

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 21/GT/2021

Coram:

Shri I.S. Jha, Member

Shri Arun Goyal, Member

Shri Pravas Kumar Singh, Member

Date of Order: 4th January, 2024

In the matter of:

Petition for truing-up of tariff for the period 2014-19 and for determination of tariff for the period 2019-24 in respect of Udupi Thermal Power Plant (1200 MW).

And

In the matter of:

Udupi Power Corporation Limited,
Office: No. 160, Om Chambers,
1st Main Road, Sheshadripuram, Near Total Gaz Pump,
Bengaluru-560020

...Petitioner

Vs

1. Power Company of Karnataka Limited,
KPTCL Building, Kaveri Bhavan, K.G Road,
Bengaluru – 560009
2. Bangalore Electricity Supply Company Limited,
Krishnarendra Circle, Bengaluru - 560001
3. Mangalore Electricity Supply Company Limited,
Paradigm Plaza, AB Shetty Circle, Mangalore – 575001
4. Gulbarga Electricity Supply Company Limited,
Station Main Road, Gulbarga-585102
5. Hubli Electricity Supply Company Limited,
Corporate Office, Navanagar, PB Road,
Hubli – 580025
6. Chamundeshwari Electricity Supply Company Limited,
Corporate Office, No. 927, LJ Avenue, New Kantaraja Urs Road,
Saraswathipuram, Mysore – 570009
7. Punjab State Power Corporation Limited,
The Mall, Patiala – 147001

...Respondents



Parties Present:

Shri Hemant Sahai, Advocate, UPCL
Shri Nitish Gupta, Advocate, UPCL
Ms. Shefali Tripathi, Advocate, UPCL
Shri Nishant Talwar, Advocate, UPCL
Shri M.G. Ramachandran, Senior Advocate, PCKL
Shri Prashant Kumar, Advocate, PCKL
Shri Ahaan Mohan, Advocate, PCKL
Shri Arunav Patnaik, Advocate, PCKL
Ms. Savithramma, Advocate, PCKL
Shri Prasanna K.S., PCKL
Ms. Padmalatha T.L., PCKL

ORDER

This Petition has been filed by the Petitioner, Udupi Power Corporation Limited, for truing-up of tariff of Udupi Thermal Power Plant (1200 MW) (in short “the generating station”) for the period from 2014-19, in terms of Regulation 8(1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (in short “the 2014 Tariff Regulations”) and for determination of tariff of the generating station for the period from 2019-24, in accordance with the provisions of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (in short “the 2019 Tariff Regulations”).

Background

2. The Petitioner has set up a 1200 MW thermal power station in Udupi district in the State of Karnataka. The project has been developed as a Mega Power project in line with the policy guidelines issued by the Ministry of Power, Government of India and is the first thermal power plant designed for 100% imported coal. The date of commercial operation of Unit-I is 11.11.2010 and that of Unit-II is 19.8.2012. Accordingly, the cut-off date of the generating station is 31.3.2015.



3. The Commission vide its order dated 27.6.2019 in Petition No. 160/GT/2012 had approved the tariff of Unit-I for the period from 11.11.2010 to 31.3.2014 and for Unit-II from 19.8.2012 to 31.3.2014. Aggrieved by the said order, the discoms of Karnataka and also the Petitioner, filed appeals before the Appellate Tribunal for Electricity ('the Tribunal') on various issues. The Tribunal by its common judgment dated 15.5.2015 disposed of these appeals, with a direction to the Commission to re-determine the tariff of the generating station based on its findings on the issues which were allowed. Against the above judgment of the Tribunal dated 15.5.2015, the Respondents PCKL, with the discoms of Karnataka filed Review Petition No.19/2015 and the Petitioner also filed Review Petition No. 22/2015 on various grounds. Meanwhile, in compliance with the directions of the Tribunal in its judgment dated 15.5.2015, the Commission by its order dated 10.7.2015 in Petition No. 160/GT/2012 re-determined the annual fixed charges of the generating station. Thereafter, the Petitioner filed Petition No. 7/GT/2016 for revision of tariff of the generating station for the period from 11.11.2010 to 31.3.2014 and the Commission vide its order dated 24.3.2017 revised the tariff of the generating station for the said period after truing-up exercise.

4. Subsequently, the Tribunal vide its common judgment dated 6.2.2019 disposed of the Review Petition Nos. 19/2015 and 22/2015 filed by the parties as aforesaid. While the Review Petition No. 22/2015 was partly allowed on issues namely, (i) Disallowance of Gross Station Heat Rate (GSHR) of 2400 kcal/kwh; and (ii) Disallowance of Rs.141.91 crore on account of "Error in calculation of EPC cost", the Review Petition No. 19/2015 was partly allowed only on the issue of 'Erection, Testing & Commissioning expenses. Accordingly, the Commission was directed by the



Tribunal to re-determine the tariff of the generating station in terms of findings in the judgment. In terms of this, the Commission by its order dated 27.6.2019 in Petition No.160/GT/2012 revised the annual fixed charges of the generating station for the period 2009-14. However, the Petitioner and the Respondents have also filed Appeals against the APTEL's Judgment dated 15.5.2015, before the Hon'ble Supreme Court which are pending for disposal as on date.

5. Subsequently, the tariff for the generating station for the period 2014-19 was determined by the Commission vide order dated 22.1.2020 in Petition No. 251/ GT/ 2017 in accordance with the 2014 Tariff Regulations. Aggrieved by the order dated 22.1.2020, the Petitioner has filed an Appeal No. 76 of 2020 before the Tribunal, which is pending for disposal as on date.

6. The Petitioner has filed the present petition for truing-up of tariff of the generating station for the period 2014-19 in terms of the above regulations and for determination of tariff for the period 2019-24, without prejudice to the outcome of the various cases pending before the Commission, APTEL and the Hon'ble Supreme Court.

7. Commission vide its order dated 22.1.2020 in Petition No. 251/GT/2017 had determined the capital cost and the annual fixed charges of the generating station vide order dated 22.1.2020, as under:

Capital Cost allowed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening capital cost	551286.09	552566.61	552868.61	552868.61	552868.61
Additional capital expenditure	1280.52	302.00	0.00	0.00	0.00
Closing capital cost	552566.61	552868.61	552868.61	552868.61	552868.61
Average capital cost	551926.35	552717.61	552868.61	552868.61	552868.61



Annual Fixed Charges allowed*(Rs. in lakh)*

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	29106.94	29153.09	29148.89	29090.29	29050.48
Interest on Loan	45332.46	41439.07	37460.73	33472.22	29490.45
Return on Equity	26618.26	26793.99	26802.92	26802.92	26875.01
Interest on Working Capital	13272.45	13270.79	13237.79	13458.33	13448.70
O&M Expenses	17601.19	18713.28	19875.05	21102.60	22410.36
Total	131931.31	129370.22	126525.38	123926.36	121275.00

Present Petition

8. 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.”

9. The Petitioner vide affidavit dated 2.7.2021 had amended the Petition (filed vide affidavit dated 26.11.2020), along with amended tariff filing forms filed vide affidavit dated 28.10.2021. Accordingly, the capital cost and annual fixed charges claimed by the Petitioner vide affidavit dated 28.10.2021, for the period 2014-19, are as under:

Capital Cost claimed*(Rs. in lakh)*

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	551286.09	554516.61	554818.61	555474.91	555474.91
Add Addition during the year	3230.52	302.00	656.30	0.00	0.00
Less De Capitalisation during the year/Period	-	-	-	-	-
Less Reversal during the year	-	-	-	-	-
Add Discharges during the year/Period	-	-	-	-	-
Closing Capital Cost	554516.61	554818.61	555474.91	555474.91	555474.91
Average Capital Cost	552901.35	554667.61	555146.76	555474.91	555474.91

Annual Fixed Charges claimed*(Rs. in lakh)*

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	29158.24	29254.52	29267.81	29276.45	29277.33
Interest on Loan	47892.44	46858.63	35420.14	30308.54	26563.08



	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity	21084.76	21166.89	26938.22	26957.62	27028.82
Interest on Working Capital	13288.38	13416.13	13320.58	13576.97	13491.83
O&M Expenses					
Normative O & M Expenses	17280.00	18372.00	19524.00	20760.00	22056.00
Additional O&M Expenses	1664.22	2723.45	2349.11	3301.46	1996.07
Total	130368.04	131791.62	126819.86	124181.04	120413.13

10. The Respondent PCKL, has filed its reply vide affidavit dated 9.8.2021 and the Petitioner vide affidavit dated 17.8.2021 has filed its rejoinder to the same. Subsequently, vide affidavit dated 2.7.2021, the Petitioner filed IA No. 62 of 2021 seeking amendment of pleadings/prayer in the present petition and the Commission vide order dated 11.10.2021, permitted the Petitioner to amend the said Petition. The Respondent PCKL, has filed its reply to the amended petition vide affidavit dated 9.11.2021 and the Petitioner has filed its rejoinder to the same vide affidavit dated 16.11.2021. The Petitioner has also filed certain additional information vide affidavits dated 30.6.2021 and 28.10.2021, after serving copies on the Respondents. Subsequently, the Petition was heard through video conferencing on 25.1.2022 and the Commission, after directing both the Petitioner and Respondent, PCKL to file certain additional information, reserved its order in the matter. The Petitioner and Respondent, PCKL have filed note of arguments made during the hearing. In compliance to the direction vide ROP dated 25.1.2022, the Petitioner has filed the additional information vide affidavit dated 15.2.2022 and the Respondent PCKL, has filed its reply to the same, vide affidavit dated 22.2.2022. Also, the Respondent PCKL, in compliance to the said ROP, has filed additional information vide affidavit dated 14.2.2022, and the Petitioner has filed its reply to the same vide affidavit dated 22.2.2022 and the Respondent PCKL, has filed rejoinder to the same vide affidavit dated 25.2.2022. Both the Petitioner and the Respondent PCKL, have also filed their written submissions vide affidavit dated 28.2.2022. Taking into consideration the



submissions of the parties and the documents available on record, we proceed to examine the claims of the Petitioner, in this petition, on prudence check, as stated in the subsequent paragraphs.

Capital Cost

11. Regulation 9(3) of the 2014 Tariff Regulations provides as under:

“9. Capital Cost:

(3) The Capital cost of an existing project shall include the following:

- (a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;*
- (b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and*
- (c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15.”*

12. The Commission vide its order dated 27.6.2019 in Petition No. 160/GT/2012 had revised the closing capital cost for the period 2009-14, based on the findings in the judgment dated 6.2.2019 of the Tribunal. Accordingly, in terms of Regulation 9 of the 2014 Tariff Regulations, the closing capital cost of Rs. 551286.09 lakh, as on 31.3.2014, as approved by order dated 27.6.2019 was considered by the Commission vide order dated 22.1.2020 in Petition No. 251/GT/2017 while determining the tariff of the generating station for the period 2014-19. Accordingly, the capital cost of Rs. 551286.09 lakh as on 31.3.2014, has been considered as the opening capital cost as on 1.4.2014, for the purpose of truing-up of tariff for the period 2014-19.

Additional Capital Expenditure for the period 2014-19

13. Regulation 14 of the 2014 Tariff Regulations provides as under:

14. Additional Capitalisation and De-capitalisation:

(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) Undischarged 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 undischarged 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 undischarged 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 obsolesce 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-materialisation 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 Modernisation (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 value of gross fixed asset and corresponding loan as well as equity shall be deducted from 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.”

14. The Petitioner has claimed total actual additional capital expenditure of Rs.

4188.82 lakh for the period 2014-17 only, as under:

(Rs. in lakh)					
Sl. No.		Regulation	2014-15	2015-16	2016-17
a.	MS Sea Water Return Pipe	14(1)(v)	3230.52	-	-
b.	Compensation paid to fisherman as per Karnataka State Human Rights Commission	14(3)(1)	-	302	-
c.	Silt Settling Chamber in Sea Water Intake Pump House	14(3)(ii) read with Regulations 54	-	-	367.65
d.	Internal Coal Handling Plant Wind screen	14(3)(iii) read with Regulations 54	-	-	288.65
			3230.52	302	656.3
	Total				4188.82

15. We now examine the actual additional capital expenditure claimed by the Petitioner for the period 2014-17, as under:



a) M S Sea water return pipe

16. The Petitioner has claimed additional capital expenditure of Rs 3230.52 lakh in 2014-15, towards MS Sea Water return pipe under Regulation 14(1)(v) of the 2014 Tariff Regulations, stating as follows:

- a) MS Sea water return pipe was installed in compliance to the statutory directives of the Karnataka State Pollution Control Board (KSPCB) dated 9.7.2013;
- b) this capitalization qualifies under Regulation 14(1)(v) of the 2014 Tariff Regulations which inter alia provides for additional capitalization on account of 'change in law' or compliance of an existing law;
- c) total investment made was of Rs. 5180.52 lakh (Rs. 1950 lakh first on installation of GRP pipeline and then Rs. 3230.52 lakh on MS Sea water return pipeline);
- d) on account of decapitalization of Rs. 1950 lakh, the Petitioner is deprived of the recovery of cost towards Rs. 1950 lakh and the corresponding return on the investment that was made;
- e) the decapitalization of Rs. 1950 lakh on MS Sea water return pipe by the Commission in its order dated 22.1.2020 in Petition No. 251/GT/2017 leads to under-recovery;
- f) the Electricity Act contemplates reasonable return on capital invested. Therefore, for the said reasons, the Petitioner has considered the entire amount of Rs. 3230.52 lakh for the purposes of additional capitalization and requested the Commission to approve the same.

17. The Respondent PCKL, has submitted the following:

- a) KSPCB did not direct the Petitioner to replace the GRP seawater pipeline through its letter dated 9.7.2013. It was issued pursuant to KSPCB's inspection of the site on 18.4.2013 and 24.5.2013;
- b) It is apparent from the KSPCB letter that the Petitioner was already contemplating or executing the replacement of pipes. In view of the same, KSPCB merely directed the Petitioner to complete the works for MS Water return pipe before June, 2014. In view of the above, the Petitioner has failed to establish that the replacement of the GRP Pipe with the MS Pipe was pursuant to a statutory directive.
- c) there was no change in law which warranted the Petitioner to replace the GRP Pipe. The Petitioner has not placed any document on record to establish such a change in law event.
- d) the Petitioner's submission concerning the decapitalization of the amounts with respect to the GRP Pipe is denied.



- e) the Petitioner has substituted the MS Return Pipe with GRP Pipes; and therefore, the GRP Pipe was decapitalized.

18. The Petitioner in its rejoinder has submitted that the allegations of the Respondent PCKL, are without any basis and that the MS Sea water return pipe was installed in compliance of the statutory directives of the KSPCB dated 9.7.2013. The Petitioner has further submitted that the plant infrastructure cannot remain in pristine condition even after years of operation and there will obviously be wear and tear, along with technological changes that have to be undertaken if further works arises. Therefore, the Petitioner has stated that the Respondent PCKL, has no basis to contradict the said fact and allege that the workmanship of the plant was not up to the mark.

19. The Respondent PCKL, vide affidavit dated 28.2.2022, has further submitted that:

- a) mere fact that the GRP pipe was initially installed establishes the fact that the said installation was part of initial scope of work. Hence, this claim is primarily a replacement by MS Sea water return pipe;
- b) since the Petitioner was undertaking the replacement of pipes; KSPCB directed that no leakage occurs from the existing pipe. In the event replacement was being done on the date of the inspection, such replacement could not be pursuant to the direction which was issued on 9.7.2013. In view of the above, the Petitioner has failed to establish that the replacement of the GRP Pipe with the MS Pipe was pursuant to a statutory directive.
- c) assuming without admitting that the replacement was on account of the KSPCB letter, and then such direction was made only when there was leakage in pipes. Therefore, even when it is assumed that there was a direction, then such direction was on account of below standard equipment installed by the Petitioner and workmanship undertaken and authorized by the Petitioner. In view of the above, the Petitioner is not entitled to said capitalization, as the same is on account of the Petitioner's failure to ensure quality workmanship, which necessitated intervention of KSPCB.
- d) the Petitioner has already challenged the order of Commission before APTEL in Appeal No. 76 of 2020. Hence, the Petitioner does not have the right to agitate the same issue in these proceedings in the garb of truing up.



20. The Petitioner vide affidavit dated 28.2.2022 has clarified as under:

- a) PCKL has wrongly alleged that the work initially undertaken while installing the Project was sub-standard. MS Sea water return pipeline was installed in compliance with the statutory directives of KSPCB. Moreover, PCKL cannot expect the initially installed Project infrastructure to remain in pristine condition even after years of operation.
- b) PCKL has erroneously stated that UPCL has already challenged the same aspects as raised in the present Petition in the Appeal filed before the APTEL arising out of the 251/GT/2017 Order, there cannot be another claim for the same aspect which stands disallowed earlier. Without prejudice to the submissions made, the decapitalization of Rs. 1950 lakh for MS sea water return pipe has been challenged by UPCL before the APTEL in Appeal No. 76 of 2020.

21. The matter has been considered. All the documents on record have been examined and it is noted that vide order dated 22.1.2020 in Petition No. 251/GT/2017 the claim of the Petitioner was limited to Rs 1280.52 lakh for the work of M.S Return Water pipeline. While dealing with the claim of the Petitioner, the Commission in the said order had observed as under:

"26. The Respondent PCKL has submitted that no in-principle approval has been given by the Commission in its order dated 3.12.2014 and therefore any claim for additional capitalization will have to be assessed in terms of Regulation, 14 of the 2014 Tariff Regulations. It has also submitted that the replacement of an existing capital asset does not come within the scope of additional capitalization as the letter of KSPCB directs the Petitioner to replace the existing GRP pipeline due to leakage and does not mandate any additional capitalization. The Respondent has further submitted that the Petitioner had executed the work by 17.5.2014 and claimed an amount of `27.56 crore in the original petition for the said asset and whereas the amount claimed by the Petitioner in the present petition is `32.30 crore without any valid justification for increase in price. Also, the submission of the Petitioner that increase in price is due to change in price index is only unacceptable as the work was completed by May 2014.

27. an expenditure of `27.56 crore was claimed by the Petitioner towards the replacement of return GRP seawater pipeline and the same was rejected by the Commission vide order dated 20.2.2014 in Petition No. 160/GT/2012 as under:

"Further, it is observed that an expenditure of Rs. 27.56 crore is proposed to be incurred for replacement of return GRP Sea Water pipeline with M.S. pipeline for improving and maintaining the environmental parameters. The Petitioner has furnished the original cost of GRP pipeline as Rs 19.5 Crore inclusive of erection cost. However, the capitalization of Rs 27.56 crore has not been considered as the petitioner has not furnished any documentary evidence in support of its claim that this has been necessitated due to environmental requirement."



28. Aggrieved by the said order dated 20.2.2014, the Petitioner had filed Petition No. 14/RP/2014 and the Commission vide order dated 3.12.2014 disposed the same as under:

“13. Firstly, the prayer of the Petitioner for grant of in-principle approval of the cost of MS pipes cannot be accepted since the provisions of the 2009 Tariff Regulations, in terms of which the tariff of the generating station had been determined by order dated 20.2.2014, do not provide for the grant of in principle approval of the expenditure. Secondly, the work for replacement of GRP pipes with MS pipes had been completed on 17.5.2014 and accordingly, the capitalization of the actual expenditure would be guided by the provisions of the CERC (Terms and Conditions of Tariff) Regulations, 2014 applicable for the period 2014-19 and not the 2009 Tariff Regulations. In view of this, we are not inclined to consider the prayer of the Petitioner in this petition. However, the Petitioner may claim the capitalization of this expenditure towards replacement of GRP pipes in the tariff petition to be filed in respect of the generating station for the tariff period 2014-19 and the same would be considered in accordance with the provisions of the 2014 Tariff Regulations.”

29. Thus, the Commission in the above order, while rejecting the prayer of the Petitioner for grant of in-principle approval towards the cost of MS pipes, had granted liberty to the Petitioner to claim capitalization of the said asset in accordance with the provisions of the 2014 Tariff Regulations. In line with this, the Petitioner has claimed the additional capitalization of this asset under Regulation 14(1)(v) of the 2014 Tariff Regulations i.e. compliance with the existing law and has stated that the same is in compliance with the directions of the KSPCB and is within the cut-off date. It is observed that KSPCB vide letter dated 9.7.2013 had granted consent for work of installation of the M.S. Sea Return Pipe for completion by June, 2014. The relevant portion of letter is extracted hereunder:

“Work of installing the MS return water pipeline shall be completed latest by June 2014. Till such time the industry shall ensure that there shall not be any leakage from the existing pipe.”

30. We notice from the above letter that KSPCB, while directing the Petitioner to ensure that there was no leakage from the existing pipe, had directed the Petitioner to install MS return water pipeline by June 2014. The Petitioner has completed the said work by 17.5.2014. The contention of the Respondent PCKL that the expenditure cannot be capitalized on the ground that the asset has only been replaced, cannot be accepted considering the fact that KSPCB had directed the Petitioner to install the said asset by June 2014. Since the expenditure has been incurred by the Petitioner in compliance with the directions of KSPCB and is an environmental requirement, we allow the actual additional capital expenditure in terms of Regulation 14(1)(v) of the 2014 Tariff Regulations. As regards the increase in price, we notice that the Petitioner in Petition No. 160/GT/2012 had furnished the original cost of GRP pipeline as `1950 lakh inclusive of erection cost. Since, M.S Return water pipeline has been installed by the Petitioner, the original cost of GRP pipe of `1950 lakh has been de-capitalized. Accordingly, an amount of `1280.52 lakh is allowed for capitalization of this asset.”

22. In line with the above observations, we are of the considered view that the claim of the Petitioner shall be limited to Rs 1280.52 lakh, excluding the decapitalized amount of Rs 1950 lakh for the work of M.S Return water pipeline. Accordingly, the



expenditure of Rs. 1280.52 lakh, is only allowed for the work of M.S. Return water pipeline in 2014-15, under Regulation 14(1)(v) of 2014 Tariff Regulations.

b) Compensation Paid to Fisherman

23. The Petitioner has claimed additional capital expenditure of Rs. 302.00 lakh, towards Compensation paid to fisherman, in 2015-16 under Regulation 14(3)(1) of 2014 Tariff Regulations. The Petitioner has submitted that it has paid an amount of Rs. 302 lakhs to the fishermen families who were unable to carry out fishing activities due to the installation of the pipelines of the generating station. The Petitioner has further submitted that said payment was made in compliance to the compensation amount sanctioned by the Government of Karnataka which was allowed by the Commission vide order dated 22.1.2020 in Petition No. 251/GT/2017.

24. The Respondent PCKL, has submitted that the amount of Rs. 302 lakhs allowed was on the basis of misrepresentation and false statements, which are evident on the face of the record, as under:

- a) none of the documents submitted by the Petitioner in Petition No. 251/GT/2017 had made any reference to the Karnataka Human Rights Commission. Hence, the issue of any direction from the Karnataka Human Rights Commission does not arise;
- b) the Petitioner has suppressed the fact in its pleadings that it paid Rs. 302 lakhs pursuant to an agreement between the fishermen's society and the Petitioner;
- c) The KPSCB letter dated 20.3.2014 cited by the Petitioner refers to a representation dated 15.3.2014, wherein the fishermen society informed the Deputy Commissioner that the Petitioner had agreed to pay Rs. 302 lakhs, i.e., Rs. 1 lakh each to 302 families. Therefore, clearly, the Petitioner pursuant to its own volition has agreed to make the payment;
- d) letter dated 20.3.2014 was pursuant to the agreement between the Petitioner and the fishermen's society and not a direction from the Deputy Commissioner. The Deputy Commissioner cited the said agreement and then required payment to be made only because it was agreed to by the Petitioner



and had the agreement not been entered into, the Deputy Commissioner would not have directed the Petitioner to make the payment;

- e) the Petitioner has admitted the fact that the payment was not made pursuant to any statutory direction in its letter dated 21.12.2015;
- f) on 2.1.2016, Deputy Commissioner issued a letter to the Tehsildar informing the Tehsildar that the Petitioner has agreed to pay the said amount for the betterment of the fishermen. It may also be noted that the said decision was arrived by the Fishermen's society and the Petitioner in the presence of people's representative. None of the statutory bodies including any government official was part of the said meeting. Hence, there could not have been any statutory direction pursuant to an agreement between two private parties;
- g) in the meeting dated 23.2.2010, in the presidentship of the Chief Minister of Karnataka, no issue of the payment of Rs. 302 lakhs was discussed. However, even on this date, no direction for payment was made;
- h) it is clear from the communication and evidence provided by the Petitioner that the Petitioner has not acknowledged the fact that the livelihood of the fishermen was impacted due to discharge of hot water;
- i) further, the Petitioner has made the payment pursuant to agreement with the fishermen society for the betterment of their lives. In view of the same, the amount of Rs. 302 crore qualifies as a CSR activity and not an act which the Petitioner was constrained to perform pursuant to a statutory direction. Hence, the Petitioner ought to have utilized the CSR funds.
- j) the Petitioner has not provided the details of the CSR funds invested or the relief and rehabilitation funds of Rs. 989 lakhs till date. It is submitted that any payments to the fishermen ought to have been made from these funds and not claimed as additional capital expenditure;
- k) assuming without admitting that the Petitioner was constrained to make the payment pursuant to the direction of the Government of Karnataka, it may be noted that the said amount could have been paid from the CSR funds of the Petitioner as the same had already been allocated for these purposes;
- l) in Petition No. 251/GT/2017, the Petitioner had claimed that it may be allowed to claim any additional amounts paid over and above the aforementioned Rs. 302 lakhs due to an order or the decree of a court of law. The Petitioner has not pleaded that the additional expenses being claimed under the present petition is on account of any order or decree of court. Hence, the claim with respect to the compensation paid to the fishermen is devoid of merits and kindly be dismissed.

25. The Petitioner in its rejoinder has submitted that it has paid an amount of Rs. 302 lakhs to the fishermen families in compliance to the compensation amount



sanctioned by the Government of Karnataka. The Petitioner has further submitted that the Respondent PCKL, cannot initiate a separate fact-finding mission with respect to the legality of claims, at the truing up stage, when the same has already been undertaken in the previous proceedings. The Petitioner has further clarified that the Respondent PCKL, has wrongly stated that the payment made to the fishermen is a CSR activity/ R&R activity undertaken by the Petitioner and is included in the Project Cost. However, the same was incurred only after the COD in 2015-16 and the P&L account was debited and not the Plant & Machinery Account. The Petitioner has further submitted that the letter dated 20.3.2014 issued by the State Government abundantly clarifies that the requirement to pay compensation to the fishermen was a directive and the Petitioner was bound to adhere to the same.

26. The matter has been considered. The Commission vide order dated 22.1.2020 in Petition No. 251/GT/2017 had allowed the claim of the Petitioner as under:

34. The matter has been examined. The Deputy Commissioner, Udupi district, Govt. of Karnataka in its letter dated 20.3.2014 has referred to the meeting which took place on 20.3.2010 with the Chief Minister of Karnataka with regard to the payment of compensation to fishermen families for loss caused to fisherman due to linking of the project pipeline to sea and discharge of hot water to sea. In the said letter, the Petitioner has been directed to take suitable action in terms of the representation made by the Fishermen society for disbursement of `302 lakh to the 302 families. Consequent upon this, the Petitioner vide its letter dated 26.12.2015 had deposited the amount of `302 lakh before the Deputy Commissioner, Udupi district, Govt. of Karnataka. Considering the fact that the letter dated 20.3.2014 is in nature of statutory direction for compliance by the Petitioner, the actual additional capital expenditure of `302 lakh in 2015-16 incurred by the Petitioner as payment of compensation to the fishermen is allowed under Regulation 14(3)(i) of the 2014 Tariff Regulations.

27. In view of the above observations, we find that the expenditure incurred by the Petitioner as payment of compensation to the fisherman is in nature of statutory directions of the DC, Govt. of Karnataka. Accordingly, we allow the additional capital expenditure of Rs. 302 lakhs in 2015-16, under Regulation 14(3)(1) of the 2014 Tariff Regulations.



c) Silt Settling Chamber in Sea Water Intake Pump House

28. The Petitioner has claimed additional capital expenditure of Rs. 367.65 lakh in 2016-17, towards Silt Settling Chamber in Sea Water intake pump house under Regulation 14(3)(ii) read with Regulation 54 & 55 of the 2014 Tariff Regulations. In justification for the same, the Petitioner has submitted that:

- a) M/S Lahmeyer was hired to independently assess issue of sea water intake system and during the site visit they noted the presence of heavy silt at the intake system and based on the plant operations data further noted that the failure of CW (Cooling Water) and ACW (Auxiliary Cooling Water) pumps due to the ingress of silt is leading to tripping of the complete unit;
- b) based on the above, it was recommended that silt de-sludge and disposal system be provided in the intake system to remove the sludge from the forebay to minimize ingress to the plant consumption water and further retrieval of the water from the slurry in the de-sludging chamber back to the forebay. This is an essential requirement for efficient functioning of the plant;
- c) as an interim measure and considering the urgent technical requirement to reduce the outage on account of silt problem, the Petitioner has executed the work towards silt settling chamber in Sea water intake pump house pending the approval of the Commission;
- d) one impervious de-sludging tank was constructed for removal and storage of the silt from the intake system and thereby managing the silt without any possible environment harm;
- e) this de-sludging tank prevents any inadvertent mixing of the silt lying nearby the forebay with the storm water drains and thereby prevents any possibility of polluted water flowing downstream to the nearby areas. This impervious tank is built to fulfill the CFO additional condition;
- f) this silt is disposed after drying, so that the dry silt is disposed in a scientific manner in ash dyke as per the directions of KSPCB through letter dated 8.8.2012.

29. The Respondent PCKL, has submitted that:

- a) the Commission, vide order dated 22.1.2020, had given liberty to the Petitioner to claim the said expenditure along with documentary evidences justifying the requirement of these assets at the time of truing up of tariff in terms of Regulation 8 of the 2014 Tariff Regulations. However, the Petitioner, has preferred an appeal in the Hon'ble APTEL vide Appeal No. 76 of 2020 challenging the disallowance of said expenditure. Hence, it is



not open to the Petitioner to yet again agitate the same claims relating to the said expenditure in the present Petition;

- b) the KSPCB letter dated 8.8.2012 which was issued in response to a request made by the Petitioner vide letter dated 23.7.2012 seeking permission to dispose the silt accumulated at the Sea water pump house in ash pond, as per the said letter, the Petitioner's request was permitted. Hence, the abovementioned documents submitted by the Petitioner for its claims cannot be considered as justification for the additional capital expenditure it has presently sought;
- c) the Petitioner has based the capital costs on the report dated 15.12.2016 prepared by Lahmeyer International (India) Pvt. Ltd, which the Petitioner has misrepresented as an independent engineer. However, Paragraph 1.1 of the report itself records the fact that the Petitioner appointed Lahmeyer International (India) Pvt. Ltd. Hence, it cannot be considered an "independent engineer". In view of the same, the Lahmeyer Report cannot be said to hold any value for the purposes of this Petition.

30. The Petitioner in its rejoinder has submitted that:

- a) it has placed on record the necessary documentary evidence in this regard which includes auditor's certificate, certifying the expenditure incurred towards Silt Settling Chamber. Therefore, non-availability of documents cannot be cited as a reason for denial of claims pertaining to additional capitalization;
- b) although the works pertaining to silt settling chamber in sea water intake pump house should be considered as part of the original scope of work, however, the cost of installation of the same did not form part of the original capital cost;
- c) further, without prejudice to the above, the supply contract referred by PCKL mentions that the de-silting chamber is available within the sea water intake pump forebay which can handle the normal silt coming with the intake sea water;
- d) during monsoon, the quantum of silt in the sea water is very high and the system was not designed to handle such high turbid water as there was no mention about the sea water turbidity in the NIO report during project phase;
- e) UPCL experienced the problem of sea water turbidity only after 2 years of commissioning. Though, the turbidity during monsoon was low during the initial years (2011 & 2012), unforeseen increase in the turbidity was experienced from the year 2013 onwards which may be due to change in the sea profile;
- f) the NIO study report which was obtained in 2009 prior to commissioning of the units does not mention about silty seabed anywhere in the report based on which, the intake system was designed, without having



arrangements for huge silt ingress during monsoon;

- g) the costs have been incurred by the Petitioner diligently and prudently. The Petitioner has got the works done at arm's length and contractors involved are not related parties;
- h) the Petitioner has faced withdrawal of both units in the month of August and September 2015 on account of high silt ingress due to high turbidity and hostile sea conditions;
- i) higher silt ingress had prevented, in makeup circulating water system and generate required quantum of RO water. During this period, unit 1 was withdrawn from 10.8.2015 from 7.58 hrs, and unit 2 was withdrawn on 11.8.2015 from 14.42 hrs., both units could be brought back to operation only on 10.9.2015 at 02.20 hrs, resulting in a loss of availability of almost a month for both units;
- j) The same problem reoccurred even in the month of July 2020 i.e., from 23.7.2020 22:30 hrs till 31.7.2020 12:15 hrs during which the operations of the plant were impacted;
- k) if the silt settling chamber would not have been implemented then the problem would have been worse leading to longer duration of outage and even it would have impacted the life of the Plant. Therefore, the Petitioner has undertaken the task for the said work which has been carried out through competitive bidding.

31. The Respondent PCKL, vide affidavit dated 28.2.2022, has reiterated its contention and added that:

- a) if the Commission were to consider the Petitioner's request, it must be noted that the additional documentary evidences provided by the Petitioner for justifying the requirement of these assets are as under:

i. CFO additional conditions under clause A (II) (10):

The said clause provides that "Arrangements shall be made that effluent and storm water do not get mixed". The said condition states that the effluent shall not get mixed with the storm water. However, as detailed by the Petitioner itself, the silt settling chamber is constructed to minimize the ingress of silt into the plant intake water and this chamber in no way relates to or effects the separation of the effluent. Instead, it relates to water intake, rather than water outlet which would be relevant from the perspective of limiting the mixing and discharge of effluents. Also, it is to be noted that the said Clause was already there in the CFO approval granted from the very beginning and cannot be treated as a new obligation.

ii. Directions issued by the KSPCB:

The Petitioner has submitted the KSPCB letter dated 8.8.2012 which was issued in response to a request made by the Petitioner vide letter dated 23.7.2012 seeking permission to dispose the silt accumulated at the Sea



water pump house in ash pond. As per the said letter, the Petitioner's request was permitted. Hence, the abovementioned documents submitted by the Petitioner cannot be considered as justification for the additional capital expenditure it has presently sought.

- b) the Petitioner has not provided the bill of material along with the CA certificate. Additionally, it is also not known whether these works were awarded through competitive bidding;
- c) this claim was part of the initial scope of work. The technical specifications in Section IV, Part-B-1, and Clause No 04.00.00 of the supply contract entered into between the Petitioner and Lanco Infratech limited provides that the seawater intake system consisting inter alia of desilting settling chamber will be provided. Therefore, the work already forms part of the capital cost of the project and no additional capitalization on this account is warranted. Clause 10.1.00 of the civil works contract document also provides that the "Basin shall have proper arrangements for proper draining and desilting". Therefore, based on the admission by the Petitioner, it is humbly submitted that the Petitioner's claim may be denied;
- d) the Petitioner has based the capital costs on the report dated 15.12.2016 prepared by Lahmeyer International (India) Pvt. Ltd, which the Petitioner has misrepresented as an independent engineer. Since, the Petitioner has appointed Lahmeyer International (India) Pvt. Ltd., it cannot be considered an "independent engineer". In view of the same, the Lahmeyer Report cannot be said to hold any value for the purposes of this Petition;
- e) the Petitioner is, under this head, claiming capital costs incurred in 2016–17, for the construction of silt settling chamber in the sea water intake pump house ("silt settling chamber"). It is humbly submitted that the claim is not based on any statutory requirement or any directive from any government authority;
- f) the Petitioner has detailed the geographical location of the power plant, seasonal rains and silt flowing from the Western Ghats, which it claims is causing silting. It is submitted that all of these factors were present when the power plant was being conceptualized. It is humbly submitted that the Petitioner has informed that the oceanography studies were conducted in 2005 itself. Therefore, the Petitioner ought to have been aware of the requirement of the silt settling chamber in 2005 itself. In view of the same, the Petitioner's claim concerning silt settling chamber merely reflects that the Petitioner did not act prudently;
- g) the Petitioner has misquoted the contents of the NIO report to suggest that the profile of the sea bed changed from 2009. The paragraph relied upon by the Petitioner does not record that the sea bed profile changed since 2009: Further, it does not provide any comparative analysis of silt with reference to 2009. Clearly the Petitioner aims to misrepresent the facts with respect to sea bed profile;
- h) the initial scope already provided for measures to be adopted on account of seasonal change in sea bed profile. The initial scope of work also included



measures to ensure that the circulation at outfall do not mix with intake. The Petitioner has made a feeble attempt to suggest that it has undertaken the said measure under the consent for operation requirements stipulated by the KSPCB. Further, the initial scope of work already included this stipulation. However, the Petitioner failed to deploy appropriate measures;

- i) the Petitioner has misrepresented before the Commission by stating that “external silt settling chamber has been constructed for settling and drying purpose which was not a part of original scope of work”. Based on the copy of the supply contract document executed between Nagarjuna Power Corporation Ltd and Lanco Infratech Ltd., it is clear that silt settling chamber was always part of initial scope;
- j) the Petitioner has executed works with respect to the Silt settling chamber and is therefore seeking post facto approval with respect to the same. Since, the Petitioner has failed to provide any documentary evidence concerning the silt settling chamber. The Petitioner has sought the post facto approval on the basis that the same has been allowed in the order dated 30.3.2017. As already demonstrated above, the said order does not relate to the capital cost being claimed by the Petitioner. Therefore, the same may not be allowed. In addition to the above, the Petitioner has not cited any exceptional grounds which may justify the costs claimed by the Petitioner.

32. The Petitioner vide affidavit dated 28.2.2022 has clarified that as an interim measure, it has executed the said work, despite the pending truing up proceedings and not having any in-principle approval. It has further stated that since silt settling was hampering the sea-water supply, the Petitioner, based on the recommendations of the Independent Engineer set up silt de-sludging chamber and incurred a cost of Rs. 367.65 lakh, which may be allowed since without undertaking this work, the functioning of the Project would have been seriously affected.

33. The matter has been considered. The Petitioner had claimed additional expenditure of Rs 293.52 lakh for the said work in Petition No. 251/GT/2017 and the Commission vide order dated 22.1.2020 had not allowed the capitalization of the said asset. However, liberty was granted to the Petitioner to furnish the details along with documentary evidence at the time of truing up of tariff. The relevant portion of the order is extracted below:



*“38. The Petitioner has claimed additional capital expenditure of `293.52 lakh for silt settling chamber in sea water intake pump house and `12.23 lakh towards sea water intake system reliability on environmental requirements. It has also claimed additional capital expenditure of `886.17 lakh towards over-ground piping for firefighting system, on the ground that the said work is towards environmental compliances. Further, the Petitioner has claimed an expenditure of `70.80 lakh in 2016-17 towards cost for construction of 4 sewage treatment plant (out of 5 required) under Regulation 14(1)(v) or 14(3)(ii) read with Regulations 54 & 55 of the 2014 Tariff Regulations. In justification of the same, the Petitioner has submitted that the said asset has been recommended to control the quality of affluent since the existing sewage system has completely degraded. The Petitioner has further submitted that the additional work has been undertaken to comply with the existing directions of KSPCB in the ‘Consent to Operate’ granted on 18.8.2010. The Petitioner has stated that the said work was executed at cost of `70.00 lakh, including IDC and other miscellaneous cost for 4 sewage plants. For the remaining one sewage treatment plant, the Petitioner has proposed to capitalize the same during the next control period, but has projected an amount of `25.51 lakh to undertake the said work, subject to approval of the Commission. It is however noticed that the Petitioner has not furnished any documentary evidence justifying that the requirement of the above said assets / works is towards environmental requirement, safety & security of the plant and for statutory compliances in terms of directions of the statutory authorities/ agencies. In the above background, we are not inclined to allow the prayer of the Petitioner for capitalization of the aforesaid assets/ works. **However, liberty is granted to the Petitioner to claim the expenditure along with documentary evidences justifying the requirement of these assets at the time of truing up of tariff in terms of Regulation 8 of the 2014 Tariff Regulations.**”*

34. It is observed that after taking over the power plant on 20.4.2015, the Petitioner vide its letter dated 12.7.2016, has requested the Respondent PCKL, for appointment of a technical consultant for assessing the requirement of additional capitalization for the period 2014-19, but there was no response from the Respondent. In the absence of any communication from the Respondent PCKL, the Petitioner has submitted that it had appointed Lahmeyer International (India) Pvt. Ltd. as the Independent Engineer (IE) to carry out the assessment of the additional capital expenditure required to be incurred by the Petitioner to adhere to various safety, environmental and statutory norms. Based on the report of Lahmeyer International (India) Pvt. Ltd., the Petitioner has claimed additional capital expenditure of Rs 367.65 lakh in 2016-17, for the work of Silt settling chamber as per Regulation 14(3)(ii) read with Regulation 54 (Power to relax) and Regulation 55 (Power to remove difficulty) of 2014 Tariff Regulations for the



purpose of truing up of tariff. However, the Petitioner has not furnished any reasons for the variation in its claim corresponding to the expenditure of Rs 367.65 lakh instead of the amount of Rs 293.52 lakh claimed in Petition No. 251/GT/2017. The contention of the Petitioner that the system was not designed to handle high turbid water as the high sea water turbidity in the NIO report during project phase is not acceptable, as the Petitioner knew beforehand that the thermal generating station is based on Sea water. Though the Petitioner has submitted that the works pertaining to Silt settling chamber in sea water intake pump house should be considered as part of the original scope of work, however, the cost of installation of the same did not form part of the original capital cost.

35. The Commission vide ROP of the hearing dated 25.1.2022, had directed the Petitioner to provide the relevant documents/communication in support of the prior approval taken from Karnataka Discoms for incurring the said additional capital expenditure, as per Article 4.1(d) & Article 6.12 of the PPA dated 26.12.2005. In compliance to the above directions, the Petitioner vide affidavit dated 15.2.2022 has mainly submitted that:

- a) it has requested the Respondent PCKL, for appointment of a technical consultant for assessing the requirement of additional capitalization during the control period 2014-19;
- b) however, in absence of any communication from Respondent PCKL, the Petitioner appointed Lahmeyer International (India) Pvt. Ltd. as the Independent Engineer (IE) to carry out the assessment of the additional capital expenditure.

36. The Respondent PCKL, in compliance to the ROP of the hearing dated 15.1.2022, has submitted that:

- a) under Clause 6.12 of the PPA, the Respondent was not required to accept any such obligations;
- b) even when the Respondent is alleged to have delayed the appointment of



the independent consultant, the Petitioner was not precluded from providing a certificate to the Respondent under Clause 6.12 of the PPA;

c) clause 4.1(d) of the PPA stipulates that any additional capital expenditure which is not included in Clause 4.1(a) shall be incurred only with the consent of the buyers.

d) regarding joint site visit it has submitted that:

- i) the Petitioner has falsely claimed that the Respondent erroneously stated that no joint site visit was carried out by Karnatka Power Corporation Limited (KPCL) and the Petitioner during the relevant period;
- ii) it is plainly evident that the report to be prepared by Director (Technical), KPCL was in his own capacity and not jointly with either the Petitioner or the Respondent;
- iii) the direction from the Respondent to KPCL was to prepare a report and not, as has been claimed, a “joint report” with the Petitioner;
- iv) it should be noted that the internal report prepared by Director (Technical), KPCL for the Respondent’s BoD in furtherance of the aforementioned letters dated 7.4.2017 and 11.7.2017 was authored solely by him on behalf of KPCL and was not a joint report.

e) As regards the attendance sheet it has submitted that:

- i) the presence of PCKL officials, notably Managing Director, PCKL, during Director (Technical), KPCL’s site visit was purely incidental and was intended to verify the existing infrastructure at the Petitioner’s generating station; said visit was independent of KPCL’s report to the BoD and the same was specified in Respondent’s letter dated 7.4.2017;
- ii) at no point did the Respondent indicate that the report to be prepared by KPCL was a joint report with the Petitioner and any inputs provided by the Petitioner to KPCL during its visit to the power plant were reiterations of its existing claims and were unsolicited;
- iii) at no point did the Respondent indicate, explicitly or by implication, that the report produced by KPCL would be shared with the Petitioner or that the findings of KPCL during its inspection would be binding upon the Respondent.

37. As regards capital expenditure, Article 4.1(d) of the PPA dated 26.12.2005 executed between the parties, provides that:

“(a)Capital Expenditure of the Facility shall be the actual costs and expenses incurred by the Seller as on the Commercial Operation Date in connection with the development, design, engineering, acquisition, construction, financing, forex



adjustment, testing, start-up and completion of the Facility as approved by the Commission including any taxes, duties made by the seller.

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(d) Any additional Capital expenditure not included in (a) above, shall be incurred by the Seller only with the prior consent of the Principal Buyer in writing. The Seller shall provide the justification and the benefit in incurring the capital expenditure and may also propose improvement to the operating parameters used for calculating tariff under this Agreement and the Agreement shall be changed to reflect this improvement. This is subjected to the approval of the Commission."

38. The COD of the generating station is 19.8.2012 and Article 4.1(d) of the PPA dated 26.12.2005, covers the expenditure incurred beyond the COD of the generating station. Despite the above submissions, there is no such prior consent from the Respondents as regards the additional capital expenditure to be incurred by the Petitioner. Though the Petitioner has requested the Respondent for appointment of an Independent Engineer, there is nothing placed on record to show that such request was accepted by the Respondent.

39. Further, Articles 6.12 of the PPA dated 26.12.2005, provides that:

"(a) Any circumstance, including a change in law, which

(i) materially increases or decreases the cost of the Seller in connection with financing, ownership, operation or maintenance of the Unit;

(ii) materially increase or decreases the revenue of the Seller in connection with financing, ownership, operation or maintenance of the Unit;

(iii) requires the Seller to incur material Additional Capital Expenditure

Then the Seller shall

(A) determine the amount of such increase or decrease in cost or revenue or the amount of such Additional Capital Expenditure;

(B) submit to the Principal Buyers a certificate setting forth in reasonable detail the basis and the calculations of such increase or decrease in cost or revenue and/or the amount of such Capital Expenditure (which shall be subject to verification and acceptance by the Principal Buyers and is agreed to be material); and

(C) subject to the approval of the additional Capital Expenditure by the Principal Buyers and the Commission, calculate equitable adjustments to the Recoverable Capacity (fixed) charges and the Energy charges to reflect such increase or decrease in cost or revenue and/or such Capital Expenditure with the intent that the financial position of the Seller shall remain unaffected by such circumstance.

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40. The change in law clause in the PPA, as shown above, provides that the Petitioner pursuant to the capital expenditure being incurred, is required to provide a



certificate to the principal buyers with reasonable details of the expenditure to be incurred. No such certificate with reasonable details has been brought to notice by the Petitioner as per Article 6.12(a)(B) of PPA. Further, Regulation 14(3)(ii) of the 2014 Tariff Regulations provides for capitalisation of the additional expenditure, incurred or projected to be incurred, under the head 'change in law'. From the plain reading of Regulation 14(3) of 2014 Tariff Regulations, it is clear that the additional capital expenditure claimed by the Petitioner in 2016-17, does not fall within the provisions of the said regulations. Moreover, the claim of the Petitioner is in the nature of O&M expenses. The Petitioner has also not argued that the normative O&M expenses allowed to the generating station are not sufficient to cater to the requirement of such expenditures. The Petitioner has claimed the said expenditure in exercise of the power under Regulation 54 (Power to relax) of the 2014 Tariff Regulations, which is extracted below.

“54. Power to Relax: The Commission, for reasons to be recorded in writing, may relax any of the provisions of these regulations on its own motion or on an application made before it by an interested person.”

41. The exercise of the Power to Relax under the 2014 Tariff Regulations is in general terms and is discretionary. As regards the exercise of the said power, the Tribunal vide its judgment dated 25.3.2011 in Appeal No. 130/2009 (RGPPL v CERC & anr.) has observed the following:

“18.1 The Regulations of the Central Commission and the decision of the Tribunal and the Supreme Court confer the judicial discretion to the Central Commission to exercise power to relax in exceptional case. However, while exercising the power to relax there should be sufficient reason to justify the relaxation and non-exercise of discretion would cause hardship and injustice to a party or lead to unjust result. It has also to be established by the party that the circumstances are not created due to act of omission or commission attributable to the party claiming relaxation. Further, the reasons justifying relaxation have to be recorded in writing.”

42. From the above observations, it is clear that the Commission has discretionary power to relax the norms based on the facts and circumstances of the case. However,



there has to be a sufficient and reasonable justification to exercise such power and has to be one of those exceptions to the general rule. Considering the fact that the Petitioner has lodged an appeal with the Hon'ble APTEL (Appeal No. 76 of 2020) contesting the disallowance of the mentioned expenditure, we find it appropriate not to delve into the Petitioner's claim at this juncture. The application of power to remove difficulties does not apply in the present context. Any finding in this regard by the Commission will impinge the order of the Appellate Tribunal. However, It is to note that the resolution of the Petitioner's claim hinges on the verdict rendered by the APTEL.

43. In view of the above discussions, the additional capital expenditure of Rs 367.65 lakh claimed by the Petitioner for Silt settling chamber in sea water intake pump house is not allowed as of now.

d) Internal Coal Handling Plant windscreen

44. The Petitioner has also claimed additional capital expenditure of Rs 288.65 lakh, towards Internal Coal Handling Plant (ICHP) windscreen under Regulation 14(3)(iii) read with Regulation 54 (power to relax) and Regulation 55 (power to remove difficulty) of the 2014 Tariff Regulations read with Section 79(1)(b) of the Electricity Act, 2003, with the following justification:

- a) as per the directions of Karnataka State Pollution Board (KSPCB) in the letters dated 22.11.2011 and 3.3.2012, provision of suitable height barricades all along the compound wall on southern and eastern side of coal storage area were erected to prevent coal dust emission during high wind velocity seasons;
- b) as per the directive, the UPCL Management has constructed a suitable wind screen on the southern side, to prevent fugitive emissions towards villages adjacent to the compound on southern side. Accordingly, in April 2015, the Petitioner has constructed a wind screen of 12 m height and 600 m length using nylon mesh material to control fugitive coal dust emission;
- c) the Commission vide order dated 20.2.2014 in Petition No. 160/GT/2012 had approved additional capitalization of Rs. 9300 lakhs, towards coal



shed in 2013-14, for complying with directives of KSPCB;

- d) however, after taking over of Management of the Petitioner by Adani Power, Petitioner had re-assessed the requirement of additional capitalization and carried out various studies to identify the Capex schemes which are absolutely important for operation of Plant and/or based on statutory directives; Therefore, Petitioner had implemented the ICHP windscreen as an interim measure to meet the statutory conditions of KSPCB.

45. The Respondent PCKL, has mainly submitted that:

- a) the Petitioner had not made any claim towards ICHP screen in Petition No. 251/GT/2017. The claim concerning the installation of ICHP screen does not satisfy the test of prudence. The Petitioner installed the ICHP screen to re-assess the requirement of the coal shed;
- b) as per the Petitioner's admission, at the time of installing the ICHP screen, the Petitioner itself was not sure whether the coal shed or the ICHP screen will fit the purpose;
- c) the Petitioner had implemented the ICHP windscreen as an interim measure with total cost of Rs. 289 lakhs, to comply with the directives of KSPCB and re-assess the requirement of coal shed;
- d) when the Petitioner filed the claim for additional capitalization, it itself was not satisfied about the efficacy of the coal shed proposed to be installed. In view of the same, the Petitioner misrepresented the facts before the Commission while filing the claim for additional capitalization for coal shed in Petition No 160/GT/2012;
- e) in view of the above, the additional capitalization allowed for coal shed may kindly be decapitalized;
- f) none of the generating stations in India made such provisions for coal shed. Further, the coal shed was not included in the original scope of work and the Petitioner has not confirmed whether it is proceeding with the coal shed installation;
- g) the ICHP screen would lead to reduction in use of coal shed. In the event the ICHP screen was used for a portion of the coal shed with respect to which additional capital expenses were allowed, the Commission may decapitalize the portion of coal shed in place of which ICHP screen was installed.

46. The Petitioner in its rejoinder and additional submissions, has clarified that:

- a) the Commission vide order dated 20.2.2014 in Petition No. 160/GT/2012 has approved additional capitalization of Rs. 9300 lakhs towards Coal shed in 2013-14, for complying with directives of KSPCB;



- b) however, after taking over of Management of UPCL by Adani Power, the Petitioner re-assessed the requirement of additional capitalization and carried out various studies to identify the Capex schemes which are absolutely important for operation of Plant and/or based on statutory directives. At the same time the Petitioner was conscious and careful of any proposal considering the impact of capital expenditure on the end consumer;
- c) during the pendency of the confirmation of approval of expenditure towards coal shed and extension of cut-off date by the Commission in Petition No. 251/GT/2017 for construction of coal shed, the Petitioner had implemented the ICHP windscreen as an interim measure with total cost of Rs. 289 lakh, to comply with the directives of KSPCB, and re-assess the requirement of coal shed. It is only then that the Petitioner could see that ICHP wind screen is able to meet the requirements to meet the statutory conditions of KSPCB;
- d) the allegations by Respondent, is baseless since the said cost was only allowed as an in-principle additional capitalization in order dated 20.2.2014 in Petition No. 160/GT/2012, however, the same was not claimed by UPCL. Hence the question of decapitalizing coal shed does not arise;
- e) as per the directions of KSPCB, suitable height barricades all along the compound wall on the southern and eastern side of the coal storage area were required to be erected to prevent coal dust emission during high wind velocity reasons;
- f) notably, the Commission vide order dated 20.2.2014 had already granted in-principle approval of Rs. 9300 lakh towards coal shed in 2013-14, for complying with directives of KSPCB. However, the cost towards coal-shed (as already approved) has not been claimed during any tariff determination proceedings;
- g) in April 2015, the Petitioner constructed a windscreen of 12 m height and 600 m length using nylon mesh material to control fugitive coal dust emission. In this regard, it may be noted that after taking over of management of Petitioner by Adani Power, Petitioner re-assessed the requirement of additional capitalization and implemented ICHP windscreen to comply with the directives of KSPCB;
- h) it is able to meet the requirements under the statutory conditions of KSPCB and the cost incurred by the Petitioner towards the construction of the ICHP windscreen is Rs. 288.65 lakh.

47. The matter has been considered. It is noticed that in Commission's order dated 27.6.2019 in Petition No. 160/GT/2012, an in-principle approval of Rs. 9300 lakh towards Coal shed in 2013-14, was granted for complying with the directives of KSPCB. However, the observations of the Commission in the said order is as under:



“96. The petitioner has claimed additional capital expenditure of Rs.182.73 crore during 2013-14 which include an expenditure of Rs. 45.00 crore for Staff colony, Rs.90.68 crore for Coal shed, Rs.2.20 crore for additional spares, Rs.27.56 crore for replacement of GRP Sea Water Outfall pipeline with M.S. pipeline and Rs.5.00 crore for widening of Culvert in NH-66 to protect the sea water pipeline which have been laid underneath of NH-66. Further, additional capital expenditure also includes taxes & duties of Rs.2.32 crore, IDC of Rs. 9.28 crore and Finance Charges of Rs. 0.69 crore.

97. The expenditure for Staff colony and Coal shed were not considered in the in-principle approved cost and are new additions. In our view, staff colony for any project is a necessity and being beneficial to the employees working in the project, the expenditure has been allowed. The proposed expenditure on Coal shed is also justifiable considering the fact that the project site is a 'cyclone prone area'. Hence, expenditure is allowed. The expenditure towards Taxes & Duties amounting to Rs.2.32 crore has also been allowed to be capitalized. From the balance amount of Rs.12.20 crore, initial spares to the tune of Rs.2.20 crore has been additionally procured due to augmentation of capacity. However, initial spares has been restricted to Rs.7.28 crore, as a ceiling of 2.5% of increase in the BoP cost of Rs.291.22 crore (excluding BTG & BoP PG charges). Accordingly, the balance spares of Rs.2.20 crore have been disallowed. Further, it is observed that an expenditure of Rs.27.56 crore is proposed to be incurred for replacement of return GRP Sea Water pipeline with M.S. pipeline for improving and maintaining the environmental parameters. The Petitioner has furnished the original cost of GRP pipeline as Rs.19.5 Crore inclusive of erection cost. However, the capitalization of Rs.27.56 crore has not been considered as the petitioner has not furnished any documentary evidence in support of its claim that this has been necessitated due to environmental requirement. Expenditure of Rs.5.00 crore for extension of culvert is not justifiable and hence disallowed. Accordingly, the additional capital expenditure of Rs.138.00 crore (including taxes & duties of Rs.2.32 crore) has been allowed during 2013-14 as against the claim for Rs.182.73 crore.”

48. Since the proposed expenditure on coal shed as per the direction of KSPCB, has been allowed vide order dated 27.6.2019, we are inclined to allow the expenditure of Rs 288.65 lakh claimed by the Petitioner in 2016-17, under Regulation 14(3)(iii) of 2014 Tariff Regulations.

49. Based on the above, the actual additional capital expenditure allowed for the period 2014-17 is summarised below:

(Rs. in lakh)				
Sl. No.		2014-15	2015-16	2016-17
a.	MS Sea Water Return Pipe	1280.52	0.00	0.00
b.	Compensation paid to fisherman as per Kamataka State Human Rights Commission	0.00	302.00	0.00
c.	Silt Settling Chamber in Sea Water Intake Pump House	0.00	0.00	0.00



Sl. No.		2014-15	2015-16	2016-17
d.	Internal Coal Handling Plant Wind screen	0.00	0.00	288.65
		1280.52	302.00	288.65
	Total			1871.17

Reconciliation of the actual additional capital expenditure

50. The statement showing reconciliation of additional capital expenditure claimed along with the capital additions as per books submitted by the Petitioner for the period 2014-19, vide affidavit dated 28.10.2021, is as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Closing gross block	628853	629211	637829	643888	647632
Less: opening gross block	625467	628853	629211	637829	643888
Total additions as per books	3385.72	357.73	8618.83	6058.36	3744.67
Break-up of Net additions					
Additions - Tangibles	3429.44	357.73	8559.79	8519.37	3814.61
Additions – Non-Tangibles	-	-	81.97	107.65	-
Additions - Total	3429.44	357.73	8641.76	8627.02	3814.61
Deletions - Tangibles	43.73	-	22.93	2568.66	69.94
Deletions – Non-Tangibles	-	-	-	-	-
Deletions - Total	43.73	-	22.93	2568.66	69.94
Net additions pertaining to instant project/unit/stage	3385.72	357.73	8618.83	6058.36	3744.67
Less: Exclusions (items not allowable/ not claimed)	155.20	357.73	7962.53	6058.36	3744.67
Net additional capital expenditure claimed	3230.52	-	656.30	-	-
Fisherman compensation not forming part of Gross Block	-	302.00	-	-	-

Exclusions

51. It is observed from the above details that the actual additional capital expenditure claimed by the Petitioner is at variance with the additional capital expenditure as per books of accounts. This is on account of exclusion of certain expenditure and exclusion of liabilities in the additional capital expenditure considered for the purpose of tariff. The summary of exclusions for the purpose of tariff for the period 2014-19 are examined hereunder:

2014-15

52. The details of exclusions claimed by the Petitioner are as under:



(Rs. in lakh)				
Sl. No.	Head of Work / Equipment	ACE Claimed under Exclusion		
		Accrual basis	Un- discharged liability included in col. 3	cash basis
(1)	(2)	(3)	(4)	(5=3-4)
	Additions			
1	Land - Freehold	16.27	-	16.27
2	Computers & Software	11.48	-	11.48
3	Office Equipment	8.42	-	8.42
4	Furniture and Fixture	0.90	-	0.90
5	Vehicles	1.91	-	1.91
	Plant and Equipment		-	
6	P & M - Electrical Equipment	4.87	-	4.87
7	P & M - Testing Equipment	18.20	-	18.20
8	Culvert	94.34	-	94.34
9	Belt Weighing System	23.35	-	23.35
10	Slurry pump Submersible Pump	13.53	-	13.53
11	Other Plant & Machinery General	5.66	-	5.66
	Total Additions	198.93	-	198.93
	Deletions /Disposal			
13	Plant and Equipment	0.92	-	0.92
14	Office Equipment	5.04	-	5.04
15	Vehicles	37.76	-	37.76
	Total Disposal	43.73	-	43.73
	Net Additions	155.20	-	155.20

Additions and Plant & Equipment

53. The Petitioner has submitted that total additions of Rs 198.93 lakh on account of land, computer & software, office equipment, furniture & fixtures, vehicles, P&M electrical & testing equipment, culvert, belt weighing system, slurry & submersible pump and other plant & machinery general are claimed under the 2014 Tariff Regulations and kept under exclusions. The capitalization of assets procured after the cut-off date of the generating station is not allowed for the purpose of tariff. Further, the Petitioner has also submitted that the claim towards culvert was disallowed by the Commission vide order dated 22.1.2020 in Petition No. 251/GT/2017. In view of the fact that positive entries corresponding to the disallowed assets were not allowed to form part of the capital cost for the purpose of tariff, the exclusion (of positive entries) as claimed and effected by the Petitioner is in order. Accordingly, the exclusion of the



said amount of Rs. 198.93 lakh, on cash basis, under this head, is in order and is allowed.

Deletions (Assets decapitalized)

54. From the details as furnished by the Petitioner in Form 9(B)(i) of the affidavit dated 28.10.2021, it is observed that the Petitioner has claimed all the de-capitalized assets amounting to Rs. 43.73 lakh in 2014-15, in books of accounts under exclusion. After examining the exclusions sought on de-capitalization of assets, it is noticed that an amount of Rs. 28.28 lakh has been recovered by the Petitioner under depreciation.

Regulation 14(4) of 2014 Tariff Regulations, provides as under:

(4) In case of de-capitalization 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-capitalization shall be deducted from the value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding loan and the equity respectively in the year such de-capitalization takes place, duly taking into consideration the year in which it was capitalized.

55. The de-capitalization of assets includes furniture & fixtures, P&M general, office equipment, computers and vehicles, which were capitalized prior to the cut-off date of the generating station i.e. 31.3.2015 in terms of the 2009 Tariff Regulations. Hence, the amount de-capitalized pertaining to assets form part of the capital cost of the generating station for the purpose of tariff. As such, in terms of Regulation 14(4) of 2014 Tariff Regulations, the de-capitalized amount is required to be deducted, in order to arrive at the capital cost for the purpose of tariff. Accordingly, the exclusion of Rs. 43.73 lakh on account of de-capitalization of assets is not allowed for the purpose of tariff.

56. Based on the above discussion, the summary of exclusions allowed/ not allowed, on cash basis, for the year 2014-15 is as under:



(Rs. in lakh)

Addition in Exclusions claimed and allowed on cash basis	198.93
Exclusions in Deletions not allowed on cash basis	43.73

2015-16

57. The exclusions claimed by the Petitioner are as under:

(Rs. in lakh)

Sl. No.	Head of Work / Equipment	ACE Claimed under Exclusion		
		Accrual basis	Un- discharged Liability included in col. 3	Cash basis
(1)	(2)	(3)	(4)	(5=3-4)
1	Building -Temple Building	25.000	-	25.00
2	Computer Hardware	92.250	-	92.25
3	Furnitures & Fixture	54.479	-	54.48
4	Office Equipment	74.815	-	74.82
5	Vehicles	11.219	-	11.22
	Plant and Machinery			
6	Plant & Machinery- Excavator Tata-Hitachi	47.534	-	47.53
7	Plant & Machinery	52.435	-	52.44
	Total Additions	357.73	-	357.73
	Deletions /Disposal	-	-	-
	Net Additions	357.73	-	357.73

Additions

58. The Petitioner has claimed total additions of Rs 357.73 lakh, on account of temple building, computer hardware, furniture & fixtures, office equipment, vehicles and plant & machinery under the 2014 Tariff Regulations and kept under exclusion. The Petitioner has not submitted whether the said assets are procured after the cut-off date or are the disallowed assets. In view of the fact that positive entries corresponding to the capitalization of assets procured after the cut-off date of the generating station is not allowed for the purpose of tariff and the disallowed assets were not allowed to form part of the capital cost for the purpose of tariff, since, the Petitioner has itself sought the exclusion, the exclusion (of positive entries) as claimed and effected by the Petitioner of Rs. 357.73 lakh, on cash basis, is allowed.



59. Based on the above discussion, the summary of exclusions allowed/ not allowed, on cash basis, for the year 2015-16 is as under:

<i>(Rs. in lakh)</i>	
Addition in Exclusions claimed and allowed on cash basis (A)	357.73

2016-17

60. The exclusions claimed by the Petitioner are as under:

Sl. No.	Head of Work / Equipment	<i>(Rs. in lakh)</i>		
		ACE Claimed under Exclusion		
		Accrual basis	Un- discharged liability included in col. 3	cash basis
(1)	(2)	(3)	(4)	(5=3-4)
	Buildings			
1	Building-Civil - Painting	841.2	-	841.2
2	Building-Civil - NDCT - Replacement of ladder, handrail & other Misc work	544.3	-	544.3
3	Building-Civil - NDCT & Chimney Concrete Treatment	54.5	-	54.5
4	Building-Civil - Security Cabin, Bulker Shed & Other	64.7	-	64.7
5	Building-Civil - Civil - Machinery-Main Plant area-STP	70.8	-	70.8
6	Building-Civil - Construction of New store at Port	53.3	-	53.3
7	Building-Mechanical - Equipment Painting	50.3	-	50.3
8	Building-Civil - CCR	28.7	-	28.7
9	Building-Civil - Vehicle shed	13.8	-	13.8
10	Building-Civil - R&R	7.1	-	7.1
	Total Buildings	1728.6	-	1728.6
11	Lease hold Land	1162.2	-	1162.2
	Plant & Machineries			
12	P&M-Mechanical - Boiler Quick erect scaffolding	1197.0	-	1197.0
13	P&M Mechanical - Boiler scaffolding including Jack Assembly & Enerpac	62.8	-	62.8
14	P&M-Mechanical - Sea Water Intake Channel-Ensuring sea water intake reliability	1222.6	-	1222.6
15	P&M-Mechanical - Fire Fighting system	886.2	-	886.2



16	P&M-Electrical - Machinery- BOOM LIFT TELESCOPIC	130.3	-	130.3
17	P&M-Electrical - Online Dissolved Gas Analyzers	127.7	-	127.7
18	P&M-C&I - Others	97.2	-	97.2
19	P&M-Mechanical - CW Pumps	91.6	-	91.6
20	P&M-C&I - Software- Vibration Diagnostic analysis	89.8	-	89.8
21	P&M-Electrical - Lab Equipment	76.7	-	76.7
22	P&M-Mechanical - Oil filtration machine	69.7	-	69.7
23	P&M-Mechanical - Ash Washery Unit	65.5	-	65.5
24	P&M-Mechanical - Tools & Tackles	58.6	-	58.6
25	P&M-Chemistry - Lab Equipment	44.3	-	44.3
26	P&M-CHP - Lift at ECHP	41.3	-	41.3
27	P&M-Mechanical - Pumps	41.2	-	41.2
28	P&M-Planning - Equipment	35.6	-	35.6
29	P&M-C&I – Lab	29.8	-	29.8
30	P&M-Electrical - Tools & Tackles	17.9	-	17.9
31	P&M-Stores - Others	11.6	-	11.6
32	P&M-CHP - Tools & Tackles	10.1	-	10.1
33	Plant & Machinery -Misc -Others	36.4	-	36.4
	Total Plant & Machinery	4443.8	-	4443.8
34	Computer Hardware & Software - C&I -Vibration Diagnostic analysis	97.3	-	97.3
35	Computer Hardware & Software	121.4	-	121.4
36	Furnitures & Fixture	124.9	-	124.9
37	Office Equipments	123.2	-	123.2
38	Vehicles	184.0	-	184.0
	Total Additions	7985.5	-	7985.5
	Deletions /Disposal		-	
	Computer Hardware	0.8	-	0.8
	Vehicles	22.1	-	22.1
	Total Disposal	22.9	-	22.9
	Net Additions	7962.5	-	7962.5

Additions (Building and plant & equipment)

61. The Petitioner has submitted that the total additions of Rs 7985.5 lakh on account of building, lease hold land, plant & machinery, computer hardware & software, furniture & fixtures, office equipment and vehicles are claimed under the 2014 Tariff Regulations and kept under exclusion. The capitalization of assets procured after the cut-off date of the generating station is not allowed for the purpose



of tariff. Further, the Petitioner has also submitted that the claim towards, NDCT & chimney concrete treatment, machinery-main plant area-STP, construction of new store at Port, Boiler Quick erect scaffolding, Sea water intake channel-ensuring sea water intake reliability, fire-fighting system, online dissolved gas analysers, vibration diagnostic analysis, lift at ECHP and computer hardware & software of vibration diagnostic analysis was disallowed by the Commission vide order dated 22.1.2020 in Petition No. 251/GT/2017. In view of the fact that positive entries corresponding to the disallowed assets were not allowed to form part of the capital cost for the purpose of tariff, the exclusion (of positive entries) as claimed and effected by the Petitioner is in order. Accordingly, the exclusion of the said amount of Rs. 7985.50 lakh, on cash basis, under this head, is in order and is allowed.

Deletions (Assets decapitalized)

62. From the details as furnished by the Petitioner in Form 9(B)(i) of the affidavit dated 28.10.2021, it is observed that the Petitioner has claimed all the de-capitalized assets amounting to Rs. 22.93 lakh in 2016-17 in books of accounts under exclusion. After examining the exclusions sought on de-capitalization of assets, it is noticed that an amount of Rs. 15.82 lakh has been recovered by the Petitioner under depreciation.

63. The de-capitalization of assets includes computers and vehicles, which were capitalized prior to the cut-off date of the generating station i.e. 31.3.2015 in terms of the 2009 Tariff Regulations. Hence, the amount de-capitalized pertain to assets which form part of the capital cost of the generating station for the purpose of the tariff. As such, in terms of Regulation 14(4) of the 2014 Tariff Regulations, the de-capitalized amount is required to be deducted, in order to arrive at the capital cost for the purpose



of tariff. Accordingly, the exclusion of Rs. 22.93 lakh on account of de-capitalization of assets is not allowed for the purpose of tariff.

64. Based on the above discussion, the summary of exclusions allowed/ not allowed, on cash basis, for the year 2016-17 is as under:

<i>(Rs. in lakh)</i>	
Addition in Exclusions claimed and allowed on cash basis	7985.50
Exclusions in deletion not allowed on cash basis	22.90

2017-18

65. The exclusions claimed by the Petitioner for the period 2017-18 are as under:

<i>(Rs. in lakh)</i>				
Sl. No.	Head of Work / Equipment	ACE Claimed under Exclusion		
		Accrual basis	Un- discharged Liability included in col. 3	Cash basis
(1)	(2)	(3)	(4)	(5=3-4)
1	Lease Hold Land-121.22 acre-for Expansion Project	4622.97	-	4622.97
	Buildings			
2	Building-Civil - Painting	421.60	-	421.60
3	Building-Civil - Buildings-Rain water Harvesting and Water Proofing work	285.43	-	285.43
4	Building-Civil - Stores	36.07	-	36.07
5	Building-Mechanical - Equipment Painting	35.29	-	35.29
6	Building-Civil - STP	16.78	-	16.78
7	Building-Civil - De-Sludging Tank	3.84	-	3.84
	Total Buildings	799.02	-	799.02
	Plant & Machineries			
8	Plant & Machinery-Capital Overhauling-Unit-1 &2	2388.92	-	2388.92
9	Plant & Machinery-Mechanical - Turbine Fast Cooling Device	172.55	-	172.55
10	Plant & Machinery-C&I - Others	122.57	-	122.57
11	Plant & Machinery-Chemistry – Lab	57.51	-	57.51
12	Plant & Machinery-Mechanical - Lift at JT-9	22.32	-	22.32
13	Plant & Machinery-C&I – Software	16.53	-	16.53



14	Plant & Machinery-CHP - Jetty Rail Refurbishment	15.27	-	15.27
15	Plant & Machinery-Misc	5.52	-	5.52
	Total Plant & Machinery	2801.20	-	2801.20
	Computer Hardware & Software			
16	Computer Hardware & Software -C&I - DCS Upgradation Unit # 1	295.00	-	295.00
17	Computer Hardware	11.61	-	11.61
18	Computer Software	38.88	-	38.88
		345.49	-	345.49
19	Furniture & Fixture	38.81	-	38.81
20	Office Equipment	19.53	-	19.53
	Total Additions	8627.02	-	8627.02
	Deletions /Disposal			
1	On account of Capital Overhauling in Plant & Machinery			
	Unit-1-Turbine Area	504.78	-	504.78
	Unit -1 Boiler	30.49	-	30.49
	Unit 1 Control Room & Switchgear Building & Switchyard	600.48	-	600.48
	Unit -II Turbine Area	428.35	-	428.35
	Unit II-Control Room & Switchgear Building & Switchyard	972.44	-	972.44
2	Computer H/W	2.65	-	2.65
3	Furniture & Fixture	2.02	-	2.02
4	Office Equipment	7.43	-	7.43
5	Vehicle	20.02	-	20.02
	Total Deletion/Disposal	2568.66	-	2568.66
	Net Additions	6058.36	-	6058.36

Additions (Building, plant & Machinery and Computer hardware & software)

66. The Petitioner has submitted that total additions of Rs 8627.02 lakh, on account of lease hold land for expansion project, buildings, plant & machineries and computer hardware & software are claimed under the 2014 Tariff Regulations and kept under exclusion. The capitalization of assets procured after the cut-off date of the generating station is not allowed for the purpose of tariff. In view of the fact that the exclusion (of positive entries) as claimed and effected by the Petitioner are not forming part of the capital cost. Accordingly, the exclusion of the said amount of Rs. 8627.02 lakh, on cash basis, as claimed by the Petitioner is allowed.



Deletions (Assets decapitalized)

67. From the details as furnished by the Petitioner in Form 9(B)(i) of the affidavit dated 28.10.2021, it is observed that the Petitioner has claimed all the de-capitalized assets amounting to Rs. 2568.66 lakh in 2017-18 in books of accounts under exclusion. After examining the exclusions sought on de-capitalization of assets, it is noticed that an amount of Rs. 807.54 lakh, has been recovered by the Petitioner under depreciation.

68. The de-capitalization of assets includes computers, office equipment, plant & machineries, furniture & fixtures and vehicles, which were capitalized prior to the cut-off date of the generating station i.e. 31.3.2015, in terms of the 2009 Tariff Regulations. Hence, the amount de-capitalized pertaining to assets form part of the capital cost of the generating station for the purpose of tariff. As such, in terms of Regulation 14(4) of the 2014 Tariff Regulations, the de-capitalized amount is required to be deducted, in order to arrive at the capital cost for the purpose of tariff. Accordingly, the exclusion of Rs. 2568.66 lakh on account of de-capitalization of assets is not allowed for the purpose of tariff.

69. Based on the above discussion, the summary of exclusions allowed/ not allowed, on cash basis, for the year 2017-18 is as under:

<i>(Rs. in lakh)</i>	
Addition in Exclusions claimed and allowed on cash basis	8627.02
Exclusions in Deletion not allowed on cash basis	2568.66

2018-19

70. The exclusions claimed by the Petitioner for the period 2018-19 are as under:



(Rs. in lakh)

Sl. No.	Head of Work / Equipment	ACE Claimed under Exclusion		
		Accrual basis	Un- discharged Liability included in col. 3	Cash Basis
(1)	(2)	(3)	(4)	(5=3-4)
	Buildings			
1	Building-Civil - NDCT	801.70	-	801.70
2	Building-Switchyard GI Structure	72.61	-	72.61
3	Building-Semi covered Shed for Lubricants	56.62	-	56.62
4	Building-Flooring of Material storage godown	16.65	-	16.65
5	Building-Civil - Painting	14.59	-	14.59
6	Building-Stores - Flooring of Main store - B	8.74	-	8.74
7	Building-Civil - CCR	7.49	-	7.49
	Total Building			978.40
8	Computer Hardware	13.71	-	13.71
9	Furnitures & Fixture	34.63	-	34.63
10	Office Equipment	31.56	-	31.56
	Plant & Machineries			
11	Plant & Machinery-Mandatory Spares- Unit-1 &2	2555.40	-	2555.40
12	Plant & Machinery-CHP - Jetty Rail Refurbishment	165.82	-	165.82
13	Plant & Machinery-Moisture Removal System & Transformer oil	95.65	-	95.65
14	Plant & Machinery-Electrical - Switchyard	22.29	-	22.29
15	Plant & Machinery-Electrical -SF6 Gas recovery kit	12.10	-	12.10
16	Plant & Machinery-Stores - Electric stackers - 2 nos.	11.56	-	11.56
17	Plant & Machinery-Torque wrench and Magnetic drilling machine	11.39	-	11.39
18	Plant & Machinery-Misc. and others	48.63	-	48.63
19	Plant & Machinery-Capital Overhauling-Unit-2	(227.12)	-	(227.12)
	Total Plant & Machinery	2695.71	-	
20	Vehicles-Safety - Water Tender	60.60	-	60.60
	Total Additions			3814.61
	Deletions /Disposal			
1	Building	36.95	-	36.95
2	Computer H/W	18.16	-	18.16
3	Furniture & Fixture	3.11	-	3.11
4	Office Equipment	0.50	-	0.50
5	Vehicles	11.22	-	
	Total Deletion/Disposal			69.94
	Net Additions			3744.67



Additions (Building, plant & Machinery and Computer hardware & software)

71. The Petitioner has submitted that total additions of Rs 3814.61 lakh, on account of buildings, computer hardware, furniture & fixtures, office equipment, plant & machineries and vehicle are claimed under the 2014 Tariff Regulations and kept under exclusion. The capitalization of assets procured after the cut-off date of the generating station is not allowed for the purpose of tariff. In view of the fact that the exclusion (of positive entries) as claimed and effected by the Petitioner do not form part of the capital cost. Accordingly, the exclusion of the said amount of Rs. 3814.61 lakh, on cash basis, as claimed by the Petitioner is allowed.

Deletions (Assets decapitalized)

72. From the details as furnished by the Petitioner in Form 9(B)(i) of the affidavit dated 28.10.2021, it is observed that the Petitioner has claimed all the de-capitalized assets amounting to Rs. 69.94 lakh in 2018-19, in the books of accounts under exclusion. After examining the exclusions sought on de-capitalization of assets, it is noticed that an amount of Rs. 30.24 lakh, has been recovered by the Petitioner under depreciation.

73. The de-capitalization of assets includes office equipment, furniture & fixtures, fire station building, computers and vehicles, which were capitalized prior to the cut-off date of the generating station i.e. 31.3.2015 in terms of the 2009 Tariff Regulations. Hence, the amount de-capitalized pertaining to assets form part of the capital cost of the generating station for the purpose of the tariff. As such, in terms of Regulation 14(4), the de-capitalized amount is required to be deducted, in order to arrive at the capital cost for the purpose of tariff. Accordingly, the exclusion of Rs. 69.94 lakh on account of de-capitalization of assets is not allowed for the purpose of tariff.



74. Based on the above discussion, the summary of exclusions allowed/ not allowed, on cash basis, for the year 2018-19 is as under:

(Rs. in lakh)	
Addition in Exclusions claimed and allowed on cash basis	3814.61
Exclusions in Deletion not allowed on cash basis	69.94

75. Based on the above discussion, the net additional capital expenditure and capital cost allowed for the generating station, for the period 2014-19, is summarised as under:

	(Rs. in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening capital cost	551286.09	552522.88	552824.88	553090.60	550521.94
Add: Additional Capital Expenditure allowed	1280.52	302	288.65	0.00	0.00
Exclusions in deletion not allowed	43.73	0.00	22.93	2568.66	69.94
Closing capital cost	552522.88	552824.88	553090.60	550521.94	550452.00
Average capital cost	551904.49	552673.88	552957.74	551806.27	550486.97

Debt Equity Ratio

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

“19. Debt-Equity Ratio: (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 utilization 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 the 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 modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

77. Gross normative loan and equity amounting to Rs.415739.95 lakh and Rs. 135546.14 lakh, respectively, as on 31.3.2014, as considered in order dated 27.6.2019 in Petition No. 160/GT/2012, has been considered as the normative loan and equity as on 1.4.2014. The debt equity ratio has been considered as 70:30, in terms of Regulation 19 of the 2014 Tariff Regulations, for the purpose of additional capitalization. De-capitalization of assets has been deducted from the corresponding loan as well as equity, taking into consideration the debt equity ratio, applied in the year in which it was capitalized, as per Regulation 19 (4) of 2014 Tariff Regulations. The opening and closing debt and equity is as under:

	As on 1.4.2014		Additional Capitalization		De-capitalization		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)	Amount	(in %)	Amount	(in %)
Debt	415739.95	75.41%	1309.82	70.00%	2041.60	75.47%	415008.16	75.39%
Equity	135546.14	24.59%	561.35	30.00%	663.66	24.53%	135443.84	24.61%
Total	551286.09	100.00%	1871.17	100.00%	2705.26	100.00%	550452.00	100.00%

Return on Equity

78. 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 the 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 of 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 requirements 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 kilometers.”

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

“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

(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.”

80. The Petitioner has not claimed grossing up of Return on Equity (ROE) with the effective tax rate during 2014-15 and 2015-16. Further, the Petitioner has paid income tax on the basis of MAT during 2016-19 and has thus applied MAT rate of the respective years for grossing up of the ROE. Accordingly, the base rate of ROE has been grossed up, based on the MAT rate of the Petitioner, for the period 2016-19.

Hence, in terms of the above regulations, ROE has been computed as under:

	(Rs. in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity (A)	135546.14	135919.57	136010.17	136091.14	135460.99
Addition of Equity due to additional capital expenditure (B)	373.43	90.60	80.97	(-)630.14	(-)17.16
Equity- Closing (C) =(A) + (B)	135919.57	136010.17	136091.14	135460.99	135443.84
Average Equity (D)=(A+C)/2	135732.85	135964.87	136050.65	135776.07	135452.41
Base Rate (%) (E)	15.500%	15.500%	15.500%	15.500%	15.500%
Effective Tax Rate (%) (F)	0.000%	0.000%	21.342%	21.342%	21.549%
Effective ROE Rate (%) (G)	15.500%	15.500%	19.705%	19.705%	19.758%
Return on Equity (H)= (G)*(D)	21038.59	21074.55	26808.78	26754.67	26762.69

Interest on Loan

81. Regulation 26 of the 2014 Tariff Regulations provides as under:

“26. Interest on loan capital: (1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of Decapitalization of assets, the repayment shall be adjusted by taking into account



cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to the date of de-capitalization of such asset

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized. Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered: Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such refinancing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute: Provided that the beneficiaries or the long term transmission customers /DICs shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan."

82. The Petitioner, vide ROP dated 25.5.2021 was directed to submit the 'statement showing changes in the rate of interest corresponding to each loan, if any, from 1.4.2014 till 31.3.2019; along with documentary evidence in respect of interest rates considered for the calculation of weighted average rate of interest in Form-13'. In response, the Petitioner has submitted the details of actual rate of interest charged by various banks corresponding to each loan as per its Books of Accounts along with the Statutory Auditor Certificate as submitted vide its affidavit dated 18.1.2021, as a documentary evidence. Hence, the Weighted Average Rate of Interest (WAROI) of 14.448% in 2014-15, 12.780% in 2015-16, 11.133% in 2016-17, 11.292% in 2017-18



and 11.200% in 2018-19 as claimed by the Petitioner has been considered for the purpose of tariff.

83. Accordingly, Interest on loan has been computed as under:

- i) The gross normative loan amounting to Rs.415739.95 lakh, as on 1.4.2014, as considered in order dated 27.6.2019 in Petition No.160/GT/2012, has been considered as on 1.4.2014.
- ii) Cumulative repayment amounting to Rs.70819.28 lakh, as on 1.4.2014, as considered in order dated 27.6.2019 in Petition No.160/GT/2012, has been considered as on 1.4.2014.
- iii) Accordingly, the net normative opening loan as on 1.4.2014 works out to Rs.344920.67 lakh.
- iv) Addition to normative loan on account of additional capital expenditure approved above have been considered.
- v) Depreciation allowed has been considered as repayment of normative loan during the respective year of the period 2014-19. Further, repayments have been adjusted for de-capitalization of assets considered for the purpose of tariff.

84. Interest on loan has been worked out as under:

	(Rs. in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross opening loan (A)	415739.95	416603.31	416814.71	416999.46	415060.95
Cumulative repayment of loan up to previous year (B)	70819.28	99918.19	129067.55	158214.00	186494.78
Net Loan Opening C= (A-B)	344920.67	316685.13	287747.16	258785.47	228566.17
Addition due to additional capital expenditure (D)	863.36	211.40	184.75	(-)1938.52	(-)52.78
Repayment of loan during the year (E)	29105.67	29149.37	29152.40	29083.09	29014.43
Less: Repayment adjustment on account of de-capitalization (F)	6.76	0.00	5.96	802.31	25.54
Net Repayment of loan during the year (G=E-F)	29098.90	29149.37	29146.44	28280.78	28988.89
Net Loan Closing (H= C+D-G)	316685.13	287747.16	258785.47	228566.17	199524.49
Average Loan (I= (C+H)/2)	330802.90	302216.14	273266.31	243675.82	214045.33
Weighted Average Rate of Interest of loan (J)	14.448%	12.780%	11.133%	11.292%	11.200%
Interest on Loan (K= I*J)	47795.73	38623.47	30421.40	27515.12	23974.04



85. The Petitioner has submitted that in order to reduce the rate of interest on loan, it has undertaken re-financing of loan in terms of Regulation 26 (7) of 2014 Tariff Regulations. It has also submitted that in terms of the said regulations, the benefit of re-financing is to be shared between the generating company and beneficiaries in the ratio of 1:2. The Petitioner has also stated that the refinancing charges are to be passed on to beneficiaries on actual basis. In this regard, it is observed that the sharing of saving in interest due to re-financing of loan, if any, has to be undertaken between the parties, on actual basis, in accordance with the provisions of Regulation 26 (7) of the 2014 Tariff Regulations. However, in case of disputes, the parties may approach the Commission, in terms of Regulation 26(9) of the 2014 Tariff Regulations.

Depreciation

86. Regulation 27 of the 2014 Tariff Regulations provides as under:

“27. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset: Provided that in case of hydro generating station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:



Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff: Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and the extended life.

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-II to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets.

(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure during the fag end of the project (five years before the useful life) along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure during the fag end of the project.

(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the decapitalized asset during its useful services."

87. Accordingly, the cumulative depreciation amounting to Rs. 70819.28 lakh, as on 31.3.2014, as considered in order dated 27.6.2019, has been retained for the purpose of tariff in this order. Since, as on 1.4.2014, the used life of the generating station (i.e. 2.50 years) is less than 12 years from the effective station COD (30.9.2011), depreciation has been calculated by applying the weighted average rate of depreciation (WAROD) for the period 2014-19. Accordingly, depreciation has been computed as under:

	(Rs. in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross block (A)	551286.09	552522.88	552824.88	553090.60	550521.94
Net Additional capital expenditure during 2014-19 (B)	1236.79	302.00	265.72	(-)2568.66	(-)69.94
Closing gross block (C=A+B)	552522.88	552824.88	553090.60	550521.94	550452.00
Average gross block (D)=(A+C)/2	551904.49	552673.88	552957.74	551806.27	550486.97
Value of Free Hold Land	34.81	34.81	34.81	34.81	34.81



	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciable Value (E= (D-Land value) *90%))	496682.71	497375.16	497630.64	496594.31	495406.94
Remaining Depreciable Value at the beginning of the year (F=E- Cum Dep at 'L' at the end of previous year)	425863.42	397456.98	368563.08	338380.32	308912.17
Rate of Depreciation (G)	5.274%	5.274%	5.272%	5.271%	5.271%
Balance useful Life (H)	22.50	21.50	20.50	19.50	18.50
Depreciation (I=D*G)	29105.67	29149.37	29152.40	29083.09	29014.43
Cumulative Depreciation at the end of the year (J=I+ Cum Dep at 'L' at the end of previous year)	99924.95	129067.55	158219.95	187297.09	215509.21
Less: Depreciation adjustment on account of de-capitalization (K)	6.76	0.00	5.96	802.31	25.54
Cumulative Depreciation at the end of the year (L)	99918.19	129067.55	158214.00	186494.78	215483.67

Operation & Maintenance Expenses

88. Regulation 29(1) of the 2014 Tariff Regulations, specifies the following norms for O&M expenses for coal based/lignite fired generating stations, as under:

“Normative Operation and Maintenance expenses of thermal generating stations shall be as follows:

(a) Coal based and lignite fired (including those based on Circulating Fluidized Bed Combustion (CFBC) technology) generating stations, other than the generating stations/units referred to in clauses (b) and (d):

(Rs. in lakh/MW)				
Year	200/210/250 MW Sets	300/330/350 MW Sets	500 MW Sets	600 MW Sets and above
<i>FY 2014-15</i>	23.90	19.95	16.00	14.40
<i>FY 2015-16</i>	25.40	21.21	17.01	15.31
<i>FY 2016-17</i>	27.00	22.54	18.08	16.27
<i>FY 2017-18</i>	28.70	23.96	19.22	17.30
<i>FY 2018-19</i>	30.51	25.47	20.43	18.38

Provided that the norms shall be multiplied by the following factors for arriving at norms of O&M expenses for additional units in respective unit sizes for the units whose COD occurs on or after 1.4.2014 in the same station:

<i>200/210/250 MW Sets</i>	<i>Additional 5th& 6th units</i>	<i>0.90</i>
	<i>Additional 7th& more units</i>	<i>0.85</i>
<i>300/330/350 MW Sets</i>	<i>Additional 4th& 5th units</i>	<i>0.90</i>
	<i>Additional 6th& more units</i>	<i>0.85</i>
<i>500 MW and above</i>	<i>Additional 3rd& 4th units</i>	<i>0.90</i>
	<i>Additional 5th& above units</i>	<i>0.85</i>



89. The Commission vide its order dated 22.1.2020 in Petition No. 251/GT/2017, after due consideration of the claim of the Petitioner, had allowed the total O&M expenses, including water charges and additional O&M expenses. The details of the claim made by the Petitioner and as allowed by the Commission vide order dated 22.1.2020 is as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
O&M expenses as claimed under Reg. 29(1)	17280.00	18372.00	19524.00	20760.00	22056.00
O&M expenses as allowed under Reg. 29(1)	17280.00	18372.00	19524.00	20760.00	22056.00
O&M expenses under Reg. 29(2)					
Water Charges as claimed under Regulation 29(2)	47.57	50.45	42.28	44.94	47.77
Water Charges as allowed under Regulation 29(2)	47.57	50.45	41.92	14.03	5.12
Additional O&M expenses					
O & M for additionalities as claimed	2209.21	2348.17	2495.87	2652.86	2819.72
O & M for additionalities as allowed (Jetty & ECHP etc.)	273.62	290.83	309.12	328.57	349.24
O & M for 6 Bays till 2016-17 and additional 2 bays (400 kV Bus reactor proposed during 2017-18) from 2017-18 onwards as Claimed	289.44	299.04	308.98	452.24	467.24
O & M for 6 Bays till 2016-17 and additional 2 bays (400 kV Bus reactor proposed during 2017-18) from 2017-18 onwards as allowed	0.00	0.00	0.00	0.00	0.00
Electricity Tax on Auxiliary consumption as claimed	10.11	234.08	233.55	233.55	233.55
Electricity Tax on Auxiliary consumption as Allowed	0.00	0.00	0.00	0.00	0.00
CESS paid to Statutory Authorities	40.58	43.13	45.85	48.73	51.79
CESS paid to Statutory Authorities as allowed	0.00	0.00	0.00	0.00	0.00
Total O&M expenses claimed	19876.91	21346.87	22650.53	24192.32	25676.07
Total O&M expenses allowed	17601.19	18713.28	19875.05	21102.60	22410.36



90. The O&M expenses claimed by the Petitioner vide amended Petition dated 2.7.2021 and affidavit dated 28.10.2021 are as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
O&M expenses under Reg. 29(1)	17280	18372	19524	20760	22056
O&M expenses under Reg. 29(2)					
Water Charges	47.57	50.45	42.28	14.03	5.12
Capital Spares	214.76	853.18	844.96	1519.95	1017.24
Additional O&M expenses					
O & M Expenses (Jetty & ECHP)	228.33	296.02	511.78	400.71	508.42
Flue Gas Desulphurization plants	654.51	614.93	485.19	388.21	354.20
De-silting sea water intake	519.05	908.87	464.90	978.56	111.09
Total Additional O&M Expenditure	1401.89	1819.82	1461.87	1767.48	973.71
Total O&M expenses claimed under Reg. 29(2)	1664.22	2723.45	2349.11	3301.46	1996.07
Total O&M expenses claimed under Reg. 29(1) and Reg. 29(2)	18944.22	21095.45	21873.11	24061.46	24052.07

91. The normative O&M expenses claimed by Petitioner are in terms of Regulation 29(1)(a) of 2014 Tariff Regulations. Hence, the claim of the Petitioner for normative O&M expenses under Regulation 29(1)(a) of 2014 Tariff Regulations, is allowed for the purpose of truing-up of tariff.

Water Charges

92. Regulation 29(2) of the 2014 Tariff Regulations provides as under:

*“29(2) The Water Charges and capital spares for thermal generating stations shall be allowed separately:
Provided that water charges shall be allowed based on water consumption depending upon type of plant, type of cooling water system etc., subject to prudence check. The details regarding the same shall be furnished along with the petition.”*

93. The water charges allowed by the Commission on projection basis vide order dated 22.1.2020 in Petition No. 251/GT/2017 is as under:

<i>(Rs. in lakh)</i>					
2014-15	2015-16	2016-17	2017-18	2018-19	Total
47.57	50.45	41.92	14.03	5.12	159.09

94. In terms of Regulation 29(2) of the 2014, Tariff Regulations, Water charges are to be allowed based on water consumption depending upon type of plant, type of



cooling water system etc., subject to prudence check. The Petitioner in the present petition has submitted that the cooling water system used at the generating station is Closed Cycle Cooling System using Sea water. Further, the details of the actual water charges incurred for the period 2014-19 and claimed by the Petitioner are as under:

SI. No		UOM	2014-15	2015-16	2016-17	2017-18	2018-19
Consumption details at plant							
A	Water consumption for Industrial Cooling	(KL)	40580323	46063539	38858175	36753131	27605523
B	Water consumption for Domestic	(KL)	7669	17269	24682	23008	21763
(C)=A+B	Total Water Used for Plant	(KL)	40587992	46080808	38882857	36776139	27627286
D	Water Charges (Cess) on (A) above	(Rs)	4058032	4606354	3885818	1052239	-
E	Water Charges (Cess) on (B) above	(Rs)	230	518	740	163	-
F	Total Water Cess	(Rs)	4058262	4606872	3886558	1052401	-
Consumption details at port							
G	Water Consumption at Port	(KL)	13440	8427	6569	6735	9846
H	Water Charges	(Rs)	698880	438204	341588	350220	511992
I	Total Water Charges (F+H)	(Rs)	4757142	5045076	4228146	1402621	511992

95. We have considered the matter. The water charges claimed by the Petitioner have been submitted duly certified by the Chartered Accountant. The water charges computed by the Petitioner is based on cess @ Rs. 0.10/KL for water consumption on industrial cooling, cess @ 0.03/KL for domestic purpose and water charge rate @ Rs 52/KL for water consumption at the port. The Commission vide its order dated 22.1.2020 in Petition No. 251/GT/2017 had allowed the water charges, subject to following observations:

65. The matter has been examined. It is observed that the actual water consumption of the Petitioner is below the allocated quantum of 10000 m³/hr and the rate of water cess and water charges claimed for the periods 2014-15 & 2016-17 is as per the water cess paid for plant consumption @ `0.10/KL and water charges paid for water consumption at captive jetty at NMPT premises is @ `52/KL. It is noticed that the water cess paid in 2017-18 is @ `0.0286/KL. Further, the Petitioner has not paid any water cess towards consumption of 27627285 KL in 2018-19. The Petitioner has



however not furnished any reason for this variation. Accordingly, the Petitioner shall furnish reasons and justifications of such variation, along with the original invoices in respect of actual water consumed or amount paid towards water charges at the time of truing-up of tariff.

96. In compliance to the above, the Petitioner in the amended petition has submitted that in July 17, with the advent of GST, water cess applicable at Plant was discontinued which explains the declining trend of water charges through different years of the tariff period and the rate of 0.0286/Kl which is on account of division of 3 months water cess with water consumption of 12 months. It has also submitted that water charges applicable at Port is still payable and GST introduction has no bearing on the same. However, the Petitioner has not furnished the original invoices with respect to payment of water charges but in justification has submitted that instead of voluminous invoices, it has appended the summary of water charges in the form of CA certificate.

97. The matter has been considered. From the perusal of the details of the water charges claimed for the period 2014-19, it is observed that the actual water charges claimed for the periods 2014-15 and 2016-17 is as per the water cess paid. However, no water cess has been paid after July, 2017. The Petitioner has submitted that during 2017-18, the total actual water consumption for industrial cooling is 36753131 KL for (12) twelve months and the water charges for industrial cooling is Rs. 1052239. The water cess for the period 2017-18 is paid only for (3) three months i.e. up to June, 2017 and the Petitioner has not segregated the actual water consumption for the three (3) months during 2017-18. Accordingly, we have computed and apportioned the total actual water consumption for the period 2017-18 to three (3) months consumption and accordingly allowed the water charges, considering the water cess for industrial cooling @ Rs 0.10/KL for (3) three months only. Further, the Petitioner has also



considered the water consumption for domestic usage in the water charges, which cannot be accounted in the O&M cost of the generating station. Accordingly, we have not considered the charges of water consumption for domestic usage.

98. In view of the above, the actual water charges allowed to the generating station is as under:

(Rs. in lakh)					
2014-15	2015-16	2016-17	2017-18	2018-19	Total
47.57	50.45	42.27	12.67	5.12	158.07

Capital spares

99. The last proviso to Regulation 29(2) of the 2014 Tariff Regulations provides as follows:

“29(2) The Water Charges and capital spares for thermal generating stations shall be allowed separately:

xxxx:

Provided that the generating station shall submit the details of year wise actual capital spares consumed at the time of truing up with appropriate justification for incurring the same and substantiating that the same is not funded through compensatory allowance or special allowance or claimed as a part of additional capitalization or consumption of stores and spares and renovation and modernization.”

100. As per the said proviso to Regulation 29(2) of the 2014 Tariff Regulations, capital spares consumed are admissible separately at the time of truing up based on the details furnished by the Petitioner. The capital spares claimed by the Petitioner for are as under:

(Rs. in lakh)					
2014-15	2015-16	2016-17	2017-18	2018-19	Total
214.76	853.18	844.96	1519.95	1017.24	4450.09

101. The Petitioner has furnished the CA certificate of capital spares consumed during the period 2014-19 and the CA certificate indicates that the capital spares are not funded through compensatory allowance or special allowance or claimed as a part of additional capitalization or consumption of stores and spares and renovation and modernization.



102. The matter has been considered. We have examined the list of the capital spares consumed by the Petitioner and submitted along with the CA certificate. It is observed from the audited statement and Form 9Bi of the respective years that the audited capital spares claimed as per CA certificate and the details submitted in form-9Bi are different and the details of capital spares submitted in CA certificate are not part of the capital cost. Accordingly, we consider the capital spares, which are given in the CA certificate.

103. It is pertinent to mention that the term “capital spares” has not been defined in the 2014 Tariff Regulations. The term capital spares, in our view, is a piece of equipment, or a spare part, of significant cost that is maintained in inventory for use in the event that a similar piece of critical equipment fails or must be rebuilt. Keeping in view the principle of materiality and to ensure standardized practices in respect of earmarking and treatment of capital spares, the value of capital spares exceeding Rs.1 (one) lakh, on prudence check of the details furnished by the Petitioner in CA certificate of the petition, has been considered for the purpose of tariff. Based on this, the details of the allowed capital spares considered for the period 2014-19 is summarized as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Capital spares not part of capital cost claimed	214.76	853.18	844.96	1519.95	1017.24
Value of spares Rs.1(one) lakh and below are disallowed on individual basis	125.18	596.06	350.71	555.44	413.34
Net total value of capital spares considered	89.58	257.12	494.25	964.51	603.90

104. Further, we are also of the view that spares do have a salvage value. Accordingly, in line with the practice of considering the salvage value, presumed to be



recovered by the Petitioner on sale of other capital assets, on becoming unserviceable, the salvage value of 10% has been deducted from the cost of capital spares considered above, for the period 2014-19. Therefore, on prudence check of the information furnished by the Petitioner in CA certificate and on applying the said ceiling limit along with deduction of the salvage value @10%, the net capital spares allowed in terms of Regulation 29(2) of 2014 Tariff Regulations is as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Net total value of capital spares considered (A)	89.58	257.12	494.25	964.50	603.90
Salvage value @ 10% (B)	8.96	25.71	49.43	96.45	60.39
Net Claim allowed (C) = (A) - (B)	80.62	231.41	444.83	868.05	543.51

O&M for additionalities

105. The Petitioner has claimed following additional O&M expenses for the period 2014-19:

		<i>(Rs. in lakh)</i>				
Sl. No.		2014-15	2015-16	2016-17	2017-18	2018-19
a.	O & M Expenses (Jetty & ECHP)	228.33	296.02	511.78	400.71	508.42
b.	Flue Gas Desulphurization plants	654.51	614.93	485.19	388.21	354.20
c.	De-Silting sea water intake	519.05	908.87	464.90	978.56	111.09
	Total Additional O&M expenses	1401.89	1819.82	1461.87	1767.48	973.71

106. The additional O&M expenses claimed by the Petitioner are discussed as under:

(a) O & M Expenses (Jetty & ECHP)

107. The Petitioner has claimed additional O&M expenses of Rs. 1945.26 lakh, during the period 2014-19, towards additional O&M of jetty and ECHP. The Petitioner has furnished the CA certificate for the cost incurred towards jetty and external coal handling plant for the period 2014-19. The details of cost include consumables, stores



and spares and repair maintenance, contractual manpower and operating cost and other administrative and personnel cost.

108. The Respondent PCKL, has submitted that the Petitioner has not provided any evidence that the expenses have actually been incurred. It has further stated that the CA certificate refers to consumables, stores, spares and repair and maintenance, contractual manpower cost and operating cost and other administrative and personnel costs. However, it has submitted that the Petitioner has not submitted any documents which suggest that the expenses have actually been incurred and the Petitioner has not submitted any details which may allow the Commission to conduct prudence check of the expenses incurred under this head. Accordingly, the Respondent has stated that the additional O&M expenses claimed for Jetty and ECHP may be rejected. The Respondent has also stated that the regulations does not provide for allowing additional O&M cost for the jetty and ECHP and in the audited accounts, the expenditure spent on the above is not available. The Respondent has further submitted that the Regulation 29(1)(a) of the 2014 Tariff Regulations already incorporates an escalation in O&M expenses in each financial year to cover increase in O&M costs for any reason, including pay revision and employee expenses such as salary, contribution to CPF, gratuity, pension etc. As such, the total O&M expense actually incurred has to be considered in light of the norms specified in the 2014 Tariff Regulations. The Respondent has contended that O&M norms alone cannot be considered to enhance the O&M expenses and can only be allowed in the event the norms under the Regulations are inadequate or insufficient to cover the same.

109. The Petitioner has clarified that the submissions of the Respondent PCKL, above are liable to be rejected. The Petitioner has stated that it has provided the



relevant documents/ information and the claims made are in terms of the regulatory framework. It has further stated that the Respondent PCKL, cannot seek to reopen settled issues in true up proceedings since the principles of res judicata bars such reopening of settled issues. The Petitioner has further submitted that the contention of Respondent PCKL, that auditor certificate does not certify the expenses for Jetty and ECHP, is incorrect since the details attached in the Petition, in the form of annexure, clearly mentions about the expenditure for ECHP. The Petitioner has submitted that Respondent PCKL's, allegation that auditor certificate refers to consumables, stores, spares and repair and maintenance, contractual manpower etc. is incorrect as annexure to the Petition clearly mentions that the expenditure has been incurred on account of ECHP and further provides details under the said heads – (1) Consumables, stores and spares & repair and maintenance (2) Contractual Manpower cost & Operating Cost (3) Other Administrative and Personnel Cost. Further, there is no bar on the Petitioner from providing additional details and the same should not be held against the Petitioner. The Petitioner has further submitted that Respondent PCKL's, contention that the O&M expenditure is not available in the audited accounts is wrong as the same is covered as under:

- a. Consumables Store & Spares have been booked under the head of Consumption of Stores and Spares which is grouped under the head of "Other Expenses".
- b. Service Cost i.e., Contractual Manpower cost & operating cost has been booked under the heads of Repairs & Maintenance – Plant & Equipment & Repairs & Maintenance – Others and have been grouped under the head of "Other Expenses"
- c. Personnel Cost booked under the head of "Employee Benefit Expenses" and other administrative booked under various heads majorly under the head of "Miscellaneous Expenses".



110. We have examined the matter and the documents available on record. On this issue, the Commission vide its order dated 22.1.2020 in Petition No. 251/GT/2017 had observed as under:

“(d) O&M Expenses (Jetty & ECHP)

75. The Petitioner has submitted that it has incurred an expenditure of `257.43 lakh in 2013-14 towards Jetty and ECHP. The Petitioner has considered the base amount of `257.43 lakh and has claimed the amount with an annual escalation of 6.29% for the period 2014-19. According to us, the thermal generating stations using imported coal are required to incur additional O&M expenses for operation of Jetty and transfer of coal to Railway wagons from ECHP. This additional O&M expenditure has not been included in the normative O&M expenses under the 2014 Tariff Regulations. In this background, the O&M expenses claimed under this head is allowed separately, subject to revision at actuals, at the time of truing-up exercise.”

111. The Petitioner in this petition, has furnished the break-up of actual additional O&M expenses incurred towards Jetty and ECHP duly certified by the CA. The breakup of the actual expenditure of Rs. 1945.26 lakh during the period 2014-19 towards additional O&M of Jetty and ECHP consists of consumables, stores & spares and repair & maintenance, contractual manpower cost & operating cost and other administrative & personnel cost. We find that this special feature of the coastal generating station, is required for smooth and efficient operation of the generating station and the normative O&M expenses allowed to the generating station, does not include the additional features of jetty and external coal handling plant. The construction of jetty is basically to unload the shipped imported coal and is cost effective alternative to ports. We are therefore, inclined to allow the additional O&M expenses considering the need of this feature in the coastal region. From the details of the expenditure submitted, it is seen that the Petitioner has also included the other administrative and personnel cost in the said expenditure. On this, the Petitioner has submitted that the personnel cost is booked under the head of Employee benefit expenses and other administrative cost is booked under various heads majorly under



the head of Miscellaneous expenses. However, the Petitioner has not furnished the bifurcation details of the costs due to normative O&M expenses and additional O&M expenses. However, such costs are already included in the normative O&M expenses allowed to the generating station. Further, the Petitioner has not demonstrated as to whether the actual O&M expenses incurred for the generating station was more than the normative O&M expenses allowed to the generating station. In view of the above, we are not inclined to allow the other administrative and personnel cost claimed in the additional O&M expenses allowed to the generating station. Accordingly, we allow the cost of consumable, stores & spares and repair & maintenance and contractual manpower cost & operating cost for jetty and external coal handling plants for the period 2014-19 in exercise of the power under Regulation 54 of 2014 Tariff Regulations. In view of the above, the additional O&M expenses in lieu of jetty and ECHP allowed to the generating station is as under:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
148.13	207.22	363.60	264.99	372.97

(b) Flue Gas Desulphurization plants

112. The Petitioner has claimed additional O&M expenses towards Flue Gas Desulphurization plants (FGD), for the period 2014-19. The Petitioner in Petition No. 251/GT/2017 had submitted that in 2013-14 it had actually incurred an expenditure of Rs. 427.09 lakh towards FGD (i.e. Rs. 80.23 lakh towards Salaries and Wages pertaining to FGD, Rs. 302.44 lakh towards RO and Chemistry lab and Rs. 44.42 lakh towards R&M expenses of FGD) and claimed Rs. 453.95 lakh, for the period 2014-15 (i.e. Rs. 85.28 lakh towards Salaries and Wages pertaining to FGD, Rs. 321.46 lakh towards RO and Chemistry lab and Rs 47.21 lakh towards R&M expenses of FGD).



113. As regards salaries & wages and Repair & Maintenance (R&M) expenses pertaining to FGD, the Commission vide order dated 22.1.2020 in Petition No. 251/GT/2017 had observed as under:

76. The Petitioner has submitted that it has incurred an expenditure of `80.23 lakh towards salaries & wages and `44.42 lakh towards Repair & Maintenance in 2013-14. According to the Petitioner, the expenditure incurred in year 2013-14 on this count has been considered as base and escalated annually at 6.29% for the period 2014-19. In our view, there are no defined norms/ standards pertaining to O&M expenses for FGD system under the 2014 Tariff Regulation. The Commission in its various orders determining tariff of the generating stations (regulated by this Commission) while granting in-principle approval for installation of ECS and other systems had granted liberty to claim the expenditure towards ECS and other installations, including the additional APC and O&M expenses on account of ECS, with all relevant documents. In line with this decision, the Petitioner is directed to submit the year-wise O&M expenses related to FGD system, on actual basis, at the time of truing-up exercise.

114. The Petitioner in the present petition, has claimed expenditure of Rs. 654.51 lakh in 2014-15, Rs. 614.93 lakh in 2015-16, Rs. 485.19 lakh in 2016-17, Rs. 388.21 lakh in 2017-18 and Rs. 354.20 lakh in 2018-19 as additional O&M expenses towards FGD. Further, the Petitioner has furnished the CA certificate indicating the cost incurred which includes consumables, stores and spares and repair maintenance, contractual manpower and operating cost and other administrative and personnel cost.

115. We have examined the matter and the documents available on record. The Petitioner had filed Petition No. 346/MP/2018 seeking regulatory certainty with respect to treatment of cost for mandatory installation of additional systems in compliance with the Environment (Protection) Amendment Rules, 2015 issued by the Ministry of Environment, Forest and Climate Change dated 7.12.2015 for thermal power stations. The scope of Petition No. 346/MP/2018 was limited to seeking declaration of the 2015 MoEF&CC Notification as an event under change in law. Accordingly, the Commission vide order dated 20.11.2019 had declared it as a change in law event and directed the Petitioner to approach the CEA to firm-up the technology to be used for installation of



FGD and for compliance with revised environmental norms as stipulated by the 2015 MoEF&CC Notification. The Petitioner in Petition No. 346/MP/2018 had submitted that at that time the generating station was mandated to only meet Ambient Air Quality Standards as per NAAQS. The Petitioner had further submitted that the existing FGD is designed to meet the limits specified in NAAQS 1994. Further, the Petitioner has installed boilers with Low NO_x burners and Over Fire Air (OFA) system to meet the NO_x norms of 80ug/m³ for 24 hours average in residential, rural and other area as prescribed by NAAQS. With these systems, the range of NO_x concentration in the flue gas emission is in the range of 150-400 mg/Nm³.

116. However, vide 2015 MoEF&CC Notification, the norms for control of emission of SO₂ and NO_x in stack emissions was introduced. In the light of above, the Commission vide ROP of the hearing dated 25.5.2021 directed the Petitioner to file the status of implementation of Emission Control Systems at generating station, in continuation of the Commission's order dated 20.11.2019 in Petition No. 346/MP/2018 and in view of all the amendments issued by MoEF&CC to the revised emissions notification dated 7.12.2015 till date; and in compliance to the directions of the Commission vide ROP of the hearing dated 25.5.2021, the Petitioner vide affidavit dated 30.6.2021 has submitted that the MoEF&CC vide its notification dated 31.3.2021, has revised the timelines for FGD implementation based on the location of the Thermal Power Plant to categorise thermal power plants in three categories as specified below:

Sl. No	Category	Location/area	Timelines for Compliance	
			Non-retiring units	Retiring units
(1)	(2)	(3)	(4)	(5)
1	A	Within 10 km radius of National Capital Region or cities having million plus population.	Up to 31 st December 2022	Up to 31 st December 2022



2	B	Within 10 km radius of Critically Polluted Areas and Non-attainment cities.	Up to 31 st December 2023	Up to 31 st December 2025
3	C	Other than those included in category A and B.	Up to 31 st December 2024	Up to 31 st December 2025

117. The Petitioner has clarified that the generating station will fall under the Category-C and Non-retiring units and accordingly, the compliance timeline for the Petitioner will be up to 31.12.2024, as against 31.3.2022 and 30.6.2022 stipulated by CEA earlier for Units-I & II, respectively. The Petitioner has further submitted that the Notice for inviting tender to appoint EPC contractor for installation of wet limestone based FGD system was floated by Adani Power Limited on 5.10.2020, for all its generating plants including the generating station and the last date for bid submissions was extended based on requests received from bidders & procurer to 30.7.2021.

118. The Petitioner has further stated that it is yet to install FGD to cater the requirement of 100% of the generating station, as per the 2015 MoEF&CC Notification dated 7.12.2015 and it had already installed FGD to cater the requirement of 25% of the installed capacity. It is noticed that the Commission in its order dated 25.1.2020 in Petition No. 251/GT/2017 had observed that there are no defined norms /standards pertaining to O&M expenses towards FGD. The additional O&M expenses towards FGD as submitted by the Petitioner are on actuals and the Commission vide order dated 5.4.2023 in Petition No 239/GT/2020 in case of Vindhyachal Super Thermal Power Station Stage-V, in the absence of defined norms during the period 2014-19 had allowed the actual O&M expenses incurred by the generating station towards the O&M of FGD. In view of the above we are inclined to allow the additional O&M expenses as claimed by the Petitioner towards FGD for the period 2014-19 as under:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
654.51	614.93	485.19	388.21	354.2



(c) De-Silting sea water intake

119. The Petitioner has claimed total additional O&M expenses of Rs. 2982.47 lakh, during the period 2014-19, towards De-silting sea water intake. The Respondent PCKL, has submitted that the Petitioner has not provided any documents to establish the O&M expenses for de-silting sea water intake for 2018-19. It has further submitted that there is no clarity on the claim concerning de-silting sea water intake since the Petitioner has sought for additional capitalization expenses for the sea water intake system and has stated that the system will be capitalized in 2021-2022. Apart from this, the Respondent has stated that the Commission had not allowed any additional O&M expenses for the sea water intake system and therefore the Petitioner's claim relating to additional O&M expenses may be rejected. In response, the Petitioner has submitted that the Commission in its order dated 22.1.2020 in Petition No. 251/GT/2017 had considered the said claim.

120. We have examined the matter. The Petitioner, in Petition No. 251/GT/2017 had submitted that it had incurred Rs. 49.74 crore in 2014 and further claimed 20% of the lumpsum amount of Rs. 49.74 crore incurred in 2014, along with yearly escalation of 6.29 % p.a. for each year of the period 2015-19. The observation of the Commission in the said order is extracted as under:

"72. The Petitioner has submitted that the expenditure of lumpsum amount of Rs.49.74 crore was done in 2014, but only 20% (i.e. Rs 9.94 crore) as recurring annual expenditure has been considered. The Petitioner has clarified that this recurring annual expenditure of Rs, 9.94 crore as considered in 2013-14 has been escalated @ 6.29% p.a. and has accordingly been claimed as additional O&M expenses for this work. Since the Petitioner has not clarified the basis of arriving at such claim (20% of Rs. 49.74 crore), we are not inclined to allow the same for want of proper justification."

121. On perusal of the above observations it is noticed that the said expenditure was not allowed for want of proper justification. The Petitioner, in this Petition, has also not



furnished any justification in terms of the directions in the said order dated 22.1.2020. Also, no basis has been provided by the Petitioner for arriving at such an additional O&M cost. The Petitioner has also not justified that it could not meet the additional expenditure from the normative O&M expenses allowed to the generating station and that the actual O&M expenses incurred was more than the normative O&M expenses allowed to the generating station. In view of the above, we are not inclined to allow the additional O&M expenses claimed by the Petitioner for the period 2014-19 towards de-silting sea water intake.

122. Accordingly, the additional O&M expenses claimed and allowed to the generating station are as under:

<i>(Rs. in lakh)</i>					
O&M expenses	2014-15	2015-16	2016-17	2017-18	2018-19
Jetty & ECHP Claimed	228.33	296.02	511.78	400.71	508.42
Jetty & ECHP Allowed	148.13	207.22	363.60	264.99	372.97
Flue Gas Desulphurization Claimed	654.51	614.93	485.19	388.21	354.20
Flue Gas Desulphurization Allowed	654.51	614.93	485.19	388.21	354.2
De-Silting sea water intake Claimed	519.05	908.87	464.90	978.56	111.09
De-Silting sea water intake Allowed	0.00	0.00	0.00	0.00	0.00
Total allowed	802.64	822.15	848.79	653.20	727.17

123. Based on above deliberations, the O&M expenses including additional O&M expenses water charges and capital spares allowed to the generating station are summarised as under:

<i>(Rs. in lakh)</i>					
O&M expenses	2014-15	2015-16	2016-17	2017-18	2018-19
O&M expenses under Reg. 29(1)	17280	18372	19524	20760	22056
O&M expenses under Reg. 29(2)					
Water Charges	47.57	50.45	42.27	12.67	5.12
Capital Spares	80.62	231.41	444.83	868.05	543.51
O&M expenses allowed	17408.19	18653.86	20011.10	21640.72	22604.63
Additional O&M expenses					
O & M Expenses (Jetty & ECHP)	148.13	207.22	363.60	264.99	372.97
Flue Gas Desulphurization plants	654.51	614.93	485.19	388.21	354.2
De-silting sea water intake	0.00	0.00	0.00	0.00	0.00
Total O&M expenses allowed	18210.83	19476.01	20859.89	22293.92	23331.80



Operational Norms

124. The operational norms considered by the Petitioner in respect of the generating station are as under:

Target Availability (%)	85
Heat Rate (kcal/kWh)	2333
Auxiliary power consumption (%)	6.45
Specific Oil Consumption (ml/kWh)	0.50

Target Availability

125. Regulation 36(A)(a) of the 2014 Tariff Regulations provides Target Availability as under:

(A) Normative Annual Plant Availability Factor (NAPAF)

(a) All thermal generating stations, except those covered under clauses (b), (c), (d) & (e) - 85%

Provided that in view of shortage of coal and uncertainty of assured coal supply on sustained basis experienced by the generating stations, the NAPAF for recovery of fixed charges shall be 83% till the same is reviewed.

The above provision shall be reviewed based on actual feedback after 3 years from 1.4.2014.

126. In view of the above, the Target Availability of 83% for the period 2014-15 to 2016-17 and 85% for the period 2017-18 & 2018-19 as per Regulation 36(A) of the 2014 Tariff Regulations as claimed by the Petitioner, is allowed.

Station Heat Rate

127. Regulation 36(C)(c) of the 2014 Tariff Regulations provides as under:

(C) Gross Station Heat Rate: -

(c) Thermal Generating Station having COD on or after 1.4.2009 till 31.3.2014

(i) Coal-based and lignite-fired Thermal Generating Stations = $1.045 \times \text{Design Heat Rate (kCal/kWh)}$

Where the Design Heat Rate of a generating unit means the unit heat rate guaranteed by the supplier at conditions of 100% MCR, zero percent make up, design coal and design cooling water temperature/back pressure:

Provided that the heat rate norms computed as per above shall be limited to the heat rate norms approved during FY 2009-10 to FY 2013-14.

128. The Commission vide order dated 22.1.2020 in Petition No. 251/GT/2017 had allowed the SHR as 2333.485 kcal/kWh and the same is allowed.



Auxiliary power consumption

129. Regulation 36(E)(a)(i) of the 2014 Tariff Regulation provides Auxiliary power consumption (APC) as under:

“(E) Auxiliary Energy Consumption

(a) Coal-based generating stations except at (b) below:

	<i>With Natural Draft cooling tower or without cooling tower</i>
<i>(i) 200 MW series</i>	<i>8.5%</i>
<i>(ii) 300/330/350/500 MW and above</i>	
<i>Steam driven boiler feed pumps</i>	<i>5.25%</i>
<i>Electrically driven boiler feed pumps</i>	<i>7.75%</i>

Provided further that for thermal generating stations with induced draft cooling tower, the norms shall be further increased by 0.5%”

130. The Petitioner has claimed APC of 6.45 %. The Commission vide order dated 22.1.2020 had allowed the APC of 6.45 % with the following observation and direction:

“.....The normative APC for generating plants 500 MW and above having steam driven boiler feed pump is 5.25%. The Commission vide its order dated 20.2.2014 in Petition No. 160/GT/2012 had allowed additional 1.20% of APC due to additional features like FGD, coal jetty, desalination plant. Accordingly, the APC of 6.45 % is allowed for the period 2014-19. However, the Petitioner shall furnish the actual auxiliary consumption due to additional features such as sea water pump house, RO plant, FGD system etc. from COD to 2018-19 at the time of truing up of tariff in terms of Regulation 8 of the 2014 tariff Regulations.”

131. Further, the Commission vide ROP dated 25.5.2021 directed the Petitioner to furnish the following:

“Actual auxiliary consumption due to additional features such as Sea water pump House, RO plant, FGD system, Jetty and ECHP etc. from COD to till 31.3.2021;”

132. In compliance to the above, the Petitioner vide affidavit dated 30.6.2021 has submitted that it does not have separate details of actual auxiliary consumption for Sea water pump house, RO plant & FGD system on account of non-availability of required infrastructure. The Petitioner has further stated that it is in the process of installation of FGD along with infrastructure required to measure the auxiliary consumption for FGD and it has maintained the details of actual auxiliary consumption at the plant level including Sea water pump house, RO plant, FGD system, Jetty and



ECHP etc. shown in the table below for the period from COD to 31.03.2021. The Petitioner has also stated that it has maintained the details of auxiliary consumption at Jetty & ECHP and the same is also being shared by Petitioner in its monthly invoice with Karnataka ESCOMs and is shown in the table below for the period from COD to 31.3.2021.

	2010-11 (From 11.11.2010 i.e. COD of Unit-I)	2011-12	2012-13	2013-14	2014-15
Total auxiliary power consumption at plant level including Sea water pump house, RO plant, FGD system Jetty and ECHP etc.	14.64%	7.47%	6.36%	6.38%	6.17%
Auxiliary consumption at Jetty & ECHP	0.03%	0.05%	0.07%	0.07%	0.06%

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total auxiliary power consumption at plant level including Sea water pump house, RO plant, FGD system Jetty and ECHP etc.	5.78%	5.93%	6.03%	6.34%	7.59%	8.24%
Auxiliary consumption at Jetty & ECHP	0.06%	0.06%	0.06%	0.07%	0.09%	0.10%

133. The Respondent PCKL, has submitted that the breakup of auxiliary consumption of additional features such as sea water pump house, R.O. Plant, FGD system and external CHP were submitted by the Petitioner in Petition No. 160/GT/2012 and from the actual consumption of jetty for the period from 2014-15 to 2017-18, it may be noted that the auxiliary consumption is at average 0.07% as against 0.45% allowed by the Commission in the orders dated 20.2.2014 and 10.7.2015. The Respondent has further submitted that in case the Commission determines that the expenditure incurred on Jetty is to be classified as an auxiliary consumption then, as decided in the order dated 20.2.2014, there is a need to revise the auxiliary consumption as approved, since the external CHP auxiliary percentage, i.e., 0.07%, by retaining other auxiliary consumptions unaltered. The revised additional auxiliary



consumption works out to 0.814% as against 1.2%. In response, the Petitioner has submitted that the contentions and averments made by the Respondent in this regard are wrong and denied since in order dated 20.2.2014 in Petition 160/GT/2012, has determined the auxiliary consumption for project specific additionalities to be 1.2%. The Petitioner has further submitted that it is incorrect to compare the auxiliary consumption head-to-head for each of the elements/components of the plant and the auxiliary consumption of the plant should be seen in totality; therefore, PCKL cannot seek to re-adjudicate and re-open the already settled decision of the Commission.

134. We have examined the matter and the documents available on record. It is noticed that the Petitioner does not have separate details of the actual auxiliary consumption for Sea water pump house, RO plant and FGD system on account of non-availability of the required infrastructure. The auxiliary consumption of a generating station depends on the variation in load, actual generation, which will vary as per variation in frequency, part loading of the generating station and due to forced or planned outage of the units. The Commission vide its order dated 8.2.2016 in Petition No. 198/GT/2013 (tariff of Vallur Thermal Power Station for 2009-14) had allowed the auxiliary power consumption of 7.44% considering additional load of 14.09 MW due to grab un-loader, special type conveyor system, desalination plant and different drives etc. The Commission in the said order has considered the additional auxiliary power consumption of 0.94% considering the additional features. In case of this generating station, the external CHP and FGD (25% to cater the AAQMS) are also installed that will incur additional auxiliary power consumption. Accordingly, the auxiliary power consumption of 6.45% i.e. 5.25% normative + 1.20% due to additional



features, as allowed by the Commission vide order dated 22.1.2020 in Petition No. 251/GT/2017 is allowed to the generating station for the period 2014-19.

Specific Oil Consumption

135. Regulation 36 (D)(a) of the 2014 Tariff Regulations provides secondary fuel oil consumption of 0.50 ml/kWh for coal based generating station and the same is allowed.

Coal transit and handling losses

136. The transit and handling losses of 0.2 % in terms of Regulation 30(8) of the 2014 Tariff Regulations, is allowed to the generating station.

Limestone Consumption

137. In line with the order dated 22.1.2020, the limestone consumption of 0.004 kg/kWh is considered an allowed for the period 2014-19.

138. Based on the above discussion, the operational norms considered for the period 2014-19, is as under:

Target Availability	83% for 2014-17 and 85% for 2017-19
Gross station Heat-Rate	2333.485 kCal/kWh
auxiliary power consumption	6.45%
Coal transit and handling losses	0.2%
Lime stone consumption	0.004 kg/kWh

Interest on Working Capital

139. Sub-section (a) of Clause (1) of Regulation 28 of the 2014 Tariff Regulations provides as under:

“28 (1) The working capital shall cover:

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

(i) Cost of coal or lignite and limestone towards stock, if applicable, for 15 days for pit-head generating stations and 30 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;

(ii) Cost of coal or lignite and limestone for 30 days for generation corresponding to the normative annual plant availability factor;



- (iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;
- (iv) Maintenance spares @20% of operation and maintenance expenses specified in regulation 29;
- (v) Receivables equivalent to two months of capacity charges and energy charges for sale of electricity calculated on the normative annual plant availability factor; and
- (vi) Operation and maintenance expenses for one month.”
- (2) The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this regulation shall be based on the landed cost incurred (taking into account normative transit and handling losses) by the generating company and gross calorific value of the fuel as per actual for the three months preceding the first month for which tariff is to be determined and no fuel price escalation shall be provided during the tariff period.
- (3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof as the case may be is declared under commercial operation whichever is late.
- (4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency.”

Fuel Cost and Energy Charges for computation of Working Capital

140. Regulation 28(2) of the 2014 Tariff Regulations provides that the computation of cost of fuel as part of Interest on Working Capital (IWC) is to be based on the landed price and GCV of fuel as per actuals, for the three months preceding the first month for which the tariff is to be determined. In terms of Regulation 30(6) of the 2014 Tariff Regulations, for determination of the energy charges in working capital, the GCV on ‘as received’ basis is to be considered. Regulation 30(7) of the 2014 Tariff Regulations provides as under:

“(7) The generating company shall provide to the beneficiaries of the generating station the details of parameters of GCV and price of fuel i.e. domestic coal, imported coal, e-auction coal, lignite, natural gas, RLNG, liquid fuel etc., as per the forms prescribed at Annexure-I to these regulations: Provided that the details of blending ratio of the imported coal with domestic coal, proportion of e-auction coal and the weighted average GCV of the fuels as received shall also be provided separately, along with the bills of the respective month: Provided further that copies of the bills and details of parameters of GCV and price of fuel i.e. domestic coal, imported coal, e-auction coal, lignite, natural gas, RLNG, liquid fuel etc., details of blending ratio of the imported coal with domestic coal, proportion of e-auction coal shall also be displayed on the website of the generating company. The details should be available on its website on monthly basis for a period of three months.”



141. The Petitioner in Form-13B of the affidavit dated 28.10.2021 has claimed cost for fuel component for working capital as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Cost of Coal towards stock (30 days corresponding to NAPAF)	17468.00	17468.00	17468.00	17888.91	17888.91
Cost of Coal towards Generation (30 days corresponding to NAPAF)	17468.00	17468.00	17468.00	17888.91	17888.91
Cost of Lime towards stock (30 days corresponding to NAPAF)	48.93	48.93	48.93	50.11	50.11
Cost of Lime towards Generation (30 days corresponding to NAPAF)	48.93	48.93	48.93	50.11	50.11
Cost of Secondary fuel oil (2 months corresponding to NAPAF)	391.33	392.40	391.33	400.76	400.76

142. The cost for fuel component claimed for working capital for the period 2014-19 is same as the cost allowed in order dated 22.1.2020. Accordingly, the cost for fuel component in working capital as considered in order dated 22.1.2020 is allowed for the period 2014-19.

Energy Charge Rate

143. Since the Commission has considered the same parameters and operational norms as allowed in order dated 22.1.2020, the ECR considered for the purpose of tariff in order dated 22.1.2020 remains unchanged. Accordingly, the Energy Charges for 2 months, for the purpose of interest on working capital, allowed to the generating station is as under:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
35913.68	36012.07	35913.68	36779.07	36779.07

Working Capital for Maintenance spares

144. The Petitioner in Form-13B has claimed the following maintenance spares in the working capital:



<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
3788.84	4219.09	4374.62	4812.29	4810.41

145. Regulation 28(1)(a)(iv) of the 2014 Tariff Regulations provide for maintenance spares @ 20% of the O&M expenses. As specified in Regulation 29(2) of the 2014 Tariff Regulations, the maintenance spares @20% of the O&M expenses, including water charges and additional O&M of jetty & EHP etc. allowed, are as under:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
3642.17	3895.20	4171.98	4458.78	4666.36

Working capital for Receivables

146. In terms of Regulation 28(1)(v) of the 2014 Tariff Regulations, receivables for two months for capacity charges as well as for energy charges are worked out and allowed as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Receivables (Fixed Charges)	21564.90	20240.84	20063.28	19840.13	19409.75
Receivables (Variable Charges)	35913.68	36012.07	35913.68	36779.07	36779.07
Receivables (Total)	57478.58	56252.92	55976.96	56619.20	56188.82

Working capital for O & M Expenses (1 month)

147. O&M expenses for 1 month claimed by the Petitioner for the purpose of working capital in Form-13B are as under:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
1578.69	1757.95	1822.76	2005.12	2004.34

148. Regulation 28(a)(vi) of the 2014 Tariff Regulations provides for O&M expenses for one month for coal-based generating station. The one-month O&M expenses allowed including additional O&M of jetty & EHP etc, is as under:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
1517.57	1623.00	1738.32	1857.83	1944.32



Rate of Interest on Working Capital

149. Regulation 28 (3) stipulates as under:

“(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later.”

150. In terms of clause (3) of Regulation 28 of the 2014 Tariff Regulations, the rate of interest on working capital has been considered as 13.50% (Bank rate 10.00 + 350 bps). Accordingly, Interest on working capital has been computed as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Cost of Coal towards stock- 30 days	17468.00	17468.00	17468.00	17888.91	17888.91
Cost of coal towards generation- 30 days	17468.00	17468.00	17468.00	17888.91	17888.91
Cost of Lime towards stock – 30 days	48.93	48.93	48.93	50.11	50.11
Cost of lime towards generation- 30 days	48.93	48.93	48.93	50.11	50.11
Cost of Secondary fuel oil 2 months	391.33	392.40	391.33	400.76	400.76
Maintenance spares (20% of the O&M exp)	3642.17	3895.20	4171.98	4458.78	4666.36
Receivables (Total)	57478.58	56252.92	55976.96	56619.20	56188.82
O&M exp for 1 month	1517.57	1623.00	1738.32	1857.83	1944.32
Total Working Capital	98063.52	97197.39	97312.46	99214.63	99078.32
Interest Rate	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	13238.57	13121.65	13137.18	13393.98	13375.57

Annual Fixed Charges for the period 2014-19

151. Based on the above, the annual fixed charges approved for the generating station for the period 2014-19 are summarized as under:



	(Rs. in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	29105.67	29149.37	29152.40	29083.09	29014.43
Interest on Loan	47795.73	38623.47	30421.40	27515.12	23974.04
Return on Equity	21038.59	21074.55	26808.78	26754.67	26762.69
Interest on Working Capital	13238.57	13121.65	13137.18	13393.98	13375.57
O&M Expenses	18210.83	19476.01	20859.89	22293.92	23331.80
Total	129389.39	121445.05	120379.65	119040.78	116458.53

Note: (1) All figures are on annualized basis. (2) All figures under each head have been rounded. The figure in total column in each year is also rounded. As such the sum of individual items may not be equal to the arithmetic total of the column.

152. The difference between the annual fixed charges already recovered by the Petitioner and the annual fixed charges determined by this order, shall be adjusted in terms of the provisions of Regulation 8(13) of the 2014 Tariff Regulations.

DETERMINATION OF TARIFF FOR THE PERIOD 2019-24

153. As stated, the Petitioner, has also sought the determination of tariff of the generating station for the period 2019-24, in terms of the provisions of the 2019 Tariff Regulations. Accordingly, the capital cost and the annual fixed charges claimed (revised vide affidavit dated 28.10.2021) by the Petitioner for the period 2019-24 are as under:

Capital Cost claimed

	(Rs in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Capital Cost	555474.91	555664.91	558537.25	586314.25	586314.25
Add: Addition during the year	190.00	2872.34	27777.00	0.00	960.00
Less De Capitalisation during the year/Period	0.00	0.00	0.00	0.00	0.00
Less Reversal during the year	0.00	0.00	0.00	0.00	0.00
Add Discharges during the year/Period	0.00	0.00	0.00	0.00	0.00
Closing Capital Cost	555664.91	558537.25	586314.25	586314.25	587274.25
Average Capital Cost	555569.91	557101.08	572425.75	586314.25	586794.25

Annual Fixed Charges Claimed

	(Rs. in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	29275.78	29356.55	30207.22	30982.17	31034.40



Interest on Loan	23925.84	20306.65	17863.54	15188.86	11267.27
Return on Equity	25697.27	25756.00	26343.65	26875.74	26893.86
Interest on Working Capital	13891.71	14432.18	14702.96	13972.90	13919.02
O&M Expenses					
Normative O & M Expenses	24312.00	25164.00	26052.00	26964.00	27912.00
Additional O&M Expenses	1416.60	12766.88	17786.69	2842.38	1700.03
Total	118519.20	127782.27	132956.06	116826.05	112726.58

Capital Cost

154. Clause (1) of Regulation 19 of the 2019 Tariff Regulations provides that the capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects. However, capital cost for an existing project is governed as per clause (3) of Regulation 19 of the 2019 Tariff Regulations, which provides as under:

“The Capital cost of an existing project shall include the following:

- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
- (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
- (c) Capital expenditure on account of renovation and modernization as admitted by this Commission in accordance with these regulations;*
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries....”*

155. The Commission, in this order, has allowed the closing capital cost of Rs. 550452.00 lakh, as on 31.3.2019. Accordingly, in terms of Regulation 19 of the 2019 Tariff Regulations, the capital cost of Rs. 550452.00 lakh, as on 31.3.2019, has been considered as the opening capital cost as on 1.4.2019, for the purpose of determination of tariff for the period 2019-24.



Additional Capital Expenditure for the period 2019-24

156. Clause (2) of Regulation 9 of the 2019 Tariff Regulations provides that the application for determination of tariff shall be on admitted capital cost, including additional capital expenditure already admitted and incurred up to 31.3.2019 (either based on actual or projected additional capital expenditure) and estimated additional capital expenditure for the respective years for the period 2019-24 along with the true up for the period 2014-19 in accordance with the 2014 Tariff Regulations. Relevant clauses of Regulation 25 and Regulation 26 of the 2019 Tariff Regulations, provide as under:

“25. Additional Capitalization within the original scope and after the cut-off date:

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

- (a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;*
- (b) Change in law or compliance of any existing law;*
- (c) Deferred works relating to ash pond or ash handling system in the original scope of work;*
- (d) Liability for works executed prior to the cut-off date;*
- (e) Force Majeure events;*
- (f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and*
- (g) Raising of ash dyke as a part of ash disposal system.*

(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

- (a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;*
- (b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;*
- (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and*
- (d) The replacement of such asset or equipment has otherwise been allowed by the Commission.*

26. Additional Capitalization beyond the original scope



(1) 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 beyond the original scope, may be admitted by the Commission, subject to prudence check:

(a) Liabilities to meet award of arbitration or for compliance of order or directions of any statutory authority, or order or decree of any court of law;

(b) Change in law or compliance of any existing law;

(c) Force Majeure events;

(d) Need for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security;

(e) Deferred works relating to ash pond or ash handling system in additional to the original scope of work, on case to case basis:

Provided also that if any expenditure has been claimed under Renovation and Modernization (R&M) or repairs and maintenance under O&M expenses, the same shall not be claimed under this Regulation;

(f) Usage of water from sewage treatment plant in thermal generating station.

(2) 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 value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding loan and the equity respectively in the year such de-capitalisation takes place with corresponding adjustments in cumulative depreciation and cumulative repayment of loan, duly taking into consideration the year in which it was capitalized."

157. The capital expenditure has been claimed by the Petitioner based on assessment of its plant by an independent agency namely M/s Lahmeyer International. The Commission, vide order dated 22.1.2020 while dealing with the additional capital expenditure claimed for the period 2014-19, had made the following observations:

"It is also noticed that the Petitioner, based on Lahmeyer report, has claimed additional capital expenditure for Rs. 60629.88 lakh, in respect of assets / works, which according to the Petitioner, are to be incurred during the next tariff period (2019-24). Since the claim of Rs. 60629.88 lakh is for the next control period, the same shall be dealt with in accordance with the 2019 Tariff Regulations."

158. However, the Petitioner in the present Petition vide affidavit dated 2.7.2021, has claimed total projected additional capital expenditure of Rs. 31799.34 lakh, for the period 2019-24. as under:



(Rs. in lakh)

Sl. No.		Regulation	2019-20	2020-21	2021-22	2022-23	2023-24
1.	Ventilation System in Track Hopper	25 (1) or 26(1) read with 76 and 77	190.00	-	-	-	-
2.	400 kV Line reactor - 2 Nos	25 (1) (a) or 26 (1) read with 76 and 77	-	2872.34	-	-	-
3.	Staff Colony	25 (1) (f) or in the alternative 25 (1) read with 76 and 77	-	-	6000.00	-	-
4.	CCTV Surveillance of Plant	26 (1) (d)	-	-	288.00	-	-
5.	New IDCT	25 (1) or 26 (1) read with 76 and 77	-	-	4450.00	-	-
6.	Auto DV Fire Protection System in Coal Handling Plant	25 (1) or 26 (1) read with 76 and 77	-	-	145.00	-	-
7.	Installation of standby ACW pipe line with corrocoat from ACWPH upto U#1 & U#2 PHE		-	-	649.00	-	-
8.	Impressed current cathodic protection system (ICCP) for Sea Water/CW supply & return line		-	-	590.00	-	-
9.	Sea Water Intake System		-	-	7768.00	-	-
10.	Laying of alternate source of electric supply for ECHP		-	-	254.00	-	-
11.	Rain Water Harvesting	26 (1) (a) read with 76 and 77	-	-	333.00	-	-
12.	Upgradation of North & South Offshore Return Line	25 (1) or Regulation 26 (1) read with 76 and 77	-	-	7300.00	-	-
13.	Cathodic Protection System for NMPT RCC Jetty Structure		-	-	-	-	960.00
	Total		190.00	2872.34	27777.00	-	960.00



159. The additional capital expenditure claimed by the Petitioner for the period 2019-24 is being discussed as under:

2019-20

Ventilation system in Track Hooper

160. The Petitioner has claimed additional capital expenditure of Rs.190 lakh on accrual basis, towards the work of Ventilation system in track hopper, under Regulation 25(1) or Regulation 26 (1) of the 2019 Tariff Regulations, read with Regulation 76 (Power to relax) and Regulation 77 (Power to Remove Difficulty) and Sections 61(c), 61(e) and 79(1)(b) of the Electricity Act, 2003. In justification for the same, the Petitioner has submitted that the original ventilation system was not capable of supplying the required fresh air as it got severely damaged due to high corrosive environment and it was not in a repairable condition. It has further stated that as per Rule 21(2) of Chapter III of Karnataka Factories Rule, 1969, ventilation system is essential, therefore the original ventilation system was scrapped and new ventilation system was installed in the track hopper to maintain the healthy environment for the employees.

161. The Respondent PCKL, has submitted that as per the provisions of the EPC contract, the firm was required to provide a ventilation system which would serve the life of the project considering the corrosivity of the atmosphere and the corrosivity now cited by the Petitioner. It has further stated that clause 15 of the supply contract dated 24.12.2006, clearly provides that the contractor shall adopt all necessary environmental protection measures and safety measures & maintain highest environmental protection and safety standards in their designs & during execution and the quality systems shall also be adopted consistent with the bid documents,



contractor's offer, subsequent agreements and the company standards and shall be of the highest standards. The Respondent has further mentioned that the deterioration of the original system within 7 years of its commissioning, shows that the deterioration was the result of a failure to adhere to the standards set under the EPC contract and possibly due to the substandard quality of the equipment and/or workmanship. Accordingly, the Respondent has stated that the original work was not carried out as per the necessary standards and contractual obligations, and the Respondents and their consumers should not be burdened for its restoration. It has also pointed out that Rule 21(2) of Chapter III of The Karnataka Factories Rules, 1969 has been in effect from 1969, i.e., well before the commissioning of the plant and therefore, the original design of the ventilation system was required to have adhered to that standard and the same was reflected in the EPC Contract. The Respondent has stated that the Petitioner was therefore, legally required to comply with the provisions of The Karnataka Factory Rules, 1969 during the execution the project from 2005 to 2010.

162. In response, the Petitioner has clarified that the original work for the ventilation system was undertaken as per the applicable laws and the best technology available at the time of the construction of the Project for yielding optimum results. It has however submitted that even after undertaking prudent efforts while installing the original ventilation system, it got severely corroded due to high corrosive environment.

163. The matter has been considered. It is noticed from the justification submitted by the Petitioner that the work of Ventilation system in track hopper is in the nature of replacement/maintenance. The Petitioner has already carried out the said work in 2019-20 and has submitted that it has incurred hard cost of Rs. 190 lakh including tax in 2019-20, for installation of aforesaid new ventilation system for track hoppers. The



original system was commissioned to cater the requirement up to useful life of the generating station. In this case, the Petitioner has submitted that it was not in repairable condition and has already incurred additional capital expenditure for new ventilation system in track hopper. The claim of the Petitioner is not covered under any subclause of Regulations 25(1) and 26(1) of the 2019 Tariff Regulations. Further, the Karnataka Factories Rules, has been in effect since 1969, i.e., well before the commissioning of the plant and the Petitioner has not placed on record the scope covered under the OEM contract, i.e whether there is a scope for R&M by the OEM or the defect liability period indicated in the contract. In our view, the expenditure claimed is in nature of O&M expenses and cannot fall within the scope of Regulation 25(1) and/or Regulation 26(1) of 2019 Tariff Regulations. For these reasons, we are not persuaded to consider the claim by relaxation of the provisions of the said regulations or in exercise of the regulatory powers. Accordingly, the expenditure claimed is not allowed.

2020-21

400 kV Line reactor – 2 Nos.

164. The Petitioner has claimed additional capital expenditure of Rs. 2872.34 lakh in 2020-21, on accrual basis, towards the work of 2 number of 400 KV line reactor under Regulation 25(1)(a) of the 2019 Tariff Regulation or in the alternative Regulation 26(1) of 2019 Tariff Regulations read with Regulation 76 (Power to relax) and Regulation 77 (Power to Remove Difficulty) of the 2019 Tariff Regulations, and Sections 61(c), 61(e) and Section 79(1)(b) of the Electricity Act, 2003. In justification for the same, the Petitioner has submitted that the generating station is connected to Hassan substation of PGCIL through 2x400 kV double circuit transmission system and whenever the 400 kV grid is lightly loaded, the system voltage shoots up and remains



quite high. To overcome the problem of high voltage, the Petitioner has submitted that the CEA during 39th Standing Committee Meeting on Power System Planning of Southern Region has approved the installation of 2x125 MVAR line reactor at UPCL switchyard and the same has also been approved in Minutes in the 119th Operation Coordination Committee meeting dated 10.5.2016 held in SRPC, Bangalore, Minutes of 41st meeting of Standing Committee on Power System Planning for Southern Region held on 22.9.2017 at Chennai and Minutes of the 142nd Meeting of the Operation Coordination Committee held on 10.4.2018 at SRPC, Bengaluru.

165. The Respondent PCKL, has submitted that the estimated cost claimed for the said work for the year 2017-18 is Rs. 3163 lakhs, as against the present claim of Rs. 2872 lakh. It has stated that as per Regulation 20 of the 2019 Tariff Regulations, the Petitioner needs to establish that the expenditure towards additional capitalization is done through competitive bidding under transparent process. The Respondent has also stated that the Petitioner has claimed the expenditure on the basis of minutes of meetings which occurred in 2016/2017 and in view of the same, the claim for additional capitalization does not qualify as a claim within the original scope of work. The Respondent has further submitted that contrary to the Petitioner's assertion, the Standing Committee on Power System Planning of Southern Region, never directed the Petitioner to install the 2x125 MVAR bus reactor, but it was the Petitioner who proposed to install the said system. Further, pursuant to the study conducted by POSOCO, certain locations were identified to undertake remedial measures, but the Petitioner's power plant was not in the list of the location of substations where reactive compensation was required. Accordingly, the Respondent has stated that the claim for Rs. 28.72 crores for 2020-21 towards 400KV line reactor of 2 Nos, cannot be



considered under any of the regulations. In response, the Petitioner has reiterated its contentions and submitted that it is seeking to invoke the powers of this Commission under Regulations 76 (Power to Relax) and Regulation 77 (Power to Remove Difficulty) of the 2019 Tariff Regulations. The Petitioner has also stated that the Commission in its order dated 22.1.2020 in Petition No. 251/GT/2017 had granted liberty to claim the expenditure towards line reactors in accordance with the provisions of the 2019 Tariff Regulations and therefore, the Petitioner has sought for the same in the present Petition. The Petitioner has further submitted that the Respondent PCKL's, contention that 400 kV line reactors were not stipulated by the Standing Committee on Power System Planning of the Southern Region and were proposed by the Petitioner itself is incorrect since it is a known fact that the line reactors though proposed by the Petitioner were agreed by the Standing Committee on Power System Planning of Southern Region. It has added that the proposed expenditure of Rs. 28.72 crore is only the hard cost part and does not contain any IDC and hence cheaper than the expenditure of Rs. 31.63 crore claimed earlier.

166. The matter has been considered. It is noticed that the requirement of 400 KV line reactor is due to fluctuation of voltage in the current 2x400 kV double circuit transmission system which is around 180 km long, connected to the Hassan substation of PGCIL. The Petitioner has submitted the details of minutes of meetings held at different forums vide amended petition dated 2.7.2021, as under:

- (a) Minutes of meeting dated 18.2.2016 of 39th meeting of the standing Committee on Power system planning of Southern region which was held on 28 to 29 December, 2015 in NRPC, New Delhi. In the minutes of meetings Director CEA informed that the UPCL (generating station) has also proposed to install 2x125 MVAR bus reactor at their switchyard to control prevailing system over voltages. Accordingly, same was agreed in the meeting.



- (b) Minutes of the 119th meeting of the Operation Coordination Committee dated 27.5.2016, which was held for status review of GT tap positions as per recommendation that all IPPS under APSLDC could be advised to change their Tap position corresponding to voltage level of 400 kV / 220 kV. The Petitioner was already having tap and corresponding voltage of 4 & 409.5 KV and same was recommended to be changed to 5 & 400KV. However, during the status review it was observed that there was rotor teeth temperature issues and OEM was called. The OEM was expected to attend the problem during June/July 2016.
- (c) Minutes of 41st meeting of Standing Committee on Power system planning of Southern region which was held on 22 September, 2017 at Chennai. In the meeting the representative of KPTCL stated that installation of 400kV, 2x125 MVAR bus reactor at UPCL (2x600MW) switchyard was agreed in the 39th meeting of the Standing Committee but Joint studies were not carried out while approving the reactor, KPTCL enquired about the necessity of installing 2x125 MVAR bus reactor at UPCL switchyard. It was informed that the requirement was assessed based on system studies, therefore, it was decided that the decision taken in 39th Standing Committee Meeting may be implemented.
- (d) Minutes of the 142nd meeting of the Operation Coordination Committee dated 1.5.2018, which was held on 10.4.2018. The rotor teeth temperature issue was still persisting and during the meeting it was suggested that their MVAR absorption should be around 50-60 MVAR in case they are not able to change tap.

167. Accordingly, the Petitioner has claimed the total additional expenditure of Rs. 2872.34 lakh, for the work of 2 number of 400 KV line reactor. Further, the Commission vide its order dated 22.1.2020 in Petition No. 251/GT/2017 had granted liberty to the Petitioner to claim expenditure towards line reactors in accordance with the provisions of the 2019 Tariff Regulations as under:

“85.....Further, the Petitioner vide its affidavit dated 19.8.2019 has submitted that the proposed capital expenditure towards 2 nos. of additional 400 kV line reactor is in compliance with the directive issued in the 39th Standing Committee meeting of Power System, Southern Region, for the purpose of Grid security and the same was also approved in the 119th Operation Coordination Committee meeting dated 10.5.2016 held in SRPC, Bangalore on 10.5.2016 has been planned during the next tariff period (2019- 24). In view of this submission, the Petitioner is at liberty to claim expenditure on this asset and the same shall be dealt with, on merits, in accordance with the provisions of the 2019 Tariff Regulations.”



168. Since, the proposed capital expenditure towards 2 nos. of additional 400 kV line reactor is in compliance to the directives issued by the Standing Committee meeting of Power System, Southern Region, for the purpose of Grid security and the same was also approved in the 119th Operation Coordination Committee meeting dated 10.5.2016 held in SRPC, Bangalore, the additional capital expenditure of Rs. 2872.34 lakh, for the work of 2 number of 400 KV line reactor is allowed to the generating station under Regulation 26(1)(a) of the 2019 Tariff Regulations. However, the Petitioner at the time of truing up of tariff, shall furnish all details corresponding to the 400 KV line reactor starting from floating NIT, number of bids received, L-1 bidder, awarded cost and timeline along with the actual completion cost and completion period.

2020-21

Staff Colony

169. The Petitioner has claimed additional capital expenditure of Rs. 6000.00 lakh in 2021-22, towards Construction of Staff colony under Regulation 25(1)(f) of the 2019 Tariff Regulations or in the alternative Regulation 25(1) of 2019 Tariff Regulations read with Regulation 76 (Power to Relax) and Regulation 77 (Power to Remove Difficulty) of the 2019 Tariff Regulations. In justification for the same, the Petitioner has submitted that the Staff colony is an essential requirement for any plant and since the generating station is located in a remote area i.e. far from the city/town therefore in case of any emergency/breakdown in the plant, the requirement for O&M employees in the least possible time is a crucial requirement to reduce the generation loss/outage time and also for the safety of plant and men. The Petitioner has further submitted that the Commission in its order dated 20.2.2014 in Petition No. 160/GT/2012 had allowed



Rs. 4500.00 lakh, for Construction of staff colony and the same was also upheld by APTEL vide Judgment dated 15.5.2015 in Appeal No. 108 of 2014.

170. The Respondent PCKL, has submitted that despite the fact that the Petitioner's additional capital cost was approved on 20.2.2014, well within the cut-off date i.e., about 1 year prior to the cut-off date of 31.3.2015, the Petitioner has delayed the Construction of Staff colony and hence, the additional capitalization allowed to the colony may be reversed. In response, the Petitioner has submitted that it could not undertake the work since it has been deprived of funds due to the Respondent PCKL/ Karnataka ESCOMS, wrongly withholding the LPS payments to the tune of Rs. 2000 crore (approx.). As regarding the increase in cost, the Petitioner has submitted that the increase from Rs. 4500 lakh to Rs. 6000 lakh in a span of 11 years, is an increase of only 2.65% per annum and hence may be allowed.

171. The matter has been considered. It is noticed that the Commission vide order dated 20.2.2014 had allowed an expenditure of Rs. 4500 lakh towards the Construction of Staff colony. The present claim of the Petitioner for Rs. 6000 lakhs, only consists of hard cost towards Staff colony. The COD of the generating station is 19.8.2012 and the Petitioner after 10 years of running of the plant is again claiming expenditure for Construction of the staff colony. The Petitioner has, however, not provided the details of the total expenditure actually envisaged in the original investment approval, for Construction of staff colony, the total expenditure incurred till date and the total expenditure proposed to be incurred. The Petitioner has also not submitted the details as to whether the additional expenditure is towards expansion of the staff colony, or for construction of a new colony. The Petitioner has also not provided the reasons for the requirement of an additional staff colony. The Petitioner



has mainly claimed the said expenditure under Regulation 25(1)(f) of 2019 Tariff Regulations, which provides for liability of works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payment. However, the claim of Rs. 6000 lakh is in addition to the already allowed amount of Rs. 4500 lakh. In view of the above, the additional cost towards the Construction of Staff colony is not allowed. However, the Petitioner at the time of truing up shall furnish the details of the staff colony and actual cost which was envisaged in the original scope of work along with documentary evidences along with the cost allowed by the Commission from zero date to till date (i.e. 31.3.2024) towards the Construction of staff colony.

2021-22

(a) CCTV Surveillance of Plant

172. The Petitioner has claimed additional capital expenditure of Rs. 288.00 lakh in 2021-22, towards CCTV surveillance of plant, under Regulation 26(1)(d) of the 2019 Tariff Regulations read with powers under the Electricity Act, 2003. In justification for the same, the Petitioner has submitted that based on the directions of Government of India (Intelligence Bureau) in its security inspection report on the Petitioner (which is confidential), it was proposed to install CCTV cameras inside the generating station. The Petitioner has further stated that CEA vide letter dated 25.4.2020, has also issued the security advisory to thermal power plants located in coastal region to maintain heightened vigilance and to take all security measures to counter possible attacks from anti-India establishments and the said advisory was issued for strict compliance.

173. The Respondent PCKL, has submitted that the request for additional CCTV cameras cannot be considered since the original EPC contract already contained provisions for allowing the installation of 48 cameras and the Petitioner has failed to



provide suitable justification for the same. The Respondent has further stated that the Petitioner has not filed the security inspection report and therefore, it is not possible to evaluate whether the said requirement is justified. In response, the Petitioner has submitted that there will be 76 nos of additional cameras covering the whole length of 6.5 km long inner and outer perimeter and 5.5 km long sea water corridor to enhance the security monitoring system. It has further submitted that the security inspection report issued by the Government of India is a confidential document and therefore the Petitioner has not filed it in the present proceedings. However, the Petitioner has stated that it has placed on record the letter dated 25.4.2020, issued by CEA which is a security advisory to thermal power plants located in coastal region and advises them to maintain heightened vigilance and to take all security measures to counter possible attacks from anti-India establishments.

174. The matter has been examined. Considering the fact that the expenditure towards CCTV surveillance camera is based on a direct advisory from the Government of India towards safety of the plant, we allow the said claim under Regulation 26(1)(d) of 2019 Tariff Regulations.

(b) New Induced Draft Cooling Tower (IDCT)

175. The Petitioner has claimed additional capital expenditure of Rs. 4450.00 lakh in 2021-22, towards Induced Draft Cooling Tower, under Regulation 25(1) of the 2019 Tariff Regulations or Regulation 26 (1) of the 2019 Tariff Regulations, read with Regulation 76 (Power to Relax) and 77 (Power to Remove Difficulty) of the 2019 Tariff Regulations, and the powers under the Electricity Act, 2003. In justification for the same, the Petitioner has submitted that the existing NDCT performance is found to be inadequate for getting the design cooling water inlet temperature and the cold water



temperature leaving the NDCT is found consistently higher than the design value by @ 3-4 deg. C, particularly during summer and monsoon period of higher relative humidity resulting into poorer condenser vacuum which leads to losses in the form of higher heat rate and increased specific coal consumption and therefore many times, full load cannot be achieved. It has stated that to overcome this problem based on M/s GEA study report, the Petitioner proposes to install an additional seven cell IDCT (6W+1S) for each unit.

176. The Respondent PCKL, has submitted that the GEA report dated 10.7.2015 appears to be incomplete and unsigned and it cannot be established whether the said report has actually been issued by GEA. It has also submitted that considering the date of report, the IDCT could not have been covered under the original scope of work and the contents of the report dated 10.7.2015 on Performance Analysis of the NDCT clearly shows that there were design flaws in the initial NDCT. Therefore, the Respondent has submitted that such claims for additional capitalization have no basis and ought to be rejected. The Respondent has further submitted that the EPC contract document for the supply of civil works clearly provides that wet evaporative cooling towers of the natural draft type shall be provided and the proposed towers shall be of proven design with a design life equal to that of the main plant offered for 25 years. It has further stated that the technical specifications of civil works also specifically provide for anticorrosive measure and provide that the contractor should bring out a suitable chemical feed system for control of scaling and corrosion. The Respondent has further submitted that, considering that an amount of Rs. 41685 lakh had already been spent towards capital cost for the Cooling water system which includes Cooling towers and Cooling water pumps, no further expenses may be allowed. The



Respondent has stated that EPC contractor is responsible for setting up the cooling tower and the Petitioner is responsible for its maintenance and they are responsible for deterioration of the asset over such a short time. It has added that the installation of additional IDCT within 9 years, shows that the original work was not carried out as per the necessary standards, and the Karnataka ESCOMs and the consumers ought not to be burdened for its restoration. In response, the Petitioner has submitted that the Respondent cannot possibly expect the initially installed Plant infrastructure to remain in pristine condition even after years of operation since the life of the existing NDCT and chemical feed system has not deteriorated and rather the system is operating at full constructed capacity even now. It has also stated that IDCT is not proposed because of the deteriorating life of the existing system, but due to variation in the relative humidity which might be due to change in the local weather pattern.

177. The matter has been considered. It is noticed that the Petitioner has proposed to construct Induced draft cooling tower in place of the existing Natural draft cooling tower. This work is not covered under original scope of work and is also not covered under any of the sub clauses of Regulation 25(1) of the 2019 Tariff Regulations. The replacement proposed by the Petitioner is based on the recommendation/report of M/s GEA. However, we note that the report filed vide amended petition dated 2.7.2021, is neither stamped nor has been signed by any authority.

178. Article 4.1 (a) and (d) of the PPA dated 26.12.2005 provides that:

“(a)Capital Expenditure of the Facility shall be the actual costs and expenses incurred by the Seller as on the Commercial Operation Date in connection with the development, design, engineering, acquisition, construction, financing, forex adjustment, testing, start-up and completion of the Facility as approved by the Commission including any taxes, duties made by the seller.

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(d) Any additional Capital expenditure not included in (a) above, shall be incurred by the Seller only with the prior consent of the Principal Buyer in writing. The Seller shall provide the justification and the benefit in incurring the capital expenditure and may also propose improvement to the operating parameters used for calculating tariff under this Agreement and the Agreement shall be changed to reflect this improvement. This is subjected to the approval of the Commission.”

179. Article 4.1(d) of the PPA covers the expenditures beyond the COD (in this case the COD is 19.8.2012). There is no such prior consent from the Respondents regarding the capital expenditure to be made by the Petitioner. Further, Article 6.12 of the PPA dated 26.12.2005, provides that:

*“(a) Any circumstance, including a change in law, which
(iv) materially increases or decreases the cost of the Seller in connection with financing, ownership, operation or maintenance of the Unit;
(v) materially increase or decreases the revenue of the Seller in connection with financing, ownership, operation or maintenance of the Unit;
(vi) requires the Seller to incur material Additional Capital Expenditure
Then the Seller shall
(D) determine the amount of such increase or decrease in cost or revenue or the amount of such Additional Capital Expenditure;
(E) submit to the Principal Buyers a certificate setting forth in reasonable detail the basis and the calculations of such increase or decrease in cost or revenue and/or the amount of such Capital Expenditure (which shall be subject to verification and acceptance by the Principal Buyers and is agreed to be material); and
(F) subject to the approval of the additional Capital Expenditure by the Principal Buyers and the Commission, calculate equitable adjustments to the Recoverable Capacity (fixed) charges and the Energy charges to reflect such increase or decrease in cost or revenue and/or such Capital Expenditure with the intent that the financial position of the Seller shall remain unaffected by such circumstance.*

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180. Accordingly, the Petitioner pursuant to incurring the additional capital expenditure is required to provide a certificate to the principal buyers with reasonable details of the expenditure to be incurred. No such certificate with details has been provided by the Petitioner in terms of the said article 6.12(a)(B). Further, the expenditure incurred/proposed for construction of IDCT do not fall within the provisions of Regulation 25(1) or Regulation 26(1) of the 2019 Tariff Regulations. In our view, the claim of the Petitioner is in the nature of R&M of the plant, which is only permissible after 25 years of useful life of the plant. In view of the above, we are not inclined to



allow the additional capital expenditure of Rs. 4450.00 lakh towards as claimed by the Petitioner cannot be allowed to the generating station. For these reasons, we are also not inclined to allow the said claim in exercise of the powers to relax the provisions of the regulations or in exercise of the regulatory powers. Accordingly, the expenditure claimed under this head is not allowed.

(c) Auto DV Fire Protection System in Coal Handling Plant

181. The Petitioner has claimed additional capital expenditure of Rs.145.00 lakh in 2021-22, towards Auto DV (Deluge valve) fire protection system in Coal Handling Plant under Regulation 25(1) of 2019 Tariffs or Regulation 26 (1) of the 2019 Tariff Regulation, read with Regulation 76 (Power to Relax) and Regulation 77 (Power to Remove Difficulty), along with the powers under the Electricity Act, 2003. In justification for the same, the Petitioner has submitted that the unloaded coal from railway wagon is conveyed to stock yard or is directly fed to the bunkers of both the units as per the requirement, by means of 24 closed conveyor system installed in Coal Handling Plant (CHP) and the 18 conveyors are incorporated with Auto operated Deluge Valves (DV) with Linear Heating Sensing (LHS) cable type fire protection system whereas in remaining 6 conveyors manual type DV fire protection system are installed. The Petitioner has also stated that the fire protection system is the most critical part of CHP as it handles the flammable substance and therefore, in order to further strengthen the fire protection system, it is proposed to install Auto operated DV type fire protection system (Infrared detection and LHS cable type) for remaining 6 conveyors.

182. The Respondent PCKL, has submitted that as per contract all the 24 conveyers were to be executed in a similar way with a comprehensive fire detection and alarm



system and fire protection system for the whole generating station and the same would have ensured a high degree of protection for the plant. It has pointed out that since it was explicitly stated that the fire protection system for all the conveyors would be “automatically activated by infrared cameras” therefore, the entire external coal handling plant was executed at a cost of Rs. 410 crore. The Respondent has stated that it was the responsibility of the Petitioner and the EPC contractor, i.e., Lanco Infrastructure Limited, to provide the firefighting system as per contractual specifications, the international standards specified therein, and in light of the existing local conditions and the Respondents and their consumers cannot be expected to bear the burden of the Petitioner and the EPC contractor’s failure to fulfil their contractual obligations, especially since the same had already been considered in the project cost. The Respondent has stated that since the Petitioner was responsible under the EPC contract to ensure the execution of the work in line with the relevant standards for the life time of the project, the cost cannot be considered under additional capitalization.

183. The matter has been considered. It is noticed that in order to strengthen the fire protection system, the Petitioner has proposed to install Auto Operated DV type fire protection system (Infrared detection and LHS cable type) for the remaining 6 conveyors out of 24 conveyors. The Petitioner has also submitted that 18 conveyors are incorporated with Auto operated Deluge Valves (DV) fire protection system whereas, in the remaining 6 conveyors manual type DV fire protection system are installed. The Petitioner has thus proposed to replace the manual type DV fire protection system for the remaining 6 conveyors with Auto operated DV type fire protection system. However, it is not clear, as to whether the said work proposed by the Petitioner, is based on any report or direction of the authorities for carrying out



such expenditure. The Petitioner has also not furnished the details of expenditure carried out for Auto operated Deluge Valves (DV) for the 18 conveyors. In this background, the claim of the Petitioner is not allowed. However, the Petitioner is granted liberty to claim the said expenditure at the time of truing up of tariff, by submitting the details regarding the notification, advice by any statutory body and the requirement for such modification along with the clarification as to whether the said expenditure fall within the original scope of work or not and the same shall be considered in accordance with law.

(d) Installation of standby ACW pipe line with corrocoat from ACWPH upto Unit-1 & Unit-2 PHE

184. The Petitioner has claimed additional capital expenditure of Rs. 649.00 lakh in 2021-22, towards Installation of standby ACW pipeline under Regulation 25(1) of the 2019 Tariff Regulations or Regulation 26 (1) of the 2019 Tariff Regulations, read with Regulation 76 (Power to Relax) and Regulation 77 (Power to Remove Difficulty) of the 2019 Tariff Regulations, along with the powers under the Electricity Act, 2003. In justification for the same, the Petitioner has submitted that it is facing frequent leakages in ACW line due to peeling of PU coating from the internal surface resulting in pipe damages and generation loss and being a critical system, station shutdown is required for attending such leakages. It has also stated that since the reliability of ACW system is very much required for smooth operation of plant and proper cooling of Turbine, Generator, and Auxiliary equipment, the Petitioner proposes to lay new line from ACW pump house strainer outlet to PHE inlet with corrosion coating pipe line which will improve reliability & redundancy and avoid station outages.



185. The Respondent PCKL, has submitted that as per the provisions of EPC contract the Petitioner and the EPC contractor were responsible to install a robust ACW system with options for periodic maintenance however, in light of this failure, the burden of bad workmanship and substandard materials cannot be laid on the Respondents. It has stated that the normal wear and tear is in the usual course of business and should be a part of O&M expenses and the Petitioner may utilize the allowed O&M expenses to ensure proper operation and maintenance of the pipes. In response, the Petitioner has reiterated its contentions and submitted that the Respondent cannot possibly expect the initially installed Plant infrastructure to remain in pristine condition even after years of operation, as there will obviously be wear and tear and therefore, the need to undertake further works will arise.

186. The matter has been considered. It is noticed that due to leakage in the existing ACW pipeline, the Petitioner has proposed to install the standby ACW pipeline. However, the Petitioner has not indicated the fact as to whether periodic maintenance was in purview of EPC contractor. However, considering the fact that ACW system is required for the smooth operation of plant and for proper cooling of Turbine, Generator, and Auxiliary equipment, we are inclined to allow the said expenditure under Regulation 25(2)(a) of the 2019 Tariff Regulations. However, as the existing ACW pump is being replaced and the Petitioner has not furnished any value of decapitalization, assumed deletion has been carried out for the said expenditure.

(e) Impressed current cathodic protection system (ICCP) for Sea Water/CW supply & return line.

187. The Petitioner has claimed additional capital expenditure of Rs. 590.00 lakh in 2021-22, towards Impressed Current Cathodic Protection system (ICCP) for Sea



Water/CW supply & return line under Regulation 25(1) of the 2019 Tariff Regulations read with Regulation 76 (Power to Relax) and Regulation 77 (Power to Remove Difficulty) of the 2019 Tariff Regulations along with the powers under the Electricity Act, 2003. In justification for the same, the Petitioner has submitted that buried, Sea water pipe lines and cooling water pipe lines which carry the sea water are more prone to corrosion and presently, there is no corrosion protection system for sea water intake and cooling water/auxiliary cooling water pipe lines. The Petitioner has also submitted that as per NACE recommendations, all buried pipe line should be with cathodic protection hence it has proposed to protect the pipe lines by installing the cathodic protection system.

188. The Respondent PCKL, has submitted that the said claim is without basis as the NACE recommendations were first approved in 1988, i.e., almost fifteen years prior to the COD of the units and hence the firm was responsible to follow the recommendations while entering into EPC contract with M/s LITL in 2006. Therefore, the Petitioner ought to have implemented ICCP at the time of constructing the power plant. The Respondent has stated that since the Petitioner has failed to do so it may be directed to claim the expenses for ICCP from the OEM and LITL. In response, the Petitioner has submitted the NACE recommendation for installing ICCP and the relevant standard IS 8062 and pointed out that the Respondent has no basis to negate the same.

189. The matter has been considered. The Petitioner has proposed the said expenditure towards Impressed current cathodic protection system for sea water intake and cooling water/auxiliary cooling water pipe lines for corrosion protection. However, the additional capital expenditure envisaged by the Petitioner is in the nature



of Renovation and Modernization work, which the generating station is only eligible after 25 years of useful life. The Petitioner in justification has referred to the NACE recommendation that all buried pipe line should be with cathodic protection. The NACE recommendation was prevalent prior to inception and Investment approval of the generating station. Moreover, the initial few lines of the NACE document referred by the Petitioner also indicates the following:

“..... Its acceptance does not in any respect preclude anyone, whether he or she has adopted the standard or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not in conformance with this standard. Nothing contained in this NACE International standard is to be construed as granting any right, by implication or otherwise, to manufacture, sell, or use in connection with any method, apparatus, or product covered by Letters Patent, or as indemnifying or protecting anyone against liability for infringement of Letters Patent. This standard represents minimum requirements and should in no way be interpreted as a restriction on the use of better procedures or materials. Neither is this standard intended to apply in all cases relating to the subject....”

190. The NACE recommendation is not binding for any generating station. The Petitioner cannot rely on the said document and claim additional capital expenditure, which would burden the beneficiaries. The Petitioner has also not taken prior consent from the Respondents in terms of Article 4.1(d) of the PPA dated 26.12.2005. In our view, the claim for the said work does not fall within the scope of Regulation 25(1) or Regulation 26(1) of 2019 Tariff Regulations. For these reasons, we are not inclined to consider the said claim in exercise of the power to relax the regulations or to exercise the regulatory powers to allow the same. Accordingly, the additional capital expenditure of Rs 590.00 lakh claimed is not allowed.

(f) Sea Water Intake System

191. The Petitioner has claimed additional capital expenditure of Rs. 7768.00 lakh in 2021-22, towards Sea water intake system under Regulation 25(1) of the 2019 Tariff Regulations or Regulation 26 (1) of the 2019 Tariff Regulations, read with Regulation



76 (Power to Relax) and Regulation 77 (Power to Remove Difficulty) of the 2019 Tariff Regulations, along with powers under the Electricity Act, 2003. In justification for the same, the Petitioner has submitted that it is experiencing the problem of silt carry over during monsoon period in sea water intake system affecting the plant equipment and operation. It has also stated that the problem of silt ingress has been held to be a valid problem faced by coastal power plants since the availability of water gets reduced compared to minimum requirement of water due to heavy deposition of silt in the sea water intake pipes during monsoon period. Also, based on the study carried out by M/s Indomer in the year 2014 and National Institute of Oceanography (NIO) in 2016, it has been proposed to shift the present intake point to the proposed new location away from current location which now has huge accumulation of silt.

192. The Respondent PCKL, has submitted that the said report of the NIO was on account of the proposed expansion of the power plant from 1200 MW to 2800 MW and the original sea water intake system was designed duly making all necessary studies at an amount of Rs. 343.6 crore. It has also pointed out that the Petitioner in Petition No. 251/GT/2017 had claimed an amount of Rs. 1222 lakh towards changing the location of intake pipe and in the present petition, the Petitioner has claimed an amount of Rs. 7768 lakh. Hence, considering the provisions of the EPC contract and the amount of Rs. 34360 lakh, having been already spent towards the original sea water intake system, the Respondent has stated that the Petitioner was responsible to ascertain the sea water intake reliability at the time of commissioning of the plant as it was part of the original scope of work and the lack of due diligence on the part of the Petitioner at the time of commissioning cannot be the reason for claiming additional capitalization. In response, the Petitioner has submitted that the existing sea water



intake system can supply the required quantity of cooling water to the condenser at all times, however, the quality of sea water in the monsoon period goes beyond the regime of treatment due to high turbidity. Placing reliance on the report of the NIO in June 2016, the Petitioner has stated that it is evident that the sea bed profile has changed from the sandy condition to clay condition since 2009, which is the root cause of huge silt ingress during monsoon period when the sea water gets turbulent.

193. The matter has been considered. It is noticed that the Petitioner has acknowledged that the existing sea water intake system can supply the required quantity of cooling water to the condenser at all times. However, only during the monsoon there is high turbidity and quality of sea water is affected. The generating station is provided with normative O&M expenses to cater such type of problems. The Petitioner has chosen the location of the generating station considering all the environmental conditions, and the same must have been factored in prior to the inception of the generating station. The normal wear and tear to the already existing system is covered under normative O&M cost allowed to the generating station. In our view, the beneficiaries cannot be burdened with such cost, in respect of a system which is already available and is working efficiently. Accordingly, the claim of the Petitioner on this count is not allowed.

(g) Laying of alternate source of electric supply for ECHP

194. The Petitioner has claimed additional capital expenditure of Rs. 254.00 lakh in 2021-22 towards Laying of alternate source of electric supply for ECHP under Regulation 25(1) of the 2019 Tariff Regulation or Regulation 26 (1) of the 2019 Tariff Regulations, read with Regulation 76 (Power to Relax) and Regulation 77 (Power to Remove Difficulty) of the 2019 Tariff Regulations, along with the powers under the



Electricity Act, 2003. In justification for the same, the Petitioner has submitted that at present, ECHP at New Mangalore Port Trust (NMPT) is being operated by only one power source, i.e. fed from 110/33 kV Bykampady substation and any interruption/failure in the power transmission from Bykampady substation to UPCL 33kV Switchyard stops the entire ECHP operations i.e. coal unloading etc. which may cause generation loss. Considering the same the Petitioner has stated that it is essential to have a standby power supply arrangement for the NMPT CHP.

195. The Respondent PCKL, has submitted that since power supply is already being provided to the Petitioner's ECHP through UG cable line, additional expenditure towards alternate power supply cannot be allowed since considering the total coal requirement of plant of 3.5 MT, monthly the firm gets 3 to 4 shipments, each shipment requires 3 days for unloading the coal handling equipment will be operative only for 9 to 12 days in the month. The Respondent has also stated that the contention of the Petitioner that interruption in coal unloading and transportation will result in generation loss may be rejected, since the Petitioner is responsible to have coal stock for 2 months generation and in any case, the additional capitalization for an additional power source is not permissible under the Tariff Regulations. In response, the Petitioner has submitted that since interruption in coal unloading and transportation to power generating station may cause generation loss or complete shutdown of the unit, which subsequently affects the power distribution system, it is essential to have a stand-by power supply arrangement for the NMPT CHP. The Petitioner has also stated that the Respondent PCKL, has no factual or legal basis to negate the above claim of the Petitioner.



196. The matter has been considered. The Petitioner has claimed the said expenditure for alternate source of electric supply for external coal handling plant with a concern that any interruption or failure in the existing power transmission may stop the entire ECHP operations i.e. coal unloading etc. which may cause generation loss. The generating station is running since last 12 years and has not gone through any such events till date. Mere concern for future mis-happenings cannot be a reason for claiming additional capital expenditure, thereby burdening the cost on the beneficiaries. However, if the Petitioner is so apprehensive with regard to any mishaps in future, the same could have been installed by the Petitioner from the normative O&M expenses allowed to the generating station. The unloading of coal is not a continuous phenomenon. The generating station is based on imported coal and the unloading of coal may consist of around 10 to 15 days. Moreover, all the coal based thermal generating stations are provided with 20 days of coal stock for non-pit head stations. In view of the above, we are not inclined to allow the additional capital expenditure claimed by the Petitioner on this count.

(h) Rain Water Harvesting

197. The Petitioner has claimed additional capital expenditure of Rs 333.00 lakh in 2020-21, towards the work of rain water harvesting under Regulation 26(1)(a) read with Regulation 76 (Power to relax) and Regulation 77 (Power to Remove Difficulty) of the 2019 Tariff Regulations, along with the Regulatory power under the Electricity Act, 2003. In justification for the same, the Petitioner has submitted that every year during the monsoon, the sea water turbidity level increases which carry silt, when used in plant operation, leads to equipment failure and plant shutdown. Since, Udupi district receives an average annual rainfall of 4000 mm, the Petitioner has stated that the



construction of rain water harvesting pond is considered to cater to the partial water requirement of the plant in compliance to Environmental clearance conditions dated 1.9.2011.

198. The Respondent PCKL, has submitted that the project was executed as coastal power project with sea water and therefore the Petitioner installed a sea water intake system, which has already been accounted for in the capital cost of the project. As per the Respondent this sea water intake system ought to be functional and sufficient at all times. Hence the Respondent has stated that the proposal for executing rain water harvesting system citing the reason that every year during monsoon the water at the shore is found turbid, cannot be used for plant operation, and rain water may be used instead does not merit consideration. The Respondent has further submitted that the Petitioner was always under an obligation to set up a rain water harvesting system and cannot now seek capitalization of the work after cut-off date. The Respondent has contended that the Petitioner has now proposed additional rainwater harvesting pond with a capacity of 2,00,000 m³ for the future however, the phrase “for the future” is too broad and lacking in specificity and does not state whether the Petitioner has proposed additional rainwater harvesting pond during the period 2019-24 or later therefore, the claim should be disallowed. In response, the Petitioner has submitted that the Respondent PCKL, has stated that the existing sea water intake system can supply the required cooling water to the condenser at all times. While the Petitioner acknowledges this aspect from quantitative perspective, however, the Petitioner reiterates that the quality of sea water in the monsoon period goes beyond the regime of treatment due to high turbidity and the turbidity level of sea water during the monsoon is not uniform every year and cannot be anticipated. To comply with the



Environment clearance clause six of specific condition the Petitioner has stated that it had already constructed two nos. of rain water harvesting ponds for which no additional capitalization claim has been made. However, this particular claim is regarding the third rainwater harvesting pond constructed to meet water requirements during monsoon siltation period as described above, so that at least one unit can remain in operation.

199. The matter has been considered. It is noted that the problem faced by the Petitioner is only during the monsoon season when the sea water turbidity level increases which carries silt and leads to equipment failure and plant shutdown. However, during monsoon also there is no hindrance as far as quantity of supply of sea water is concerned. The problem is that due to high turbidity the water is not usable for plant operation and the Petitioner has also installed a sea water intake system and had already constructed two nos. of rain water harvesting ponds. Further, the problem of high turbidity during monsoon season must have been factored while taking investment approval of the generating station, as the rainfall index of the site of any generating station is taken into consideration while planning a DPR for the plant in that particular area. The Petitioner is already having desalination plant and the cost of desalination plant apart from normative O&M expenses is being allowed to the generating station. The Petitioner in justification has submitted that the construction of rain water harvesting pond is considered to cater to the partial water requirement of the plant in compliance to Environmental clearance conditions. The environmental clearance condition referred by the Petitioner is a letter issued by MoEF on 1.9.2011, which was a reply to the amendment requested by the Petitioner towards environmental clearance which was accorded by the Ministry on 20.3.1997. The



specific condition of the amendment dated 1.9.2011 stipulates that a well-designed rain water harvesting system shall be put in place, further the general condition of the amendment of Environmental clearance provides that well designed rain water harvesting system shall be constructed. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within three months from the date of issue of clearance. The Petitioner must have accorded the Environmental clearance prior to the COD of the generating station (i.e. 19.8.2012) as it is a mandatory condition. The Petitioner in its submission has also pointed out that it has already constructed two ponds of rain water harvesting. The Petitioner in lieu of the amendment of Environmental clearance dated 1.9.2011 is claiming additional rain water harvesting pond. In view of above, the additional expenditure of Rs 333.00 lakh towards the work of rain water harvesting is not allowed to the generating station under Regulation 26(1)(a) of the 2019 Tariff Regulations. Hence the claim of the Petitioner on this count is not allowed.

(i) Upgradation of North & South offshore return line

200. The Petitioner has claimed additional capital expenditure of Rs. 7300.00 lakh in 2021-22, towards Upgradation of North & South offshore line under Regulation 25(1) of the 2019 Tariff Regulations or Regulation 26 (1) of the 2019 Tariff Regulations, read with Regulation 76 (Power to Relax) and Regulation 77 (Power to Remove Difficulty) of the 2019 Tariff Regulations, along with the powers under the Electricity Act, 2003. In justification for the same, the Petitioner has submitted that the existing North & South side Sea water outfall offshore Glass Reinforced Plastics (GRP) pipelines has got weakened and condition of these pipelines have been deteriorated. The Petitioner has further submitted that GRP pipeline was installed in the year 2010 and has almost



reached end of its life after 11 years of operation due to frequent sea erosion in tidal zone, cyclones & storm and the said pipe has also eroded due to ingress of high abrasive silt and high turbidity level. Hence, in order to protect the ecosystem and for reliable plant operation, upgradation of system is essential and therefore the existing South side GRP pipeline is being upgraded to High Density Polyethylene Pipes (HDPE) line for better reliability.

201. The Respondent PCKL, has submitted that as per the EPC contract, all equipment installed in the project was to be designed to serve the lifetime of the project however, the Petitioner itself has estimated that the original system shall deteriorate by 2020-21, i.e., within 8 years of its commissioning. The Respondent has also stated that this is a clear and unambiguous evidence that the original system is in adherence with the contractual requirements and that the deterioration may have been caused by substandard materials/workmanship. The Respondent has further submitted that the Petitioner had also claimed an expenditure of Rs. 3230.00 lakh, towards the Replacement of GRP pipes with MS pipeline for Sea water return pipe in the petition, for the period 2014-19 and now the Petitioner is further claiming an amount of Rs. 7300 lakh towards upgrading the North and South offshore return line and therefore, no additional costs for the upgradation of North and South offshore return line should be allowed. In response, the Petitioner has submitted that to maintain the cycle of concentration in the cooling tower forebay, a part of sea water & desalination plant RO reject water is pumped back to sea, through single return pipe, this return pipe line is further bifurcated into two outfall pipelines (North & south) from seawater pump house to sea and water is discharged into the sea through diffuser arrangement. The Petitioner has further submitted that in 2014, GRP single return line which was an



onshore line was replaced with MS pipeline and its line length is approximately 5.5 Km, whereas the GRP Sea Water North Outfall (Return) Line and Sea Water South Outfall (Return Line) which is proposed to be replaced with HDPE Line in 2022 at a cost of Rs. 7300 lakh. It has stated that the same is an off-shore under sea pipeline of 1.33 KM (0.67 KM each) and the cost of replacement of single Return line from the Plant to Sea Water Pump house, which was executed in 2014, is not comparable with Replacement of Sea Water Outfall line from the Sea Water pump house to within the Sea (Under Sea Pipe line) as one is an On-Shore Line and the other two are Off shore Under Sea Pipe lines.

202. The matter has been considered. The Petitioner had claimed Rs. 3230.52 lakh in 2014-15, for replacement of GRP pipeline with MS sea water return pipe. The Petitioner had submitted that it had made a total investment of Rs. 5180.52 lakh (Rs. 1950 lakh first on installation of GRP Pipeline and then Rs. 3230.52 lakh on MS Sea Water Return Pipeline). Accordingly, the Commission had decapitalized the amount of Rs. 1950 lakh and allowed the expenditure of Rs. 1280.52 lakh for the said work. The Petitioner has further claimed Rs. 7300.00 lakh in 2021-22 stating that in 2014 the GRP single return line, which was an onshore line, was replaced with MS pipeline, whereas, the GRP Sea Water North Outfall (Return) Line and Sea Water South Outfall (Return Line) is proposed to be replaced with HDPE Line in 2022, at a cost of Rs. 7300 lakh is an off-shore under sea pipeline. The work of upgradation of north and south return line is in nature of replacement. The Petitioner has already carried out the replacement of GRP pipeline with MS sea water return pipe line in 2014-15, which was an onshore line, whereas in 2021-22 the GRP Sea Water North Outfall (Return) Line and Sea Water South Outfall (Return Line) is proposed to be replaced with HDPE Line



at a cost of Rs. 7300 lakh as an off-shore under sea pipeline. In view of this, the additional expenditure for the replacement claimed by the Petitioner is allowed. However, the Petitioner is directed to furnish the original contract awarded for the work of GRP pipeline with complete details of scope of work, schedule completion date and schedule completion cost along with actual completion date and actual completion cost at the time of truing up of tariff. The Petitioner shall also indicate as to whether the said work is covered under original scope of work or not, along with details of the total expenditure actually envisaged in the original investment approval for the work of GRP pipeline clearly bifurcating the onshore and offshore pipeline, total expenditure incurred from zero date till date. Since the Petitioner has not furnished the details of decapitalization amount pertaining to the said claim, the same has been considered under assumed deletion.

2023-24

Cathodic Protection System for NMPT RCC Jetty Structure

203. The Petitioner has claimed additional capital expenditure of Rs. 960.00 lakh in 2023-24, towards Cathodic Protection System for NMPT RCC Jetty Structure under Regulation 25(1) of the 2019 Tariff Regulation or Regulation 26 (1) of the 2019 Tariff Regulation, read with Regulation 76 (Power to Relax) and Regulation 77 (Power to Remove Difficulty) of the 2019 Tariff Regulations, along with powers under the Electricity Act, 2003. In justification for the same, the Petitioner has submitted that the jetty is located on the western coast of the Arabian Sea near Mangalore which is a very severe corrosion prone zone and New Mangalore Port Trust (NMPT) RCC jetty is directly exposed to severe corrosive environment of sea water with high chloride and salt content. The Petitioner has further submitted that during the recent inspection



of the jetty, deterioration was observed at the bottom side of the jetty in RCC beams, slabs, and diaphragm wall. Accordingly, the Petitioner has submitted that it is planning to renovate this corrosion related deteriorations on the jetty structure along with the portion of the diaphragm wall above and underneath the water level. Also, for the firm and long-term solution, the Petitioner has proposed to install Cathodic Protection (CP) system for the RCC jetty structures to protect against corrosion related deterioration.

204. The Respondent PCKL, has submitted that as per the provisions of the EPC contract the complete coal Jetty was executed on a turnkey basis with expenditure of Rs. 347.5 crore incurred towards the external coal handling plant and Rs. 63.01 crore incurred towards additional cost due to increase in capacity by 185 MW towards coal handling equipment. Therefore, it has submitted that the work was executed on a turnkey basis with a total expenditure of Rs. 410.51 crore for External Coal Handling System with all the necessary infrastructure which should have been included in the system. It has pointed out that as per the EPC contract, the Petitioner and the contractor were responsible for providing a Jetty which would serve the life of the project despite the corrosivity of the atmosphere. The Respondent has further stated that Article 15 of the contract between the Petitioner and M/s Lanco Infratech Limited dated 24.12.2006 provided that the contractor shall adopt all necessary environmental protection measures and safety measures and maintain highest environmental protection and safety standards in their designs and during execution. Thus, the statement of Respondent is a clear indication that the quality of work was substandard and it failed to meet the contractual requirements and therefore, the Petitioner must claim the additional expenditure from the EPC contractor by either encashing the Bank Guarantee obtained in this regard or through any other legal remedies available to it



and the Respondents and their customers should not be burdened with the costs directly resulting from the EPC contractor's failure to fulfil its contractual obligations under the EPC Contract. In response, the Petitioner has submitted that the Respondent PCKL, has wrongly alleged that the quality of work undertaken by the Petitioner with respect to NMPT RCC Jetty structure was substandard and it failed to meet the contractual requirements. The Petitioner has also stated that the Respondent cannot expect that the initially installed Plant infrastructure to remain in pristine condition even after years of operation since there will obviously be wear and tear, even the technology in place at the time of construction of the Plant will change. The Petitioner has further stated that the Plant is located in the coastal region and therefore corrosion of the pipes is a natural phenomenon and therefore, the need to undertake further works arises and cathodic protection system is the only available method for corrosion protection which can withstand and protect the structures to cover the balance life of the plant.

205. The matter has been considered. It is noticed that the Petitioner has proposed to renovate the corrosion related deteriorations on the jetty structure along with the portion of the diaphragm wall. It is also noticed that the additional capital expenditure towards Cathodic Protection System for NMPT RCC Jetty Structure is not covered under original scope of work. Though continuous maintenance work to be carried out in all the equipment's installed in the generating station, is not denied, the Petitioner in our view, knew beforehand that the generating station is to be located in the coastal region and the EPC contract also provides all the precautionary measures to be taken while constructing the generating station. However, for such type of work where annual wear and tear is to be carried out, the regulation provides for normative O&M expenses



to the generating station. Further, additional O&M expenses are also provided to the generating station for its additional features of desalination plant. In view of the above, the additional capital expenditure claimed by the Petitioner on this count is not allowed.

206. As regards exercise of power to relax, it is clear from the judgment of the Tribunal in RGPPL case (supra) that the Central Commission has discretionary power to relax norms based on the facts and circumstances and that there has to be a sufficient & reasonable justification and such a case has to be one of those exceptions to the general rule.

207. The COD of the generating station is 19.8.2012 and the generating station after 9 years of useful life has proposed to replace the existing system. All the equipment's and auxiliaries for the generating station installed are to cater the requirement up to 25 years of useful life. Most of the expenditures claimed by the Petitioner are based on the report of the technical expert, which is not duly signed by the expert. Moreover, there is no consent of any of the Respondents as per Article 4.1(d) of the PPA dated 26.12.2005. Further, the Petitioner prior to taking over the generating station from Nagarjuna Power Corporation Limited should have made sure that, the plant caters to the requirement of all the general conditions of safe and smooth functioning and should have negotiated the cost accordingly. Considering the fact that the appointment of independent engineer and consequent claimed cost based on its report is not covered under any of the provisions of the Tariff Regulations, the expenditure claimed cannot be considered in exercise of the powers to relax the provisions of the Regulations. Also, the power to remove difficulty is to be exercised only when there is difficulty in effecting the Regulations and not when difficulty is caused due to



application of the Regulations. In these circumstances, the claim of the Petitioner is not allowed.

Assumed Deletion

208. As per the consistent methodology adopted by the Commission, the expenditure on replacement of assets, if found justified, is allowed for the purpose of tariff provided that the capitalization of the said asset, is followed by the de-capitalization of the gross value of the old asset. However, in certain cases, where the de-capitalization is proposed to be affected during the future year of capitalization of the new asset, the de-capitalization of the old asset for the purpose of tariff is shifted to the very same year in which the capitalization of the new asset is allowed. Such de-capitalization which is not a book entry in the year of capitalization is termed as 'Assumed Deletion'. Therefore, for arriving at the gross value of the old asset under consideration, the escalation rate of 5% per annum from the COD has been considered till the year during which additional capital expenditure is claimed against the replacement of the same. The amount claimed for the additional capital expenditure against the asset is multiplied by the derived ratio from above values i.e., value in year of COD divided by value in the year of replacement being claimed. Accordingly, based on above methodology, the assumed deletions considered for these assets/works and consequently net additional capital expenditure allowed for 2021-22 is as under:

Details	Additions claimed for new asset on replacement	De-capitalization value of old asset Claimed	Assumed Deletions for old asset Allowed	Net Additional Capital Expenditure allowed
Installation of standby ACW pipe line with corrocoat from ACWPH upto U#1 & U#2 PHE	649.00	0.00	418.35	230.65



upgradation of North & South offshore line	7300.00	0.00	4705.65	2594.35
Total	7949.00	0.00	5124.00	2825.00

209. Based on the above, the projected net additional capital expenditure allowed, considering the value of assumed deletion, for the period 2019-24, is as under:

<i>(Rs. in lakh)</i>						
Sl. No.		2019-20	2020-21	2021-22	2022-23	2023-24
1.	Ventilation System in Track Hopper	0.00	0.00	0.00	0.00	0.00
2.	400 kV Line reactor - 2 Nos	0.00	2872.34	0.00	0.00	0.00
3.	Staff Colony	0.00	0.00	0.00	0.00	0.00
4.	CCTV Surveillance of Plant	0.00	0.00	288.00	0.00	0.00
5.	New IDCT	0.00	0.00	0.00	0.00	0.00
6.	Auto DV Fire Protection System in Coal Handling Plant	0.00	0.00	0.00	0.00	0.00
7.	Installation of standby ACW pipe line with corrocoat from ACWPH upto U#1 & U#2 PHE	0.00	0.00	230.65	0.00	0.00
8.	Impressed current cathodic protection system (ICCP) for Sea Water/CW supply & return line	0.00	0.00	0.00	0.00	0.00
9.	Sea Water Intake System	0.00	0.00	0.00	0.00	0.00
10.	Laying of alternate source of electric supply for ECHP	0.00	0.00	0.00	0.00	0.00
11.	Rain Water Harvesting	0.00	0.00	0.00	0.00	0.00
12.	Upgradation of North & South Offshore Return Line	0.00	0.00	2594.35	0.00	0.00
	Total	0.00	2872.34	3113.00	0.00	0.00

Capital cost allowed for the period 2019-24

210. Based on the above, the capital cost allowed for the generating station for the period 2019-24 is as under:

<i>(Rs. in lakh)</i>					
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Capital Cost	550452.00	550452.00	553324.34	556437.34	556437.34
Net Additional capital expenditure allowed during the year/ period	0.00	2872.34	3113.00	0.00	0.00
Closing Capital Cost	550452.00	553324.34	556437.34	556437.34	556437.34



Debt-Equity Ratio

211. Regulation 18 of the 2019 Tariff Regulations provides as under:

“18. Debt-Equity Ratio: (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. 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, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization 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 1.4.2019, debt:equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

Provided that in case of a generating station or a transmission system including communication, system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30% shall not be taken into account for tariff computation;

Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 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.”



212. In terms of the above regulations, the debt equity ratio, is considered as 70:30, for the purpose of additional capitalization. De-capitalization of assets has been deducted from the corresponding loan as well as equity, taking into consideration the debt equity ratio, applied in the year in which it was capitalized. Accordingly, the details of debt-equity ratio in respect of the generating station as on 1.4.2019 and as on 31.3.2024 are as under:

<i>(Rs. in lakh)</i>								
	As on 1.4.2019		Additional Capitalization		De-capitalization		As on 31.3.2024	
	Amount	(in %)	Amount	(in %)	Amount	(in %)	Amount	(in %)
Debt	415008.16	75.39	7776.54	70.00	3866.98	75.47	418917.72	75.29
Equity	135443.84	24.61	3332.80	30.00	1257.02	24.53	137519.62	24.71
Total	550452.00	100.00	11109.34	100.00	5124.00	100.00	556437.34	100.00

Return on Equity

213. Regulations 30 and 31 of the 2019 tariff Regulations provide as under:

“30. Return on Equity

(1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, 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 return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

Provided further that:

i. In case of a new project, the rate of return on equity shall be reduced by 1.00% 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 of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;

ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

iii. in case of a thermal generating station, with effect from 1.4.2020:



- a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
- b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.

31. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations 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 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 paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded 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 a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess: Rate of return on equity = $15.50 / (1 - 0.2155) = 19.758\%$

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

(a) Estimated Gross Income from generation or transmission business for 2019-20 is Rs. 1,000 Crore;

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

(c) Effective Tax Rate for the year 2019-20 = Rs. 240 Crore / Rs. 1000 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 2019-24 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 customers, as the case may be, on year to year basis."



214. The Return on Equity (ROE) for the existing asset base and the additional capital expenditure allowed, in this order, for asset/works within the original scope of work, has been calculated by grossing up the base ROE at MAT rate of 17.472% as submitted by the Petitioner. Further, based on the additional capital expenditure which are beyond the original scope and allowed in this order, ROE has been calculated considering the weighted average rate of interest claimed by the Petitioner. Accordingly, ROE has been worked out and allowed as under:

ROE at Normal Rate

	(Rs. in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity (A)	135443.84	135443.84	135443.84	136571.51	136571.51
Total addition due to Capitalization (B)	0.00	0.00	1127.68	0.00	0.00
Closing Equity (C) =(A)+(B)	135443.84	135443.84	136571.51	136571.51	136571.51
Average Equity (D)=(A+C)/2	135443.84	135443.84	136007.68	136571.51	136571.51
Base rate (%) (E)	15.500%	15.500%	15.500%	15.500%	15.500%
Effective Tax rate (%) (F)	17.472%	17.472%	17.472%	17.472%	17.472%
Effective ROE rate (%) (G) =E/(1-F)	18.782%	18.782%	18.782%	18.782%	18.782%
Return on Equity within the original scope of work (H)=(D)*(G)	25439.06	25439.06	25544.96	25650.86	25650.86
Return on Equity at WAROI					
Opening Equity (A)	0.00	0.00	861.70	948.10	948.10
Addition due to Capitalization beyond scope of work (B)	0.00	861.70	86.40	0.00	0.00
Closing Equity (C)=(A)+(B)	0.00	861.70	948.10	948.10	948.10
Average Equity (D)=(A+C)/2	0.00	430.85	904.90	948.10	948.10
Base rate (%) (E)	11.134%	11.126%	11.117%	11.106%	11.100%
Effective Tax rate (%) (F)	17.472%	17.472%	17.472%	17.472%	17.472%
Effective ROE rate (%) (G) =E/(1-F)	13.492%	13.482%	13.470%	13.457%	13.450%
Return on Equity within the original scope of work (H)=(D)*(G)	0.00	58.09	121.89	127.59	127.52

Total ROE allowed

	(Rs. in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Return on Equity at Normal Rate (A)	25439.06	25439.06	25544.96	25650.86	25650.86
Return on Equity at WAROI (B)	0.00	58.09	121.89	127.59	127.52
Total Return on Equity allowed (C= A+B)	25439.06	25497.15	25666.85	25778.45	25778.38



Interest on Loan

215. Regulation 32 of the 2019 Tariff Regulations provides as under:

“32. Interest on loan capital:

(1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to the date of de-capitalisation of such asset.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered; Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest

(7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.”

216. Interest on Loan has been computed as under:

- i) The gross normative loan amounting to Rs.415008.16 lakh, as on 31.3.2019, as considered in the truing up section of this order has been considered as opening gross normative loan as on 1.4.2019.
- ii) Cumulative repayment amounting to Rs.215483.67 lakh, as on 31.3.2019, as considered in truing up section of this order has been considered as on 1.4.2019.
- iii) Accordingly, the net normative opening loan as on 1.4.2019 works out to Rs.199524.49 lakh.
- iv) Addition to normative loan on account of additional capital expenditure approved above have been considered.
- v) The Petitioner has claimed interest on loan considering weighted average rate of interest (WAROI) of 11.134% in 2019-20, 11.126% in



2020-21, 11.117% in 2021-22, 11.106% in 2022-23 and 11.100% in 2023-24. The same have been considered for tariff subject to submission of documentary evidences in respect of rate of interest applied on loan during the period 2019-24, at the time of truing up of tariff.

- vi) Depreciation allowed has been considered as repayment of normative loan during the respective year of the period 2019-24. Further, repayments have been adjusted for de-capitalization of assets considered for the purpose of tariff.

217. Interest on loan has been worked out as under:

	(Rs. in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Gross opening loan (A)	415008.16	415008.16	417018.80	418917.72	418917.72
Cumulative repayment of loan upto previous year (B)	215483.67	244496.26	273584.54	300181.36	329509.41
Net Loan Opening (C=A-B)	199524.49	170511.91	143434.27	118736.37	89408.31
Addition due to additional capital expenditure (D)	0.00	2010.64	1898.92	0.00	0.00
Repayment of loan during the year (E)	29012.59	29088.28	29246.02	29328.05	29328.05
Less: Repayment adjustment on account of de-capitalization (F)	0.00	0.00	2649.20	0.00	0.00
Net Repayment of loan during the year (G=E-F)	29012.59	29088.28	26596.82	29328.05	29328.05
Net Loan Closing (H = C+D-G)	170511.91	143434.27	118736.37	89408.31	60080.26
Average Loan (I= (C+H)/2)	185018.20	156973.09	131085.32	104072.34	74744.29
Weighted Average Rate of Interest of loan (J)	11.134%	11.126%	11.117%	11.106%	11.100%
Interest on Loan (K= I*J)	20600.46	17465.27	14572.66	11558.12	8296.65

Depreciation

218. Regulation 33 of the 2019 Tariff Regulations provides as under:

“33. Depreciation:

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.



(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:

Provided also that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or the extended life.

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2019 from the gross depreciable value of the assets.

(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.

(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services."

219. The COD of the generating station is 30.9.2011. As the generating station has not completed 12 years of operation, as on 1.4.2019, the rate of depreciation for 2018-19 i.e. 5.271% has been considered for the period 2019-24, subject to submission of



Form-11 at the time of truing-up of tariff. Accordingly, depreciation has been computed as under:

	(Rs. in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross block (A)	550452.00	550452.00	553324.34	556437.34	556437.34
Net Additional capital expenditure during 2019-24 (B)	0.00	2872.34	3113.00	0.00	0.00
Closing gross block (C=A+B)	550452.00	553324.34	556437.34	556437.34	556437.34
Average gross block (D)=(A+C)/2	550452.00	551888.17	554880.84	556437.34	556437.34
Land Value	34.81	34.81	34.81	34.81	34.81
Depreciable Value [E= (D-Land Value) *90%]	495375.47	496668.02	499361.43	500762.28	500762.28
Remaining Depreciable Value at the beginning of the year (F=E- Cum Dep at 'L' at the end of previous year)	279891.80	252171.77	225776.89	200580.92	171252.87
Rate of Depreciation (G)	5.271%	5.271%	5.271%	5.271%	5.271%
Balance useful Life (H)	17.50	16.50	15.50	14.50	13.50
Depreciation (I=D*G)	29012.59	29088.28	29246.02	29328.05	29328.05
Cumulative Depreciation at the end of the year (J=I+ Cum Dep at 'K' at the end of previous year)	244496.26	273584.54	302830.55	329509.41	358837.46
Adjustment on account of decapitalization (K)	0.00	0.00	2649.20	0.00	0.00
Cumulative Depreciation at the end of the year (L=J-K)	244496.26	273584.54	300181.36	329509.41	358837.46

Operation & Maintenance Expenses

220. The Petitioner has claimed the following O&M expenses:

	(Rs. in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses under Reg. 35(1)	24312.00	25164.00	26052.00	26964.00	27912.00
Additional O&M expenses for the period 2019-24					
Additional O&M expenses	1007.89	1109.82	1148.78	1189.11	1230.84
Water Charges	5.30	5.49	5.68	5.88	6.08
Security Expenses	403.41	417.57	432.23	447.40	463.10
Capital Spares	0.00	11164.00	16200.00	1200.00	0.00
Total Additional O&M Expenses	1416.60	12696.88	17786.69	2842.38	1700.03

221. Regulation 35(1)(1) of the 2019 Tariff Regulations provides the following O&M expense norms for coal based generating stations of 600 MW capacity:

(Rs. in lakh/MW)				
2019-20	2020-21	2021-22	2022-23	2023-24
20.26	20.97	21.71	22.47	23.26



222. The Petitioner has claimed the year-wise O&M expenses comprising of normative O&M expenses, additional O&M expenses, water charges, security expenses and capital spares. As the normative O&M expenses claimed by the Petitioner above, is in terms of Regulation 35(1)(1) of the 2019 Tariff Regulations, the same is allowed.

Additional O&M Expenses

223. The break-up of additional O&M expenses claimed by the Petitioner is as under:

	<i>(Rs. in lakh)</i> Projected				
	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses (Jetty & ECHP)	526.27	544.74	563.86	583.65	604.14
FGD	366.63	379.50	392.82	406.61	420.88
Desilting Sea Water intake	114.99	119.03	123.20	127.53	132.00
400 kV line reactors	0.00	66.56	68.90	71.32	73.82
Total	1007.89	1109.82	1148.78	1189.11	1230.84

224. The Petitioner has submitted that the projection of additional O&M expenses has been done based on the actual expenditure incurred in 2018-19 and escalating it at a rate of 3.51% (as considered by the Commission to escalate the normative O&M expenditure for the period 2019-24) except for the normative O&M expenses of Line Reactors which shall be installed in 2020-21. The claim of additional O&M expenses are discussed in the subsequent paragraphs:

O & M Expenses (Jetty & ECHP)

225. The Petitioner has claimed additional O&M expenses of Rs. 2822.65 lakh, towards Jetty and External Coal Handling Plant for the period 2019-24. The Petitioner has submitted that it has incurred the actual additional O&M expenses of Rs 508.42 lakh in 2018-19 towards Jetty and ECHP. The Petitioner has considered the base amount of Rs. 508.42 lakh and has claimed the amount with an annual escalation of



3.51% for the period 2019-24. It is noticed that the thermal generating stations using imported coal are required to incur O&M expenses for operation of Jetty and transfer of coal to Railway wagons from External coal handling plant. This O&M expenses has not been included in the normative O&M expenses under the 2014 Tariff Regulations. In this background, the additional O&M expenses claimed under this head is allowed, subject to revision at actuals, at the time of truing-up of tariff. Accordingly, the Petitioner at the time of truing up of tariff, shall provide all the necessary details pertaining to the additional O&M expenses incurred on actuals towards jetty and ECHP along with breakup of expenses.

Flue gas desulphurization (FGD)

226. The Petitioner has claimed additional O&M expenses for Rs. 1966.45 lakh towards Flue Gas Desulphurization, for the period 2019-24. In justification for the same, the Petitioner has submitted that it has claimed additional O&M expenses of Rs. 354.20 lakh in 2018-19 towards FGD and considering the base amount of Rs. 354.20 lakh escalated the same with an annual escalation of 3.51% for the period 2019-24. It is observed that the claim of additional O&M expenses towards FGD for the period 2014-19 has been discussed in detail in previous paras in truing up section of the tariff period 2014-19 above. The Petitioner is yet to install FGD as per the 2015 MoEF&CC Notification dated 7.12.2015 to cater the 100% requirement of the generating station. However, the Commission had allowed and approved the capital cost of Rs.150 crore towards FGD for 25% capacity. In this regard, Regulation 35(1)(7) of the 2019 Tariff Regulations provides as under:

(7) The operation and maintenance expenses on account of emission control system in coal or lignite based thermal generating station shall be 2% of the admitted capital



expenditure (excluding IDC and IEDC) as on its date of operation, which shall be escalated annually @3.5% during the tariff period ending on 31st March 2024: Provided that income generated from sale of gypsum or other by-products shall be reduced from the operation and maintenance expenses.

227. As per the above Regulations, we have considered the capital cost of Rs.150 crore towards FGD and allowed 2% for the year 2019-20 and escalated the same @ 3.5% for the period 2020-24. However, the Petitioner at the time of truing up of tariff, shall furnish the details of the actual O&M expenses incurred towards FGD in terms of the said regulation.

Desilting Sea Water intake

228. The Petitioner has claimed additional O&M expenses of Rs. 616.75 lakh towards Desilting sea water intake for the period 2019-24. The Petitioner has submitted that it has incurred actual additional O&M expenses for Rs. 111.09 lakh in 2018-19 towards Desilting sea water intake and considering the base amount of Rs 111.09 lakh, the same is escalated with an annual escalation of 3.51% for the period 2019-24. It is observed that the claim for additional O&M expenses towards desilting sea water for the period 2014-19 has been discussed in detail in previous paras of truing up section of the tariff period 2014-19 above. In line with this view, we are not inclined to allow the additional O&M expenses for the period 2019-24 for the said work of desilting sea water intake.

400 kV line reactors

229. The Petitioner has claimed additional O&M expenses of Rs. 280.60 lakh towards 400 KV line reactor for the period 2020-24 but has not claimed any additional O&M expenditure for the period 2019-20. It is observed that the Commission had allowed the capital expenditure towards 2 nos. of additional 400 kV line reactor (in paras 162 to 166 of this order above). The requirement of 2 nos. of additional 400 kV



line reactor is based on the directive issued by the Standing Committee meeting of Power System, Southern Region, for the purpose of Grid security approved in the 119th Operation Coordination Committee meeting dated 10.5.2016 held in SRPC, Bangalore. Considering the allowance of such capital expenditure and the fact that additional expenses of additional 400 kV line reactor is not covered under the normative O&M expenses allowed to the generating station, we allow the additional projected O&M expenditure claimed by the Petitioner on this count. However, this projected expenditure is subject to the truing up as per actual expenditure incurred after prudence check

230. Accordingly, the additional O&M expenses allowed for the generating station for the period 2019-24, is as under:

	(Rs. in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses (Jetty & ECHP)	526.27	544.74	563.86	583.65	604.14
FGD	300.00	310.50	321.37	332.62	344.26
Desilting Sea Water intake	0.00	0.00	0.00	0.00	0.00
400 kV line reactors	0.00	66.56	68.90	71.32	73.82
Total additional O&M expenses allowed	826.27	921.8	954.13	987.59	1022.2

231. The first proviso to Regulation 35(1)(6) of the 2019 Tariff Regulations provides as under:

“(6) The Water Charges, Security Expenses and Capital Spares for thermal generating stations shall be allowed separately after prudence check:

Provided that water charges shall be allowed based on water consumption depending upon type of plant and type of cooling water system, subject to prudence check. The details regarding the same shall be furnished along with the petition;

Provided further that the generating station shall submit the assessment of the security requirement and estimated expenses;

Provided also that the generating station shall submit the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification for incurring the same and substantiating that the same is not funded through compensatory allowance as per Regulation 17 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 or Special Allowance or claimed as a part of additional capitalization or consumption of stores and spares and renovation and modernization.



Water Charges

232. In terms of the first proviso to Regulations 35(1)(6) of the 2019 Tariff Regulations, water charges shall be allowed separately, based on water consumption depending upon type of plant, type of cooling water system etc., subject to prudence check. The Petitioner has submitted that Water charges has been projected by considering water consumption at port for 2018-19 i.e. 9846 KL and year on year increase by 3.51%. It has submitted that the quantity arrived at is multiplied by Rs. 52/KL as per agreement with City Corporation, Mangalore and approved by in order dated 22.1.2020 in Petition No. 251/GT/2017. Accordingly, the details of the water charges submitted and claimed by the Petitioner in Form-19 of the amended petition is as under:

(Rs in lakh)							
S. No.	Details of Water charges (excluding water cess)		Quantity allocated	Normative consumption (at 85% PLF)	Rate specified (as per govt. notification or agreement)	Spillage of water (in percentage)	Amount Claimed
	Name of source and quantity	Amount	Unit	Unit	Rs./KL		
Water consumption at NMPT port							
2019-20							
1.	City Corporation Mangalore	-	40 m3/hr	-	52	-	5.30
2020-21							
2.	City Corporation Mangalore	-	40 m3/hr	-	52	-	5.49
2021-22							
3.	City Corporation Mangalore	-	40 m3/hr	-	52	-	5.68
2022-23							
4.	City Corporation Mangalore	-	40 m3/hr	-	52	-	5.88
2023-24							
5.	City Corporation Mangalore	-	40 m3/hr	-	52	-	6.08



233. Considering the fact that we have already allowed an amount of Rs 5.12 lakh for 2018-19 after detailed deliberation in the table under para-91 to 97 of this order above, and the Petitioner has claimed the said amount with annual escalation of 3.51 % for the period 2019-24, we are inclined to consider the water charges actually incurred during the period 2018-19 and allow the same for the period 2019-24 without any escalation. However, the Petitioner, at the time of truing up of tariff, shall furnish the details of the actual water consumption, along with reason for the variation in the claim if any, duly supported by documents (i.e. agreement/ direction/ order etc. by state govt./ statutory authority) for the rate of water charges. The water charges allowed are subject to the truing up as per actual water charges paid after prudence check. Accordingly, the water charges allowed to the generating station for the period 2019-24 is as under:

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
5.12	5.12	5.12	5.12	5.12

Security expenses

234. The Petitioner has claimed following Security expenses under the second proviso to Regulation 35(1)(6) of the 2019 Tariff Regulations:

<i>(Rs in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
403.41	417.57	432.23	447.40	463.10

235. The Commission vide ROP of the hearing dated 25.5.2021 had directed the Petitioner to furnish details of actual security expenses incurred during the period 2014-19 and 2019-24 duly supported by audited books of accounts. In compliance thereof, the Petitioner vide affidavit dated 30.6.2021 has submitted the details of Security expenses incurred for the period 2014-19 as under:



<i>(Rs in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
16.48	141.07	373.97	418.43	483.93

236. The Petitioner has also submitted the CA certificate for the above-mentioned expenditure. However, the Petitioner has not provided the assessment of the security requirement. It is observed that the actual security expenses for 2018-19 is Rs.483.93 lakh however, the Petitioner has claimed Rs. 403.41 lakh, in 2019-20 and escalated the same at the rate of 3.5 % approximately. Accordingly, the security expenses allowed on projection basis are as under:

<i>(Rs in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
403.41	417.57	432.23	447.40	463.10

237. However, the Petitioner at the time of truing up of tariff, shall furnish the actual security expenses incurred with details and breakup along with the justification and the same shall be assessed in terms of Regulation 35(1)(6) of the 2019 Tariff Regulations.

Capital spares

238. The Petitioner has claimed capital spares only for the period from 2020-21 to 2022-23, as under:

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
0.00	11164.00	16200.00	1200.00	0.00

239. In terms of the last proviso to Regulation 35(1)(6) of the 2019 Tariff Regulations, capital spares shall be allowed separately after prudence check. The Petitioner has neither submitted any details of capital spares nor has complied with the said proviso to Regulation 35(1)(6) of the 2019 Tariff Regulations. In view of the above, the capital spares will be allowed to the Petitioner based on the details furnished at the time of truing up of tariff, after prudence check.



240. Accordingly, the total O&M expenses, including Water charges, Security expenses and Capital spares claimed and allowed for the period 2019-24 is summarized as under:

		<i>(Rs in lakh)</i>				
		2019-20	2020-21	2021-22	2022-23	2023-24
Installed Capacity (MW)		1200	1200	1200	1200	1200
Total O&M Expenses	Claimed	24312.00	25164.00	26052.00	26964.00	27912.00
	Allowed	24312.00	25164.00	26052.00	26964.00	27912.00
Water charges	Claimed	5.30	5.49	5.68	5.88	6.08
	Allowed	5.12	5.12	5.12	5.12	5.12
Security Expenses	Claimed	403.41	417.57	432.23	447.40	463.10
	Allowed	403.41	417.57	432.23	447.40	463.10
Capital Spares	Claimed	0.00	11164.00	16200.00	1200.00	0.00
	Allowed	0.00	0.00	0.00	0.00	0.00
O&M expenses as allowed (including Water Charges, Security expenses and Capital Spares (G) = (C+D+E+F)		24720.53	25586.69	26489.35	27416.52	28380.22
Additional O&M Expenses						
O & M Expenses (Jetty & ECHP)	Claimed	526.27	544.74	563.86	583.65	604.14
	Allowed	526.27	544.74	563.86	583.65	604.14
FGD	Claimed	366.63	379.5	392.82	406.61	420.88
	Allowed	300.00	310.50	321.37	332.62	344.26
Desilting Sea Water intake	Claimed	114.99	119.03	123.2	127.53	132
	Allowed	0.00	0.00	0.00	0.00	0.00
400 kV line reactors	Claimed	0.00	66.56	68.9	71.32	73.82
	Allowed	0.00	66.56	68.9	71.32	73.82
Additional O&M expenses allowed		826.27	921.8	954.13	987.59	1022.22
Total O&M expenses allowed		25546.80	26508.49	27443.48	28404.11	29402.44

241. The Petitioner is directed to furnish all the details with complete bifurcation of the actual O&M expenses incurred by the generating station for the period 2019-24. Further, the Petitioner is also directed to furnish all the details/documents of prior consent from the Respondents regarding capital expenditure as per Article use 4.1(d) of the PPA dated 26.12.2005 along with details/documents of the certificate of the expenditure to be incurred or incurred as per Article 6.12(a)(B) of PPA.



Operational Norms

242. The following norms of operation have been considered by the Petitioner for the period 2019-24:

Normative Annual Plant Availability Factor (NAPAF) (%)	85
Heat Rate (kcal/kwh)	2344.65
Auxiliary power consumption (%)	6.95
Specific Oil Consumption (ml/kwh)	0.50

Normative Annual Plant Availability Factor

243. Regulation 49 of the 2019 Tariff Regulations provides as under:

- (A) Normative Annual Plant Availability Factor (NAPAF)
(a) For all thermal generating stations, except those covered under clauses (b), (c), (d), & (e) - 85%.

244. The NAPAF of 85% claimed by the Petitioner is as per Regulation 49(A)(a) of 2019 Tariff Regulations and hence the same is allowed.

Station Heat Rate

245. Regulation 49(C)(b)(1) of 2019, Tariff Regulations provides as under:

- (C) Gross Station Heat Rate:
(b) Thermal Generating Stations achieving COD on or after 1.4.2009:
(i) For Coal-based and lignite-fired Thermal Generating Stations:
1.05 X Design Heat Rate (kCal/kWh)
Where the Design Heat Rate of a generating unit means the unit heat rate guaranteed by the supplier at conditions of 100% MCR, zero percent make up, design coal and design cooling water temperature/back pressure.
Provided that the design heat rate shall not exceed the following maximum design unit heat rates depending upon the pressure and temperature ratings of the units:

Pressure Rating (Kg/cm ²)	150	170	170
SHT/RHT (°C)	535/535	537/537	537/565
Type of BFP	Electrical Driven	Turbine Driven	Turbine Driven
Max Turbine Heat Rate (kCal/kWh)	1955	1950	1935
Min. Boiler Efficiency			
Sub-Bituminous Indian Coal	0.86	0.86	0.86
Bituminous Imported Coal	0.89	0.89	0.89
Max. Design Heat Rate (kCal/kWh)			
Sub-Bituminous Indian Coal	2273	2267	2250
Bituminous Imported Coal	2197	2191	2174



Pressure Rating (Kg/cm ²)	247	247	270	270
SHT/RHT (0C)	537/565	565/593	593/593	600/600
Type of BFP	Turbine Driven	Turbine Driven	Turbine Driven	Turbine Driven
Max Turbine Heat Rate (kCal/kWh)	1900	1850	1810	1800
Min. Boiler Efficiency				
Sub-Bituminous Indian Coal	0.86	0.86	0.865	0.865
Bituminous Imported Coal	0.89	0.89	0.895	0.895
Max. Design Heat Rate (kCal/kWh)				
Sub-Bituminous Indian Coal	2222	2151	2105	2081
Bituminous Imported Coal	2135	2078	2034	2022

Provided further that in case pressure and temperature parameters of a unit are different from above ratings, the maximum design heat rate of the unit of the nearest class shall be taken:

Provided also that where heat rate of the unit has not been guaranteed but turbine cycle heat rate and boiler efficiency are guaranteed separately by the same supplier or different suppliers, the design heat rate of the unit shall be arrived at by using guaranteed turbine cycle heat rate and boiler efficiency:

Provided also that where the boiler efficiency is lower than 86% for Subbituminous Indian coal and 89% for bituminous imported coal, the same shall be considered as 86% and 89% for Sub-bituminous Indian coal and bituminous imported coal respectively, for computation of station heat rate:

Provided also that maximum turbine cycle heat rate shall be adjusted for type of dry cooling system:

Provided also that in case of coal based generating station if one or more generating units were declared under commercial operation prior to 1.4.2019, the heat rate norms for those generating units as well as generating units declared under commercial operation on or after 1.4.2019 shall be lowest of the heat rate norms considered by the Commission during tariff period 2014-19 or those arrived at by above methodology or the norms as per the sub-clause (C)(a)(i) of this Regulation:

246. The Petitioner in Form-2 has furnished the design turbine cycle heat rate and boiler efficiency of the generating station as 1945 kcal/kWh and 87.00% respectively. However, the Boiler efficiency of 87% as furnished by the Petitioner is incorrect. The Commission in its order dated 22.1.2020 in Petition No. 251/GT/2017 had observed the following:

“95. The Petitioner was directed to submit the reason for variation in the boiler efficiency data (87%) indicated in Form-2 of the petition as against the boiler efficiency of 88.5% considered in Petition No. 160/GT/2012. In response, the Petitioner has submitted that the boiler efficiency of 87% considered in Form-2 is an inadvertent error and has prayed for consideration of the same as 88.5%.”



247. Considering the design turbine cycle heat rate and boiler efficiency of the generating station as 1945 kcal/kWh and 88.50% respectively, the unit design heat rate is worked out as 2197.74 kcal/kWh (1945/0.8850). However, Regulation 49(C)(b)(i) of the 2019 Tariff Regulations provides that for thermal generating stations achieving COD on or after 1.4.2009, the Gross Station Heat Rate is =1.05 x Design Heat Rate (kcal/kWh) = (1.05x 2197.74 =2307.627), provided that the design heat rate shall not exceed the maximum design unit heat rate depending upon the pressure and temperature ratings of the units as specified under the Regulation. Considering the pressure of 170 Kg/cm², Superheater and Reheater temperature of 538°C each and also considering the proviso that in case pressure and temperature parameter are different, the maximum design heat rate of the unit of the nearest class shall be taken, the maximum design heat rate using bituminous imported coal is 2191 kCal/kWh.

248. Thus, taking the multiplying factor of 1.05, the applicable Station Heat Rate for the generating station is 1.05x2191 =2300.55 kcal/kwh. Accordingly, GSHR of 2300.55 kcal/kWh is considered for the purpose of tariff for the period 2019-24.

Auxiliary Power Consumption

249. Regulation 49(E)(a)(ii) of the 2019 Tariff Regulation provides for Auxiliary Power consumption as under: -

(E) Auxiliary Energy Consumption

(a) Coal-based generating stations except at (b) below:

Generating Station	With Natural Draft cooling tower or without cooling tower
<i>(i) 200 MW series</i>	8.5%
<i>(ii) 300 MW and above</i>	
<i>Steam driven boiler feed pumps</i>	5.75%
<i>Electrically driven boiler feed pumps</i>	8.0%

Provided that for thermal generating stations with induced draft cooling towers and where tube type coal mill is used, the norms shall be further increased by 0.5% and 0.8% respectively:



250. The Petitioner in Form-3 vide affidavit dated 28.10.2021, has claimed Auxiliary Power Consumption of 6.95%. As discussed in previous paras in truing up section of the tariff period 2014-19 above, the Commission after detailed deliberation, had allowed the auxiliary power consumption of 6.45% i.e. 5.25% normative + 1.20% due to additional features, for the period 2014-19, after truing-up exercise.

251. Regulation 49(E)(a)(ii) of the 2019 Tariff Regulations provides the applicable normative auxiliary consumption of 5.75% for the generating station. Further, considering 1.20% of additional auxiliary consumption due to additional features, the auxiliary consumption allowed to the generating station is 6.95% for the period 2019-24. The auxiliary power consumption of 6.95% allowed to the generating station is subject to furnishing the actual consumption at the time of truing-up of tariff. Accordingly, the Petitioner at the time of truing up of tariff, shall furnish the actual auxiliary consumption separately for additional features such as Sea water pump House, RO plant, FGD system, Jetty and ECHP etc. from COD to till 31.3.2024.

Specific Oil Consumption

252. Regulation 49(D)(a) of the 2019 Tariff Regulations provides as under:

“(a) For Coal-based generating stations other than at (c) below: 0.50 ml/kWh”

253. In terms of Regulation 49(D)(a) of the 2019 Tariff Regulations, the Petitioner has considered secondary fuel oil consumption of 0.50 ml/kWh during the period 2019-24. Hence, the Secondary fuel oil consumption considered by the Petitioner is as per norms and the same is allowed for the period 2019-24.

254. Based on the above, the operational norms for the generating station considered for the period 2019-24 is as under:



Normative Annual Plant Availability Factor (NAPAF) (%)	85
Heat Rate (kCal/kWh)	2300.55
Auxiliary Power Consumption (%)	6.95
Specific Oil Consumption (ml/kWh)	0.50

Interest on Working Capital

255. Sub-section (a) of clause (1) of Regulation 34 of the 2019 Tariff Regulations provides as under:

“34. Interest on Working Capital: (1) The working capital shall cover

(a) For Coal-based/lignite-fired thermal generating stations:

- (i) Cost of coal or lignite and limestone towards stock, if applicable, for 10 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;*
- (ii) Advance payment for 30 days towards cost of coal or lignite and limestone for generation corresponding to the normative annual plant availability factor;*
- (iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;*
- (iv) Maintenance spares @ 20% of operation and maintenance expenses including water charges and security expenses;*
- (v) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on the normative annual plant availability factor; and*
- (vi) Operation and maintenance expenses, including water charges and security expenses, for one month.*

(aa) For emission control system of coal or lignite based thermal generating stations:

- (i) Cost of limestone or reagent towards stock for 20 days corresponding to normative annual plant availability factor;*
- (ii) Advance payment for 30 days towards cost of reagent for generation corresponding to the normative annual plant availability factor;*
- (iii) Receivables equivalent to 45 days of supplementary capacity charge and supplementary energy charge for sale of electricity calculated on the normative annual plant availability factor;*
- (iv) Operation & maintenance expenses in respect of emission control system for one month;*
- (v) Maintenance spares @20% of operation and maintenance expenses in respect of emission control system.*

The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined:



Provided that in case of new generating station the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months as used for infirm power preceding date of commercial operation for which tariff is to be determined.

(3) Rate of interest on working capital shall be on normative basis and shall be

considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof

or the transmission system including communication system or element thereof as the case may be is declared under commercial operation whichever is later.

Provided that in case of truing-up the rate of interest on working capital shall be

considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.

(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency.

Fuel Component and Energy Charges in Working Capital

256. The Regulation 34(2) of the 2019 Tariff Regulations provides that the computation of cost of fuel as part of Interest on Working Capital (IWC) is to be based on the landed price and GCV of fuel as per actuals, for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined. Regulation 39 of 2019 tariff Regulations provide for the normative transit and handling losses of 0.20% for the imported coal based thermal generating stations.

257. Further, Regulation 43(2) of the 2019 Tariff Regulations provides as under:

“(2) Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the following formulae:

(a) For coal based and lignite fired stations:

$$ECR = \{(SHR - SFC \times CVSF) \times LPPF / CVPF + SFC \times LPSFi + LC \times LPL\} \times 100 / (100 - AUX)$$

(b) For gas and liquid fuel based stations:

$$ECR = SHR \times LPPF \times 100 / \{(CVPF) \times (100 - AUX)\}$$

Where,

AUX = Normative auxiliary energy consumption in percentage.

CVPF = (a) Weighted Average Gross calorific value of coal as received, in kCal per kg for coal based stations less 85 Kcal/Kg on account of variation during storage at generating station;



(b) *Weighted Average Gross calorific value of primary fuel as received, in kCal per kg, per litre or per standard cubic meter, as applicable for lignite, gas and liquid fuel based stations;*

(c) *In case of blending of fuel from different sources, the weighted average Gross calorific value of primary fuel shall be arrived in proportion to blending ratio:*

CVSF = Calorific value of secondary fuel, in kCal per ml;

ECR = Energy charge rate, in Rupees per kWh sent out;

SHR = Gross station heat rate, in kCal per kWh;

LC = Normative limestone consumption in kg per kWh;

LPL = Weighted average landed cost of limestone in Rupees per kg;

LPPF = Weighted average landed fuel cost of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month.

(In case of blending of fuel from different sources, the weighted average landed fuel cost of primary fuel shall be arrived in proportion to blending ratio);

SFC= Normative specific fuel oil consumption, in ml per kWh;

LPSFi= Weighted Average Landed Fuel Cost of Secondary Fuel in Rs./ ml during the month:

Provided that energy charge rate for a gas or liquid fuel based station shall be adjusted for open cycle operation based on certification of Member Secretary of respective Regional Power Committee during the month."

258. The Petitioner has claimed the cost of fuel component in working capital and Energy Charge Rate (ECR) based on the following:

(a) Operational norms as per the 2019 Tariff Regulations;

(b) Price and 'as received GCV of coal procured for the three months of January, 2019, February, 2019 and March, 2019.

(c) Price and GCV of secondary fuel oil for the three months of January, 2019, February, 2019 and March, 2019.

(d) Weighted average cost of Limestone for three months of January, 2019, February, 2019 and March, 2019.

259. Accordingly, the Petitioner has claimed ECR of Rs. 4.269 per kWh and the following fuel cost component in working capital:

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Cost of Coal/Lignite	48192.83	48192.83	48192.83	48192.83	48192.83
Cost of main Secondary fuel oil	397.08	395.99	395.99	395.99	397.08
Cost of Limestone	102.12	102.12	102.12	102.12	102.12

260. The Petitioner has submitted the revised forms for the period 2019-24. On perusal of Form-15 furnished by the Petitioner, it is observed that the Petitioner has



submitted the details of Coal, Oil and Limestone for three months of January, 2019, February 2019 and March, 2019. The Petitioner has also included the opening stock of coal and its corresponding value while computing the weighted average price of coal for the month of January, 2019, February, 2019 and March, 2019. However, in terms of Regulation 34(2) of the 2019 Tariff Regulations, the computation of cost of fuel as part of IWC is to be based on the landed price and GCV of fuel as per actuals, for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined, which means that fuel received during these three months is only to be considered and also no opening stock shall be included therein.

261. Though the Petitioner has submitted the details for the period of January, 2019, February 2019 and March, 2019, it has not procured any coal in the month of February, 2019. Further, the amount charged by the Coal Company as submitted by the Petitioner is inclusive of the opening stock. The Petitioner has not furnished the amount charged by Coal Company corresponding to the amount purchased for each month separately. The Petitioner has also included Custom duty, Stevedoring Expenses, Shore handling expenses, Survey, coal sampling analysis, wharfage charges, Pilotage & port dues, Coal tender consultant charges and SLDC charges towards CUG license etc. for the year 2017 in the adjustment in amount charged by coal company in Form-15 corresponding to coal. However, the adjustment in amount towards Pilotage & port dues, coal tender consultant charges and SLDC charges towards CUG license are booked as one-time charges. These charges cannot be allowed for the working capital. Accordingly, we allow only Custom duty, Stevedoring Expenses, Shore handling expenses, Survey, coal sampling analysis and wharfage charges for adjustment in amount charged by Coal Company for the working capital.



262. The Petitioner has also furnished the details of limestone in Form-16, but without any detail for specific limestone consumption. In view of this, the specific limestone consumption allowed is 0.004 kg/kWh at this stage, as considered for the period 2014-19. However, the Petitioner at the time of truing up of tariff, shall furnish the said details.

263. The Petitioner at the time of truing up is also directed to furnish the details in terms of Regulation 34(2) of the 2019 Tariff Regulations. However, in the absence of the details as per 2019 Tariff Regulations, we are considering the details as furnished by the Petitioner, except for Pilotage & port dues, coal tender consultant charges and SLDC charges towards CUG license for adjustment in amount charged by Coal Company. The working capital will be re-determined at the time of truing up of tariff, based on the details furnished by the Petitioner as per 2019 Tariff Regulations. Accordingly, the weighted average price and GCV of coal and oil claimed and allowed for the period 2019-24, is as under:

	<i>(Rs. in lakh)</i>	
	Claimed	Allowed
Weighted average price of coal (Rs./MT)	9148.64	9144.51
Weighted average GCV of coal (kCal/kg)	5522.17	5522.17
Weighted average price of oil (Rs./KL)	53181.61	53181.61
Weighted average GCV of oil (kCal/Ltr.)	9277.78	9277.78

264. The computation of Energy Charges and Fuel component (coal cost) in working capital during the period 2019-24 is based on “as received GCV” of coal. The Petitioner has claimed Ex-bus Energy Charge Rate (ECR) of 426.90 Paise/kWh based on the weighted average price, GCV of coal (on as received basis) & Oil procured and burnt for the three months (January, 2019 to March, 2019). The cost for fuel components in working capital has been computed based on the details furnished by the Petitioner.



265. Accordingly, the fuel component in working capital, Energy Charges and ECR allowed for the period 2019-24 is as under:

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Cost of Coal towards Stock - 20 Days corresponding to NAPAF	18614.32	18614.32	18614.32	18614.32	18614.32
Cost of Coal towards generation -30 days generation corresponding to NAPAF	27921.48	27921.48	27921.48	27921.48	27921.48
Cost of limestone towards Stock -20 Days corresponding to NAPAF	35.81561	35.81561	35.81561	35.81561	35.81561
Cost of limestone towards generation - 30 days generation corresponding to NAPAF	53.72342	53.72342	53.72342	53.72342	53.72342
Cost of Secondary fuel oil- 2 months generation corresponding to NAPAF	397.08	395.99	395.99	395.99	397.08

266. The Petitioner, on a month to month basis, shall compute and claim the energy charges from the beneficiaries based on formulae given under Regulation 43 of the 2019 Tariff Regulations.

Energy Charge Rate

267. Accordingly, the Energy Charge Rate (ECR) worked out based on the operational norms specified under the 2019 Tariff Regulations and allowed for the period 2019-24 are as under:

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Energy Charges for 45 days	42252.10	42252.10	42252.10	42252.10	42252.10

Working Capital for Maintenance Spares

268. The Petitioner has claimed the maintenance spares in the working capital as under:

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
	5145.72	7586.18	8767.74	5961.28	5922.41



269. Regulation 34(1)(a)(iv) of the 2019 Tariff Regulations provide for maintenance spares @ 20% of the O&M expenses (including water charges and security expenses). Accordingly, maintenance spares @ 20% of the O&M expenses (including the water charges and security expenses) allowed for the period 2019-24 is as under:

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
5109.36	5301.70	5488.70	5680.82	5880.49

Working Capital for Receivables

270. Receivables for 45 days for capacity charges and energy charges are worked out as under:

<i>(Rs. in lakh)</i>					
	2019-20	2020-21	2021-22	2022-23	2023-24
Receivables (Fixed Charges)	14006.12	13683.30	13379.67	13150.89	13043.03
Receivables (Variable Charges)	42252.10	42252.10	42252.10	42252.10	42252.10
Receivables (Total)	56258.22	55935.40	55631.77	55402.99	55295.13

Working Capital for O&M expenses

271. O&M expenses for 1 month claimed by the Petitioner for the purpose of working capital are as under:

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
2144.05	3160.91	3653.22	2483.87	2467.67

272. Regulation 34(1)(a)(vi) of the 2019 Tariff Regulations provides for O&M expenses equivalent to 1 month of the O&M expenses (including water charges and security expenses). Accordingly, the O&M expenses equivalent to one month of the O&M expenses (including water charges and security expenses) allowed for the period 2019-24 is as under:

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
2128.90	2209.04	2286.96	2367.01	2450.20



273. In accordance with Regulation 34(3) of the 2019 Tariff Regulations, the rate of interest on working capital considered as 12.05% (i.e. 1 year SBI MCLR of 8.55% as on 01.04.2019 + 350 bps) for the year 2019-20, 11.25% (i.e. 1 year SBI MCLR of 7.75% as on 01.04.2020 + 350 bps) for the year 2020-21, 10.50% (i.e. 1 year SBI MCLR of 7.00% as on 01.04.2021 + 350 bps) for the year 2021-22, 10.50% (i.e. 1 year SBI MCLR of 7.00% as on 01.04.2022 + 350 bps) for the period 2022-23 and 12.00% (i.e. 1 year SBI MCLR of 8.50% as on 01.04.2022 + 350 bps) for the period 2023-24).

Accordingly, Interest on working capital has been computed as under:

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Cost of Coal for stock – 20 days	18614.32	18614.32	18614.32	18614.32	18614.32
Cost of Coal for generation – 30 days	27921.48	27921.48	27921.48	27921.48	27921.48
Cost of Lime for stock – 20 days	35.82	35.82	35.82	35.82	35.82
Cost of Lime for generation – 30 days	53.72	53.72	53.72	53.72	53.72
Cost of Secondary fuel oil 2 months	397.08	395.99	395.99	395.99	397.08
Maintenance spares (20% of the O&M exp)	5109.36	5301.70	5488.70	5680.82	5880.49
Receivables (Total)	56258.22	55935.40	55631.77	55402.99	55295.13
O&M exp for 1 month	2128.90	2209.04	2286.96	2367.01	2450.20
Total Working Capital	110518.89	110467.47	110428.75	110472.14	110648.23
Interest Rate	12.05%	11.25%	10.50%	10.50%	12.00%
Interest on Working Capital	13317.53	12427.59	11595.02	11599.58	13277.79

Annual Fixed Charges for the period 2019-24

274. Based on the above, the annual fixed charges approved for the generating station for the period 2019-24, are summarized as under:

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	29012.59	29088.28	29246.02	29328.05	29328.05
Interest on loan	20600.46	17465.27	14572.66	11558.12	8296.65
Return on Equity	25439.06	25497.15	25666.85	25778.45	25778.38
Interest on Working capital	13317.53	12427.59	11595.02	11599.58	13277.79
O&M Expenses	25546.80	26508.49	27443.48	28404.11	29402.44
Total	113916.43	110986.77	108524.02	106668.31	106083.31



Note: (1) All figures are on annualized basis. (2) All figures under each head have been rounded. The figure in total column in each year is also rounded. As such the sum of individual items may not be equal to the arithmetic total of the column.

275. The annual fixed charges allowed as above, are subject to truing-up, in terms of Regulation 13 of the 2019 Tariff Regulations.

Application Fee and Publication Expenses

276. The Petitioner has sought the reimbursement of fees paid by it for filing the tariff petition and for publication expenses in respect of the said petition. The Petitioner shall be entitled for the reimbursement of filing fees and publication expenses in connection with the present petition, directly from the beneficiaries, on pro-rata basis, in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

277. Similarly, RLDC fees & charges paid by the Petitioner in terms of the Central Electricity Regulatory Commission (Fees and Charges of Regional Load Dispatch Centre and other related matters) Regulations, 2019, shall be recovered from the beneficiaries. In addition, the Petitioner is entitled recovery of statutory taxes, levies, duties, cess etc. levied by the statutory authorities in accordance with the 2019 Tariff Regulations.

278. Petition No. 21/GT/2021 is disposed of in terms of the above.

Sd/-
(Pravas Kumar Singh)
Member

Sd/-
(Arun Goyal)
Member

Sd/-
(I.S. Jha)
Member

