore in para 31 of the order is in excess of the 50% of the LD recovered on account of the delay and hence the Commission may review the order dated 10.7.2015 on this count.

- 17. The respondents have submitted that since the delay was caused due to mismanagement of the petitioner and as the agreement between the parties clearly contemplate that LDs are to be equally shared between the parties, the order of the Commission to retain only 50% of the LD by the petitioner is correct.
- 18. We have examined the matter. The Commission in its order dated 10.7.2015 had adjusted an amount of ₹64.94 crore (50% of 129.88 crore) in the capital cost keeping in view the submissions of the petitioner in affidavit dated 20.7.2012 that the LD recovered from BHEL on account of the delay was ₹129.88 crore (₹68.35 crore in form of cash and ₹61.52 crore in form of BG). Though the petitioner has now pointed out that the amount of ₹108.20 crore recovered as LD should only be apportioned, no documentary evidence indicating the details of LD recovered from all the parties has been submitted. In view of this, there is no error apparent on the face of the record. However, in the interest of justice, the petitioner is directed to submit documentary evidence in support of the LD's recovered for consideration of the Commission at the time of revision of tariff of the generating station based on truing-up exercise in terms of Regulation 6 of the 2009 Tariff Regulations. Accordingly, review on this count is disposed of as above.

#### **Computation of IDC**

19. The unit-wise IDC worked out and allowed for the purpose of tariff in the table under para 38 of the order dated 10.7.2015 is as under:

(₹ in lakh)

Units	IDC allowed up to scheduled COD		IDC allowed during scheduled COD to actual COD (time over-run)		
	Scheduled COD	100% of IDC allowed	Scheduled COD to actual COD	50% of the IDC allowed	
Unit-I	14.12.2008	2640.45	15.12.2008 to 20.1.2012	5804.42	
Unit-II	14.6.2009	4120.34	15.6.2009 to 29.12.2011	4790.14	
	IDC allowed (a)	6760.79	IDC allowed (b)	10594.57	
	Total IDC allowed (a+b) = <b>17355.36</b>				

20. The petitioner in the review petition has submitted as follows:

<sup>&</sup>quot;3B.I. Without prejudice to the submissions herein above, the actual amount of IDC to be adjusted for time overrun that may be disallowed by the Hon'ble Commission should be determined after considering the quantum of IDC which would be applicable up to SCOD and quantum of IDC



relating to the delay that has been condoned and allowed and in no event, the IDC to be disallowed should result in the reduction of the capital cost and IDC as calculated herein above. The capital cost along with the IDC of Rs.114.55 Cr. allowed in the revised cost Estimate-1 was Rs.1626.09 Cr. The IDC to be be considered for any disallowance cannot in any manner affect the said amount:

II. In the Order dated 10.7.2015, the Hon'ble Commission has disallowed the claim of IDC of an amount of Rs.129.75 Cr. as against Rs. 303.30 Cr. which would be the excess IDC to be considered on account of time overrun. Accordingly, there is an error apparent on the fact of the record in considering the adjustment of IDC as reduction in the capital cost of Rs.1620.89 Cr. as against Rs.1750.64 Cr. There are sufficient reasons for rectifying the above Order, without prejudice to the contentions of NLC that the entire time overrun with consequential IDC to be considered and allowed.

3C. Consequential effect of allowing Time Overrun:

NLC submits that as a consequence of the above rectification and modification of the Order dated 10.7.2015 passed by the Hon'ble Commission, the effect on other aspects including Interest on Loan including Normative Loan, Incidental Expenses during Construction and other resultant financials may also be considered and allowed.

The IDC in project sanction cost was Rs. 82.35 Cr. After placement of order for major packages RCE I was prepared and got approved retaining the same time schedule. The IDC in RCE I was Rs.114.55 Cr. The increase is only due to cost increase in competitive bidding and not due to time overrun.

The entire IDC of Rs.114.55 Cr. should have been allowed, whereas commission has allowed only Rs. 67.60 Cr. as the IDC incurred upto SCOD. IDC calculation without considering the deferred deployment of funds and implication there off is an error apparent on the face of record and the same is required to be rectified. There are otherwise sufficient reasons for reviewing the order on the above aspects."

- 21. It is evident from the above that the petitioner has contended that (i) the IDC indicated in the Revised Cost Estimate (RCE-I) is ₹114.55 crore and any disallowance in IDC should not affect the said amount and (ii) the IDC calculation without considering the deferred deployment of funds and implication there off is an error apparent on the face of record.
- 22. The respondent has submitted that the submissions of the petitioner are wholly erroneous and does not deserve consideration for the reason that that time overrun leading to increase in capital cost is attributable to the petitioner and such delay is not due to any act or force which are unavoidable in nature. Accordingly, it has prayed that the interest as has been granted by the order should further be disallowed.
- 23. We have examined the matter. The project cost approved vide order dated 10.7.2015 is as under:

				(₹in crore)
	Sanction date	Project Cost	IDC	Project Cost including IDC
Original sanction	15.12.2004	1031.83	82.35	1114.18
RCE-I	June, 2007	1511.53	114.60	1626.09



RCE-II	August, 2009	1664.73	304.90	1969.61
Allowed vide Commission's		1265.85	173.60	1439.41
order dated 10.7.2015				

24. It is noticed that for calculation of IDC, the loan deployed till the actual COD of the project and the rate of interest as applicable from time to time have been considered. Also, the IDC accrued till the scheduled COD of the individual units have been allowed fully and thereafter, 50% of the IDC has been disallowed on account of time overrun. Based on this, IDC had been computed and allowed as under:

		(₹in crore)
	Unit - II	Unit -I
Scheduled COD (SCOD)	15.6.2009	15.12.2008
a. IDC allowed till SCOD (100%)	41.20	26.40
Actual COD (ACOD)	29.12.2011	20.1.2012
IDC accrued	116.09	95.80
b. IDC allowed from SCOD to ACOD (50%)	58.04	47.90
Total IDC allowed till each ACOD (a+b)	99.25	74.31
Cumulative IDC allowed	99.25	173.55

25. Clause (c) of Regulation 7(1) of the 2009 Tariff Regulations provides that the cost of the project shall include interest during construction incurred or projected to be incurred up to the date of commercial operation of the project. In terms of this, the project cost as on COD shall include IDC, incurred or projected to be incurred, up to the date of commercial operation. The petitioner has submitted that the entire IDC of ₹114.55 crore as per RCE-I should have been allowed till SCOD, irrespective of actual fund deployment. This contention of the petitioner is not acceptable. In our view, IDC upto SCOD is to be considered based on the actual deployment of loan capital upto SCOD and the same cannot be correlated with the amount of IDC as per RCE-I. Accordingly, there is no error apparent on the face of the record and review on this count fails. However, as the petitioner has submitted that deferred deployment of debt and implication thereof has not been considered by the Commission while allowing IDC, albeit without any detailed justification, we, in the interest of justice, grant liberty to the petitioner to furnish detailed justification, substantiating the position in this regard at the time of revision of tariff of the generating station based on truing-up exercise in terms of Regulation 6 of the 2009 Tariff Regulations.

**Arithmetical/Computation Errors** 

In addition to the above, the petitioner has prayed for correction of certain arithmetical and 26.

calculation errors in the tables under paras 52, 55 and 57 of the order dated 10.7.2015 with

regard to gross normative equity and gross notional loan and opening gross block. It has also

submitted that there is difference in considering the opening amounts for the year 2012-13 as

compared with the closing figure for 2011-12.

27. The respondents have submitted that it has no objection to the rectification of arithmetical

errors provided that the actual figures supported by documents are being used for computation of

tariff.

We have examined the matter. It is noticed that certain arithmetical / clerical errors had

occurred in order dated 10.7.2015 with respect to the opening balance of the gross block for the

year 2012-13 as considered in computation of tariff. It is noticed that the opening balance for the

said year had been considered as ₹143940.71 lakh (opening gross block for 2011-12) instead of

₹144041.71 Consequent upon this, arithmetical errors had occurred in the calculation of

components of annual fixed charges namely, Depreciation, Interest on loan, Return on equity,

Interest on working capital. These are inadvertent arithmetical/clerical errors which are required

to be rectified. Accordingly, in terms of Regulation 103A of the Central Electricity Regulatory

Commission (Conduct of Business) Regulations, 1999, as amended on 12.11.2013, the prayer of

the petitioner for review of order for correction of errors is allowed. However, we direct the

rectification of the said errors at the time of revision of tariff of the generating station based on

truing-up exercise for the period 2009-14.

29. Review petition 18/RP/2015 is disposed of in terms of the above.

-Sd/-(Dr. M.K.lyer)

Member

-Sd/-(A.S. Bakshi) Member

-Sd/-(A.K.Singhal)

-Sd/-(Gireesh B. Pradhan) Chairperson