

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 367/GT/2020

Coram:

**Shri P. K. Pujari, Chairperson
Shri I. S. Jha, Member
Shri Arun Goyal, Member
Shri Pravas Kumar Singh, Member**

Date of Order: 9th June, 2022

In the matter of:

Petition for truing-up of tariff of Circulating Fluidized Bed Combustion Technology based NLC Thermal Power Station-II Expansion Units I & II (500 MW) for the period from their actual date of commercial operation till 31.3.2019.

And

In the matter of:

NLC India Limited,
First Floor, No.8, Mayor Sathyamurthy Road,
FSD, Egmore Complex of Food Corporation of India, Chetpet,
Chennai-600031

....Petitioner

Vs

1. Tamil Nadu Generation and Distribution Corporation Limited,
NPKRR Maaligai, 144, Anna Salai,
Chennai – 600002
2. Power Company of Karnataka Limited,
KPTCL Complex, Kaveri Bhavan,
Bangalore – 560009
3. Bangalore Electricity Supply Company Limited,
Krishna Rajendra Circle,
Bangalore - 560 001
4. Mangalore Electricity Supply Company Limited,
Corporate Office, MESCOM Bhavana, Bejai, Kavour Cross Road,
Mangalore 575 004
5. Chamundeshwari Electricity Supply Corporation Limited,
Corporate Office No CA 29, Vijayanagar, 2nd Stage, Hinakal,
Mysore -570017
6. Gulbarga Electricity Supply Company Limited,
Station Main road,

Gulbarga -585 102, Karnataka

7. Hubli Electricity Supply Company Limited,
Corporate office, P.B.Road, Navanagar,
Hubli - 580 025
8. Kerala State Electricity Board Limited,
Vaidyuthi Bhavanam, Pattom,
Thiruvananthapuram-695004
9. Puducherry Electricity Department,
137, NSC Bose Salai,
Puducherry – 605 001

....Respondents

Parties Present:

Ms. Anushree Bardhan, Advocate, NLC
Ms. Srishti Khindaria, Advocate, NLC
Shri Nambirajan, NLC
Shri Srinivasan, NLC
Shri AK Sahani, NLC
Shri S. Vallinayagam, Advocate, TANGEDCO
Shri B. Rajeswari, TANGEDCO
Shri R. Ramalakshmi, TANGEDCO

ORDER

This petition has been filed by the Petitioner, NLC for truing-up of tariff of Circulating Fluidized Bed Combustion (CFBC) Technology based NLC Thermal Power Station-II (Expansion) (2 x 250 MW) (in short 'the project/generating station') for the period from their actual date of commercial operation (COD) of Unit-I & Unit-II till 31.3.2019, based on Regulation 8(1) of the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2014 ('the 2014 Tariff Regulations').

2. The actual COD of Unit-I and Unit-II are 5.7.2015 and 22.4.2015 respectively. The installed capacity of the project is 500 MW with CFBC lignite boilers feeding to turbines. The Petitioner has entered into Power Purchase Agreements (PPA) with the Respondent beneficiaries and the Ministry of Power, GOI, has allocated the power generated from this project amongst the respondent beneficiaries. The allocation of

power from the generating station to the Respondents, as per the MOP, GOI letter dated 9.3.2004 is as under:

Name of the Beneficiaries	Allocation (in %)	Allocation (in MW)
Tamil Nadu	46	230
Karnataka	22	110
Kerala	14	70
Pondicherry	3	15
Un-allocated	15	75
Total	100	500

3. The Commission vide its order dated 24.7.2017 in Petition No. 146/GT/2015, had approved the tariff of the generating station for the period from COD of Unit-II to 31.3.2019. Aggrieved by the said order dated 24.7.2017, the Petitioner had filed Review Petition No. 39/RP/2017 and by order dated 19.12.2018, the Commission, while allowing the claim of the Petitioner with regard to the computation of interest on loan to be considered at the time of truing-up of tariff, also granted liberty to the Petitioner to raise the issue of initial spares, base lignite price and auxiliary power consumption at the time of truing up of tariff. The claims of the Petitioner with regard to the error on the issues of time overrun, consequential IDC and IEDC, Station Heat Rate and inclusion of cost of limestone for computing interest on working capital, were however rejected by the said order dated 19.12.2018. Against the orders dated 24.7.2017/19.12.2018, the Petitioner has filed appeal (Appeal No. 145 of 2019) before the Appellate Tribunal for Electricity ('the Tribunal') and the Tribunal has passed order dated 23.9.2019 and clarificatory order dated 1.6.2020, with regard to the maintainability of the said appeal. The appeal is pending for a final decision on merits and the Petitioner has filed this petition, without any prejudice to the appeal.

4. The capital cost and the annual fixed charges allowed by order dated 24.7.2017 in Petition No. 146/GT/2015, are as under:

Capital Cost allowed

(Rs. in lakh)

	2015-16		2016-17	2017-18	2018-19
	22.4.2015 to 4.7.2015 (Unit-II)	5.7.2015 to 31.3.2016 (Unit-I & Unit-II)			
Opening capital cost excluding IDC, normative IDC, liabilities	112530.65	238274.95	0.00	0.00	0.00
IDC allowed	27281.65	58661.76	0.00	0.00	0.00
Normative IDC allowed	5109.44	13340.58	0.00	0.00	0.00
Opening Capital Cost	144921.75	310277.29	316916.00	335354.26	335354.26
Discharge of Liabilities	0.00	6638.71	18438.26	0.00	0.00
Closing capital cost	144921.75	316916.00	335354.26	335354.26	335354.26

Annual Fixed Charges allowed

(Rs.in lakh)

	2015-16		2016-17	2017-18	2018-19
	22.4.2015 to 4.7.2015 (Unit-II)	5.7.2015 to 31.3.2016 (Unit-I & Unit-II)			
Depreciation	1535.38	12167.21	17089.48	17572.56	17572.56
Interest on Loan	2008.42	15480.57	19683.83	17099.73	14988.49
Return on Equity	1732.14	13726.42	19279.48	19824.47	19824.47
Interest on Working Capital	454.19	3619.70	4937.87	4954.88	5100.84
O&M Expenses	1296.86	9451.08	13564.19	14414.19	15319.19
Total	7026.98	54444.98	74554.85	73865.84	72805.56

Present Petition

5. Regulation 8(1) of the 2014 Tariff Regulations provides as under:

“8. Truing up

(1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2019, as admitted by the Commission after prudence check at the time of truing up:

Provided that the generating company or the transmission licensee, as the case may be, shall make an application for interim truing up of capital expenditure including additional capital expenditure in FY 2016-17.”

6. In terms of Regulation 8(1) of the 2014 Tariff Regulations, the Petitioner has filed the present Petition for truing up of tariff of the generating station from actual COD of

the units till 31.3.2019 and has claimed the following capital cost and annual fixed charges:

Capital Cost claimed

	2015-16		2016-17	2017-18	2018-19
	22.4.2015 to 4.7.2015 (Unit-II)	5.7.2015 to 31.3.2016 (Unit-I & Unit-II)			
Opening Capital Cost	144921.75	310277.29	316963.29	322181.29	322824.29
Add: Release of LD of A0-6 Package (50% reduced in the final order dated 24.7.2017)	0.00	0.00	0.00	0.00	276.49
Add: Cost of arbitration as awarded in arbitration order in A0-6 Arbitration	0.00	0.00	0.00	0.00	20.41
Add: Post award interest on total award amount as given in arbitration order in A0-6 Arbitration	0.00	0.00	0.00	0.00	201.80
Add: Interest on LD Withheld as given in arbitration order in A0-6 Arbitration	0.00	0.00	0.00	0.00	97.27
Discharge of Liabilities	0.00	6686.00	5218.00	643.00	255.86
Closing capital cost	144921.75	316963.29	322181.29	322824.29	323676.27
Average capital cost	144921.75	313620.29	319572.29	322502.79	323250.28

Annual Fixed Charges claimed

	2015-16		2016-17	2017-18	2018-19
	22.4.2015 to 4.7.2015 (Unit-II) *	5.7.2015 to 31.3.2016 (Unit-I & Unit-II) *			
Depreciation	7588.97	16423.04	16734.72	16888.18	16912.85
Interest on Loan	9927.37	20888.53	19228.35	17167.54	15124.44
Return on Equity	8567.05	18539.66	18891.52	19064.75	19160.34
Interest on Working Capital	2198.23	5082.65	5205.00	5225.79	5380.92
O&M Expenses	6405.93	12904.82	13755.62	14732.48	15490.81
Total	34687.56	73838.71	73815.21	73078.74	72069.35

*Annualized values

7. The Respondent, TANGEDCO and Respondent, KSEBL have filed their reply affidavits on 21.11.2020 and 20.7.2021 respectively. The Petitioner has filed its rejoinder affidavits, to the said replies, on 28.5.2021 and 30.8.2021 respectively. This Petition, along with Petition No. 111/GT/2020 (tariff of the generating station for the 2019-24 tariff period) was heard through video conferencing on 27.7.2021 and the

Commission, after directing the Petitioner, to submit certain additional information reserved its order in these petitions. In compliance to the directions, the Petitioner has filed the additional information vide affidavit dated 17.9.2021, after serving copies to the Respondents. Based on the submissions of the parties and documents available on record and after prudence check, we proceed for truing up the tariff of the generating station, in this petition, as stated in the subsequent paragraphs.

Capital Cost

8. Regulation 9(2) of the 2014 Tariff Regulations provides as under:

“The Capital cost of a new project shall include the following:

- (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) Increase in cost in contract packages as approved by the Commission;*
- (d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;*
- (e) Capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;*
- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;*
- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and*
- (h) adjustment of any revenue earned by the transmission licensee by using the assets before COD.”*

9. The Commission vide its order dated 24.7.2017 in Petition No. 146/GT/2015 had approved the hard cost of Rs 238274.95 lakh, as on the COD of the generating station (5.7.2015) considering IDC of Rs 58661.76 lakh and Normative IDC of Rs 13340.58 lakh, thereby totalling to Rs. 310277.29 lakh, as on the COD of the generating station. The Petitioner, in compliance to the directions vide ROP of the hearing dated 27.7.2021 has furnished revised Form-B for the project, stating that an amount of Rs. 12670.28 lakh has been deducted, on account of adjustment towards liquidated damages. We, therefore, proceed to redetermine the capital cost as on COD of the units, as stated in the subsequent paragraphs.

Liquidated Damages

10. The Commission vide its order dated 24.7.2017 in Petition No. 146/GT/2015, while determining the tariff on projection basis for 2014-19 tariff period had prorated the total withheld amount of Rs.1917.88 lakh towards LD corresponding to the total delay of 77 months and already deducted Rs.646.45 lakh to the extent of time overrun of 56 months condoned for Unit-I and 42.5 months condoned for Unit-II of the generating station. The relevant para is extracted below:

“43. The petitioner has further submitted that the LD amount of Rs. 1917.88 lakh withheld is in the custody of the petitioner and based on the decision which is yet to be taken, the amount will be either refunded or accounted as LD. We are of the considered view that since the petitioner has kept an amount of Rs.1917.88 Lakh in his possession as on date of COD of the generating station, the same needs to be adjusted in the capital cost to the extent the time overrun has been allowed in Unit-I and Unit-II respectively. The total LD amount of Rs. 1917.88 lakh withheld is for the total delay of 77 months, and hence the same is to be prorated for the time overrun allowed for 56 months for Unit-I and 42.5 months for Unit-II. However, the adjustment of LD will be done at the time of truing up exercise.”

11. The Commission vide ROP of the hearing dated 27.7.2021 with respect to LD had directed the Petitioner to furnish the following details

“Details of the adjustment of Liquidated Damages adjustment, in line with directions of the Commission in para 43 of the order dated 24.7.2017 in Petition NO.146/GT/2015.”

12. In response, the Petitioner vide affidavit dated 17.9.2021 has stated that the deducted LD amount of Rs.12670.28 lakh has been accounted for and adjusted in the capital cost. The details of the LD deducted and LD status as on 12.8.2021, as furnished by the Petitioner is as under:

Sl. No.	Package	Description	Name of Firm	LD amount withheld (in Rs.) as on 31.3.2016 submitted and considered in 146/GT/2015 (A)	LD amount withheld (in Rs.) as submitted in instant Petition (B)	LD amount Discharged (in Rs.) as submitted in instant Petition (C)	Total (in Rs.) (B+C)
1	A01	Main Plant	BHEL	114341148	0.00	1143411480	1143411480
2	A03	Ash Handling system	ENERGO	1609490	17704500	0.00	17704500
3	A04	Circulating water system	SPML	3324706	3324706	0.00	3324706
4	A06	Chimney + Cooling tower	GAMMON	55297890	0.00	0.00	0.00
5	A08	Switch Yard	BHEL	8678107	0.00	84112506	84112506
6	B01	DG Station	Jeevan Diesels	357089	0.00	0.00	0.00
7	C02	Roads & Drains- Phase-II- Gr-II	NSK Builders Pvt. Ltd.	107310	6555973	0.00	6555973
8	C02	Gen. Civil works - Phase-II- Gr-I	ECCI	1499876	0.00	9696074	9696074
9	C02	Gen. Civil works-Phase-II	RS Development & Co.	6246988	0.00	0.00	0.00
10	C02	Gen. Civil works- Phase-II- Gr-III	Diamond Infra Construction	325000	0.00	2222915	2222915
Total				191787604	27585179	1239442975	1267028154

13. It is observed from the Petitioner's RoP reply dated 17.9.2021 that LD amount of Rs.12670.28 lakh has been deducted from the capital cost in the revised Form 5B (consisting of Rs.124.83 Cr in Plant and Machinery Cost, Rs.0.66 Cr in Roads and Drains and Rs.1.19 Cr in Civil works). The liquidated damages of Rs.12670.28 lakh corresponds to total delay of 77 months and 71 months for Unit-I and Unit-II respectively. Hence, this LD amount has been prorated to the extent of the time overrun of 56 months and 42.5 months condoned for Unit-I and Unit-II respectively, which works out to Rs.8399.54 lakh (Rs.4607.38 lakh for Unit-I and Rs.3792.16 lakh for Unit-II). Accordingly, based on the delay in completion of each unit, Rs.3792.16 lakh and Rs.8399.54 lakh has been adjusted as on the COD of Unit-II and Station COD respectively.

14. It is further observed that the Petitioner has not submitted revised Form 9 E, after revision of Form 5B and therefore, the opening capital cost as on COD of each unit, has been worked out on the basis of the total capital cost considered in the order dated 24.7.2017 in Petition No. 146/GT/2015 and the adjustment of Rs. 646.45 lakh in lieu of LD in the aforesaid order has been reversed and the revised deduction of Rs.8399.54 Lakh has been made as discussed in paragraph 10.

Initial Spares

15. Regulation 13 of the 2014 Tariff Regulations provides as under:

“13. Initial Spares: Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:

(a) Coal-based/lignite-fired thermal generating stations - 4.0%

(b) Gas Turbine/Combined Cycle thermal generating stations - 4.0%

Provided that:

i. where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost by the Commission, such norms shall apply to the exclusion of the norms specified above:

iv. for the purpose of computing of initial the cost spares, plant and machinery cost shall be considered as project cost as on cut-off date excluding IDC, IEDC, Land Cost and cost of civil works. The transmission licensee shall submit the break-up of head wise IDC & IEDC in its tariff application.”

16. The Petitioner has, in original Form-5B of the main petition and revised Form 5B (submitted in response to ROP dated 27.7.2021) submitted that initial spares for Rs. 7951.00 lakh has been procured and capitalized as on the station COD and upto the cut-off date (31.3.2018). The Petitioner has also furnished the item-wise breakup of the initial spares (which comprises of 4 major items), procured and capitalised as initial spares. The Petitioner has accordingly prayed to allow the capitalisation of initial spares of Rs. 7951.00 lakh claimed as on COD and as on the cut-off date, in view of the uniqueness of this generating station and the consequent criticality of initial spares.

17. The Commission vide its order dated 24.7.2017 in Petition No. 146/GT/2015, had disallowed the excess claim of Rs 1745.48 lakh in initial spares, as on the station COD, based on the following observation: -

“38. The total Plant and Machinery cost including taxes and duties as per Form-5B is Rs.155138.00 lakh. Further, the petitioner has capitalized initial spares of Rs.7951.00 lakh as on COD of the generating station (5.7.2015). Accordingly, the initial spares capitalized for Rs.7951 lakh works out to 5.125% of the Plant and Equipment cost which is beyond the ceiling limit of 4% (Rs.6205.52 lakh) specified under the said regulations. Hence, initial spares have been restricted to Rs.6205.52 lakh upto COD of the generating station with deduction of Rs. 1745.48 lakh as on COD of the generating station. The petitioner is directed to furnish the details of additional capital expenditure along with the break-up of actual plant & machinery cost up to cut-off date and the details of initial spares capitalized up to the cut-off date at the time of true-up of tariff in terms of the Regulation 8 of the 2014 Tariff Regulations.”

18. In order dated 19.12.2018 in Review Petition No. 39/RP/2017, the Commission had observed that,

“29....it is clear that deduction of initial spares of Rs 17.45 Cr was strictly in terms of Regulation 13 of the 2014 Tariff Regulations. However, the petitioner was directed by the Commission to furnish details of capital expenditure including plant & machinery up to cut off date (31.3.2018) and initial spares capitalized up to cut off date. Therefore, at the time of true-up of tariff the initial spares would be revisited. Hence, there is no error apparent on the face of the order regarding the reduction of Rs 17.45 Cr of initial spares”

19. We have considered the matter. The Plant & Machinery cost as on the station COD (5.7.2015) allowed vide order 24.7.2017 in Petition No.146/GT/2015 is Rs.155138 lakh, and the same is claimed in the present petition. The initial spares on projection basis, allowed at 4% of the Plant & Machinery cost, works out as Rs. 6205.52 lakh, as on the station COD. However, the Plant & Machinery cost, as on cut-off date (31.3.2018) has been revised as Rs. 142652.28 lakh, on account of deduction of LD of Rs.12485.72 lakh from the Plant & Machinery cost (i.e., Rs.155138.00-Rs.12485.72= Rs.142652.28) in the revised Form 5B submitted by the Petitioner. Further, based on the prudence check Commission has allowed discharge of liabilities amounting to Rs.5262.78 lakh pertaining to plant and machinery in 2015-18 period. Hence, the allowable initial spares, as on cut-off date, at 4% of the Plant & Machinery cost is revised to Rs. 5916.60 lakh. Accordingly, the excess initial spares disallowed is Rs.2034.46 lakh as on the cut-off date.

20. Accordingly, the opening capital cost, as on the COD of the units of the generating station are approved as under:

	<i>(Rs. in lakh)</i>	
	Unit II COD (22.4.2015)	Station COD (5.7.2015)
Capital cost including IDC, Normative IDC and Liabilities	185536.99	389398.64
Less: Liabilities	12538.5	25076.97
Capital cost including IDC and Normative IDC excluding Liabilities	172998.49	364321.67
Less: IDC	39512.39	79551.02
Less: Normative IDC	17218.51	38267.03
Capital cost excluding IDC, Normative IDC and Liabilities	116267.59	246503.62
Less: Pro-rata reduction on overhead expenses IEDC	2479.27	5836.74
Less: Initial spares beyond 4% of plant and machinery	1017.23	2034.46
Total Opening Capital cost excluding IDC, Normative IDC, Liabilities	108978.93	230232.89
Add: IDC allowed	27281.65	58661.76
Add: Normative IDC allowed	5109.44	13340.58
Less: Adjustment of LD Recovered	3792.16	8399.54
Opening Capital Cost	141370.02	302235.23

Additional Capital Expenditure

21. Regulations 14 of the 2014 Tariff Regulations provides as under:

“14. Additional Capitalization and De-capitalization:

(1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

(i) Un-discharged liabilities recognized to be payable at a future date;

(ii) Works deferred for execution;

(iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;

(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and

v) Change in law or compliance of any existing law:

Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff.

(2) The capital expenditure incurred or projected to be incurred in respect of the new project on the following counts within the original scope of work after the cut-off date may be admitted by the Commission, subject to prudence check:

(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;

- (ii) *Change in law or compliance of any existing law;*
- (iii) *Deferred works relating to ash pond or ash handling system in the original scope of work; and*
- (iv) *Any liability for works executed prior to the cut-off date, after prudence check of the details of such un-discharged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.*
- (3) *The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:*
- (i) *Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;*
- (ii) *Change in law or compliance of any existing law;*
- (iii) *Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security;*
- (iv) *Deferred works relating to ash pond or ash handling system in the original scope of work;*
- (v) *Any liability for works executed prior to the cut-off date, after prudence check of the details of such un-discharged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;*
- (vi) *Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;*
- (vii) *Any additional capital expenditure which has become necessary for efficient operation of generating station other than coal /lignite based stations or transmission system as the case may be. The claim shall be substantiated with the technical justification duly supported by the documentary evidence like test results carried out by an independent agency in case of deterioration of assets, report of an independent agency in case of damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level;*
- (viii) *In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) and due to geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;*
- (ix) *In case of transmission system, any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement due to obsolescence of technology, replacement of switchyard equipment due to increase of fault level, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, replacement of porcelain insulator with polymer insulators, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system; and*
- (x) *Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receiving system arising due to non-materialization of coal supply corresponding to full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station:*

Provided that any expenditure on acquiring the minor items or the assets including tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, computers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2014:

Provided further that any capital expenditure other than that of the nature specified above in (i) to (iv) in case of coal/lignite based station shall be met out of compensation allowance:

Provided also that if any expenditure has been claimed under Renovation and Modernization (R&M), repairs and maintenance under (O&M) expenses and Compensation Allowance, same expenditure cannot be claimed under this regulation.

(4) In case of de-capitalisation of assets of a generating company or the transmission licensee, as the case may be, the original cost of such asset as on the date of de-capitalisation shall be deducted from the vale of gross fixed asset and corresponding loan as well as equity shall be deducted from the outstanding loan and the equity respectively in the year such de-capitalisation takes place, duly taking into consideration the year in which it was capitalised.”

22. The Petitioner, in Petition No. 146/GT/2015, had not claimed any projected additional capital expenditure and had submitted that the same will be claimed at the time of truing-up of tariff. Accordingly, the Commission vide its order dated 24.7.2017 observed as under:

“35. The petitioner has not furnished the additional capital expenditure claimed in a year-wise chronological order. Accordingly, the petitioner was directed vide ROP of the hearing dated 2.8.2016 to submit the details as per the Form-9A of the 2014 Tariff Regulations and also to fill up the form in chronological order year-wise along with detailed justification clearly indicating the necessity and the benefits of such capitalization. In response, the petitioner vide affidavit dated 31.8.2016 has submitted that the additional capital expenditure for the period 2014-19 has not been envisaged now and the same would be claimed at the time truing up of tariff in terms of 2014 Tariff Regulations. In view of the submissions of the petitioner, no additional capital expenditure has been considered in this order. The claim of the petitioner at the time of truing up shall however be considered based on the justification and documents furnished by the petitioner in terms of the provisions of the 2014 Tariff Regulations.”

23. The Petitioner, in the present petition, has not claimed any actual additional capital expenditure for the period 2015-19. However, the revision of the capital cost of the generating station is mainly on account of discharge of liabilities and the reversal of LD.

Discharges of Liabilities

24. The Commission vide its order dated 24.7.2017 in Petition No. 146/GT/2015, had allowed projected discharge of liabilities of Rs.6638.71 lakh in 2015-16 and

18438.26 lakh in 2016-17, out of the total projected undischarged liability of Rs.25077 lakh as on COD. The Petitioner, in Form-9A of the petition, has submitted the additional capital expenditure claimed under discharge of liabilities. The Petitioner has submitted that the actual discharge of undischarged liabilities is Rs.12803 lakh as on 31.3.2018 (cut-off date) as against the projected undischarged liabilities of Rs. 25077 lakh, as on COD. It has further stated that the remaining discharge of Rs.12274 lakh, on account of balance payments to Package contractors, would be carried out before 31.3.2020, i.e after the cut-off date. The Petitioner has therefore prayed that the cut-off date may accordingly be extended up to 31.3.2020, in exercise of the power to relax.

25. The Respondent TANGEDCO has submitted that 'power to relax' must be exercised reasonably and for valid recorded reasons. In response the Petitioner, has submitted that CFBC based 250 MW size power plant is first of its kind in South East Asia and they have faced considerable technical difficulties with their main contractor M/s BHEL and some PG tests are pending as on 2019 also. Accordingly, the Petitioner has submitted that the discharge of undischarged of liabilities as contemplated could not be made within the cut-off date.

26. We have considered the matter. According to us, the discharge of liabilities is always allowed on cash basis, for works which have already been allowed on accrual basis, as per Regulation 14(1)(i), Regulation 14(2)(iv) and Regulation 14(3)(v) of the 2014 Tariff Regulations. Therefore, there is no need for extension of cut-off date as prayed for by the Petitioner. Accordingly, the discharge of liabilities of Rs.6686 lakh in 2015-16, Rs.5218 lakh in 2016-17, Rs.643 lakh in 2017-18 and Rs.256 lakh in 2018-19 is considered for further scrutiny.

27. It is noticed that the Petitioner, has, claimed discharge of liabilities, as additional capital expenditure in Form-9A. However, on prudence check, it is observed

that the Petitioner has not submitted the corresponding liability flow statement (Form 18) matching to the above discharges. Hence, many items claimed under discharge of liabilities in Form 9A, could not be ascertained as to whether they relate to discharges of the earlier allowed items/heads and could not also be reconciled with revised Form 5B furnished, as on the cut-off date. Accordingly, only those items which could be reconciled with the heads as in Form 5B, have been allowed and the remaining items claimed as discharge of liabilities for additional capitalisation, have been disallowed in the respective years, as detailed below:

a. 2015-16: The Petitioner has claimed discharge of liabilities of Rs.6686.71 lakh for items in the main plant package, lignite handling system, ash handling system, cooling water system, effluent plant, civil works etc. The same is in order with Form 5B and is therefore allowed.

b. 2016-17: The Petitioner has claimed discharge of liabilities of Rs 5218.28 lakh, which consists of items like Ash handling system, shed near cooling tower, flooring way approach, lean roofing to diesel, cementory rocks to canteen etc. It is observed that. except for discharge of liability of Rs. 2762.82 lakh claimed under Ash handling system, the remaining items could not be reconciled, as the Petitioner has neither submitted Form 18 (liability flow statement), nor it could be reconciled with revised Form 5B. In view of this, we allow the discharge of liability for Rs. 2762.82 lakh pertaining to Ash handling system and the balance unreconciled discharge of liability is not allowed.

2017-18: The Petitioner has claimed discharge of liabilities of Rs 643.00 lakh which consists of items like bed material store shed, extension of scooter shed, BT roads, RCC roads, rail track road, culverts, duct banks, RCC drains, retaining wall cum drain, portable high frequency induction heater, portable high frequency induction heater, infra-red thermal imaging camera, pedestal fan 18 inch, PVC chairs 150 nos, RO units with UV system, battery operated industrial trolley vehicles 2 nos, etc. It is observed that for items like BT roads, RCC roads, rail track road, culverts, duct banks, RCC drains, retaining wall cum drain, falling under the head of civil works could be reconciled with the previously recognised liabilities by the Commission in order dated 24.7.2017 in

petition 146/GT/2015 and hence are allowed. However, the remaining items that could not be reconciled with Form 5B are disallowed. Accordingly, discharge of liabilities amounting to Rs. 364.31 lakh is allowed.

2018-19: The Petitioner has claimed discharge of liabilities of Rs 255.86 lakh for A01 - Main Plant Package - Unit II, A01-Main Plant Package- Unit-I, plasma cutting machine, OFC cable joining splicing machine, 5 HP 3 ph centrifugal self-priming monobloc pump set, morphi smart 300 series fingerprint sensor, 2nos UHD 65-inch smart monitor, 4 nos. UHD 55-inch smart monitor, 65-inch smart monitor, TPS IIE reciprocating air compressor, etc. It is noticed that only two items i.e. A01 - Main Plant Package - Unit II, A01-Main Plant Package- Unit-I fall under the package of Plant & Equipment and is therefore reconciled and allowed for Rs 22.36 lakh. However, the remaining items could not be reconciled with Form 5B and are accordingly disallowed.

Reversal of Liquidated Damages

28. The Petitioner has claimed reversal of LD in 2018-19 under the following heads:

	Liquidated Damages claimed	Amount (Rs. in lakh)
A	Release of LD of A0-6 Package (50% reduced in the final order for 2014-19 dated 24.7.2017, so only 50% is being claimed)	276.49
B	Cost of arbitration as awarded in arbitration order in A0-6 Arbitration	20.41
C	Post award interest on total award amount as given in arbitration order in A0-6 Arbitration	201.80
D	Interest on LD withheld awarded as per arbitration order in A0-6 Arbitration	97.27
E	Total (A+B+C+D)	595.97

29. It is observed from the details of the LD deducted as furnished by the Petitioner, that the LD against the package mentioned in the table above is 'nil'. Further, the Petitioner has not submitted any documentary proof of the arbitration award etc. In case the arbitration proceedings are pending, the Petitioner is at liberty to approach the Commission after finalisation and the same will be considered in accordance with law. In view of this, the additional capital expenditure claimed under this head, is not allowed.

30. Accordingly, the discharges of liabilities claimed by the Petitioner and allowed is as under:

		<i>(Rs. in lakh)</i>				
		2015-16	2016-17	2017-18	2018-19	Total
A	Allowed vide order dated 24.7.2017 in Petition No. 146/ GT/ 2015	6638.71	18438.26	0.00	0.00	25076.97
B	Claimed liabilities corresponding to additional capital expenditure	6686.71	5218.28	643.00	255.86	12803.00
C	Liabilities corresponding to additional capital expenditure allowed during the year	6686.71	2762.82	364.31	22.36	9836.20

Capital cost allowed for the 2014-19 tariff period

31. Based on above, the capital cost allowed for the purpose of tariff is as under:

		<i>(Rs. in lakh)</i>				
Sl. No.		2015-16		2016-17	2017-18	2018-19
		22.4.2015 to 4.7.2015 (Unit-II)	5.7.2015 to 31.3.2016 (Unit-I & Unit-II)			
A	Opening Capital Cost	141370.02	302235.23	308921.93	311684.75	312049.06
B	Additional Capital Expenditure	0.00	6686.71	2762.82	364.31	22.36
C	Closing Capital Cost (A+B)	141370.02	308921.93	311684.75	312049.06	312071.42
D	Average Capital Cost [(A+C)/2]	141370.02	305578.58	310303.34	311866.91	312060.24

Debt-Equity Ratio

32. Regulation 19 of the 2014 Tariff Regulations provides as under:

“19.(1) For a project declared under commercial operation on or after 1.4.2014 the debt equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost equity in excess of 30% shall be treated as normative loan:

Provided that:

- (i) where equity actually deployed is less than 30% of the capital cost actual equity shall be considered for determination of tariff:*
- (ii) the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:*
- (iii) any grant obtained for the execution of the project shall not be considered as a part*

of capital structure for the purpose of debt-equity ratio.

Explanation - The premium if any raised by the generating company or the transmission licensee as the case may be while issuing share capital and investment of internal resources created out of its free reserve for the funding of the project shall be reckoned as paid up capital for the purpose of computing return on equity only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

(2) The generating Company or the transmission licensee shall submit the resolution of the Board of the company or approval from Cabinet Committee on Economic Affairs (CCEA) regarding infusion of fund from internal resources in support of the utilisation made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2014 debt equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered.

(4) In case of generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2014 but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2014 the Commission shall approve the debt: equity ratio based on actual information provided by the generating company or the transmission licensee as the case may be.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as may be admitted by the Commission as additional capital expenditure for determination of tariff and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

33. The gross normative loan and equity amounting to Rs. 216975.36 lakh and Rs. 93083.19 lakh respectively as on 5.7.2015 was allowed vide order dated 24.7.2015 in Petition No. 146/GT/2015. In paragraph 55 of the order dated 19.12.2018 in Petition No. 39/RP/2017 in Petition No. 146/GT/2015, the Commission decided as under:

“55. While computing interest on loan, it is noticed that the net loan closing figure of the previous year has inadvertently not been carried forward to the net loan opening figure for the next year. Thus, there is an error apparent on the face of the record and the same is required to be corrected. Accordingly, review on this ground is allowed which shall be rectified at the time of truing up.”

34. Accordingly, the opening loan has been revised as Rs. 214307.45 lakh and the additional capital expenditure approved as above, is allocated to debt and equity in the ratio of 70:30 as under:

	As on Station COD (5.7.2015)		Net additional capital expenditure		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)	Amount	(in %)
	(Rs. in lakh)		(Rs. in lakh)		(Rs. in lakh)	
Debt	211564.66*	70%	6885.34	70%	218450.00	70%
Equity	90670.57*	30%	2950.86	30%	93621.43	30%
Total	302235.23*	100%	9836.20	100%	312071.42	100%

**After adjustment of LD deduction and initial spares deduction*

Return on Equity

35. Regulation 24 of the 2014 Tariff Regulations provides as under:

“24. Return on Equity:

(1) Return on equity shall be computed in rupee terms on the equity base determined in accordance with regulation 19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations transmission system including communication system and run of river hydro generating station and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Provided that:

(i) in case of projects commissioned on or after 1st April 2014 an additional return of 0.50% shall be allowed if such projects are completed within the timeline specified in Appendix-I:

(ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:

(iii) additional ROE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee / National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:

(iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission if the generating station or transmission system is found to be declared under commercial operation without commissioning any of the Restricted Governor Mode Operation (RGMO) / Free Governor Mode Operation (FGMO) data telemetry communication system up to load dispatch centre or protection system:

(v) as and when any of the above requirement are found lacking in a generating station based on the report submitted by the respective RLDC ROE shall be reduced by 1% for the period for which the deficiency continues:

(vi) additional ROE shall not be admissible for transmission line having length of less than 50 kilometres.”

36. Regulation 25 of the 2014 Tariff Regulations provides as under:

“25. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose the effective tax rate shall be considered on the basis of actual tax paid in

the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee as the case may be. The actual tax income on other income stream (i.e. income of non-generation or non-transmission business as the case may be) shall not be considered for the calculation of “effective tax rate”.

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where “t” is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business as the case may be and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT) “t” shall be considered as MAT rate including surcharge and cess.

Illustration.

(i) In case of the generating company or the transmission licensee paying Minimum Alternate Tax (MAT) @ 20.96% including surcharge and cess: Rate of return on equity = $15.50/(1-0.2096) = 19.610\%$

(ii) In case of generating company or the transmission licensee paying normal corporate tax including surcharge and cess:

(a) Estimated Gross Income from generation or transmission business for FY 2014-15 is Rs 1000 crore.

(b) Estimated Advance Tax for the year on above is Rs 240 crore.

(c) Effective Tax Rate for the year 2014-15 = $\text{Rs } 240 \text{ Crore} / \text{Rs } 1000 \text{ Crore} = 24\%$

(d) Rate of return on equity = $15.50 / (1-0.24) = 20.395\%$

(3) The generating company or the transmission licensee as the case may be shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2014-15 to 2018-19 on actual gross income of any financial year. However, penalty if any arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee as the case may be. Any under-recovery or over recovery of grossed up rate on return on equity after truing up shall be recovered or refunded to beneficiaries or the long-term transmission customers/DICs as the case may be on year-to-year basis.”

37. The Petitioner has claimed tariff considering the rate of return on equity of 19.706% in 2015-18 and 19.758% in 2018-19. The Petitioner has worked out these rates, after grossing up the base rate of return on equity of 15.50% with the MAT rate of 21.342% in 2015-18 and 21.549% in 2018-19. Accordingly, the rate of return on equity considered for the purpose of tariff works out to 19.705% for 2015-18 and 19.758% for 2018-19. Accordingly, return on equity has been worked out as under: