CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 293/GT/2020

Coram:

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

Date of Order: **11th January, 2022**

In the matter of

Petition for revision of tariff of Simhadri Super Thermal Power Station, Stage-II (1000 MW) for the 2014-19 tariff period, after truing-up exercise.

And

In the matter of

NTPC Limited,
NTPC Bhawan
Core-7, Scope Complex,
7, Institutional Area, Lodhi Road,
New Delhi-110003 **.....Petitioner**

Vs

1. AP Eastern Power Distribution Company Limited,
   Corporate Office, P&T Colony, Seethammadhara,
   Visakhapatnam – 530 013 - (AP)

2. AP Southern Power Distribution Company Limited,
   Corporate Office, Back Side Srinivasa Kalyana Mandapam,
   Tiruchhanur Road, Kesavayana Gunta,
   Tirupathi – 517 503 (AP)

3. Telangana State Northern Power Distribution Company Limited,
   H.No. 2-5-31/2, Vidyut Bhavan, Nakkalagutta, Hanamkonda,
   Warangal – 506 001 (AP)

4. Telangana State Southern Power Distribution Company Limited,
   Mint Compound, Corporate Office,
   Hyderabad (AP) – 500 063

5. Tamil Nadu Generation & Distribution Corporation Limited,
   144, Anna Salai, Chennai – 600 002

6. Bangalore Electricity Supply Company Limited,
Krishna Rajendra Circle,
Bangalore - 560 009

7. Mangalore Electricity Supply Company Limited,
MESCOM Bhavan, Corporate Office,
Bejai, Kavoor cross road,
Mangaluru-575004, Karnataka

8. Chamundeshwari Electricity Supply Corporation Limited,
Corporate Office, No. 29, Vijayanagar, 2nd stage, Hinkal,
Mysore – 570 017.

9. Gulbarga Electricity Supply Company Limited,
Main road, Gulbarga – 585 102, Karnataka

10. Hubli Electricity Supply Company Limited,
Corporate office, P.B. Road, Navanagar,
Hubli – 580 025

11. Kerala State Electricity Board Limited,
Vaidyuthi Bhavanam, Pattom,
Thiruvananthapuram – 695 004

12. Electricity department,
Govt. of Puducherry, 137, NSC Bose Salai
Puducherry- 605001 **…..Respondents**

Parties present:

Shri Venkatesh, Advocate, NTPC
Shri Ashutosh K. Srivastava, Advocate, NTPC
Shri Siddharth Joshi, Advocate, NTPC
Shri Anant Singh, Advocate, NTPC
Shri Abhishek Nangia, Advocate, NTPC
Shri Neil Chaterjee, Advocate, NTPC
Shri Vinay Kumar Garg, NTPC
Shri Ishpaul Uppal, NTPC
Shri Anand Pandey, NTPC
Shri B.Vinodh Kanna, Advocate, TANGEDCO
Ms. R.Ramalakshmi, TANGEDCO
Ms. R.Alamelu, TANGEDCO

ORDER

This petition has been filed by the Petitioner, NTPC Limited (in short, "NTPC"), for truing-up of tariff of Simhadri STPS, Stage-II (1000 MW) (hereinafter referred to as "the generating station") for the 2014-19 tariff period, in accordance with Regulation 8 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations").

Background

2. The generating station with a capacity of 1000 MW comprises of two units of 500 MW each. Unit-I of the generating station achieved COD on 16.9.2011 and Unit-II on 30.9.2012. The Commission vide its order dated 2.11.2015 in Petition No. 303/GT/2014, approved the tariff of the generating station for the period from 16.9.2011 to 31.3.2014. Thereafter, vide order dated 9.5.2016 in Review Petition No. 2/RP/2016 (in Petition No. 303/GT/2014), the tariff of the generating station for the period 16.9.2011 to 31.3.2014 was revised, based on the actual additional capital expenditure incurred for the said period. Subsequently, vide order dated 29.7.2016 in Petition No.294/GT/2014, the tariff of the generating station was determined for the 2014-19 tariff period. Thereafter, by order dated 1.5.2017 in Review Petition No. 50/RP/2016, the order dated 29.7.2016 in Petition No. 294/GT/ 2014 was modified, by considering the projected additional capital expenditure towards the construction of Railway siding for 2014-15 and 2015-16. The capital cost and the annual fixed charges allowed vide order dated 1.5.2017 in Review Petition No. 50/RP/2016 (in Petition No. 294/GT/2014) read with order dated 29.7.2016 in Petition No. 294/GT/2014 are as follows:

Capital cost allowed

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Opening Capital Cost (A)	503884.86	531700.43	535195.31	537395.31	540035.31
Add: additional capital expenditure allowed (B)	27815.57	3494.88	2200.00	2640.00	1000.00
Closing Capital Cost (C) = (A) + (B)	**531700.43**	**535195.31**	**537395.31**	**540035.31**	**541035.31**
Average Capital Cost (D) = (A+B)/2	517792.65	533447.87	536295.31	538715.31	540535.31

Annual fixed charges allowed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	26518.17	27319.93	27465.76	27589.70	27682.91
Interest on loan	27818.19	26052.23	23640.97	21473.15	18812.98
Return on Equity	30461.74	31534.77	31703.10	31846.16	31953.75
Interest on Working Capital	9653.33	9723.34	9727.07	9912.05	9924.90
O&M Expenses	14896.16	15829.97	16819.02	17872.37	18990.09
Total	**109347.59**	**110460.24**	**109355.91**	**108693.42**	**107364.63**

<u>Present Petition</u>

3. Regulation 8(1) of the 2014 Tariff Regulations provides as follows:

> *"(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.*
>
> *xxx…"*

4. In terms of Regulation 8(1) of the 2014 Tariff Regulations, the Petitioner has filed the present petition for truing-up of tariff for the 2014-19 tariff period and has claimed the trued-up capital cost, in Form I(I) of the petition and the annual fixed charges as stated below:

Capital Cost claimed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost (A)	503884.86	535143.30	550467.10	554987.23	557688.54
Add: Addition during the year/period (B)	26424.86	14517.26	3957.01	1970.01	2954.64
Less: De-capitalization during the year /period (C)	310.82	263.36	341.21	328.97	435.30
Add: Discharges during the year /period (D)	5144.40	1069.90	904.33	1060.27	807.55
Closing Capital Cost (E) = (A+B-C+D)	**535143.30**	**550467.10**	**554987.23**	**557688.54**	**561015.43**
Average Capital Cost (F) = (A+E)/2	519514.08	542805.20	552727.17	556337.89	559351.99

Annual fixed charges claimed

(Rs in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	26606.27	27704.39	28074.31	28251.28	28402.48

Interest on Loan	27776.88	25822.18	23411.48	20678.41	18204.04
Return on Equity	30563.90	32088.84	32675.40	32888.85	33154.20
Interest on Working Capital	12880.12	12980.79	13074.60	13357.36	13568.09
O&M Expenses	15327.48	16424.52	17455.10	18429.07	19564.22
Sub-total	**113154.65**	**115020.72**	**114690.89**	**113604.98**	**112893.02**
Additional O&M expenditure					
Impact of Pay revision	0.00	52.00	1292.85	1692.82	2177.34
Impact of GST	0.00	0.00	0.00	177.02	256.58
Ash Transportation expenses	0.00	0.00	0.00	0.00	2453.69
Total additional O&M expenditure	0.00	52.00	1292.85	1869.84	4887.61
Total annual fixed charges claimed	**113154.65**	**115072.72**	**115983.74**	**115474.82**	**117780.63**

5. The Respondent No.5, TANGEDCO has filed its reply vide affidavits dated 22.10.2020 and 12.7.2021 and the Respondent No. 11, KSEBL has filed its reply vide affidavit dated 9.6.2021. The Petitioner has filed its rejoinder to the replies of TANGEDCO (vide affidavits dated 29.1.2021 and 20.7.2021) and KSEBL (vide affidavit dated 5.7.2021). The Petitioner has also filed certain additional information vide affidavit dated 4.6.2021.

6. This petition, along with Petition No.418/GT/2020 filed by the Petitioner for determination of tariff of the generating station for the 2019-24 tariff period, was heard on 11.6.2021 and the Commission, after directing the Petitioner to furnish revised Form-15 (in Petition No.418/GT/2020), vide Record of the Proceeding (ROP), reserved its order in these petitions. Subsequently, the request of Petitioner vide letter dated 19.10.2021, to file additional affidavit, with respect to the O&M expenses was not entertained, as the same was belated and orders in the petition had already been reserved. Based on the submissions of the parties and the documents available on record, we proceed for truing-up the tariff of the generating station for the 2014-19 tariff period, on prudence check, in the subsequent paragraphs.

Capital Cost

7. Clause (1) of Regulation 9 of the 2014 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. Clause 3 of Regulation 9 of the 2014 Tariff Regulations provides as follows:

> *"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.*
> *xxx…"*

8. The Investment Approval of the project was accorded by the Board of the Petitioner Company in its 298th meeting held on 23.3.2007, at SBI Capital Markets Limited appraised current estimated cost of Rs.51033.94 million (Rs.41636.71 million + US $212.85 million) including IDC and FC of Rs.5529.30 million (Rs.2393.19 million + US $71.03 million) and Working Capital Margin (WCM) of Rs.1150.53 million at an exchange rate of US $1 = Rs.44.15, as of 1st quarter 2007 price level and indicative estimated completed cost of Rs.55559.86 million (Rs.45808.99 million + US $220.86 million) including IDC and FC of Rs.5892.61 million (Rs.2549.31 million + US $75.73 million) and WCM of Rs.1189.65 million at an exchange rate of US $1 = Rs.44.15, subject to environmental and forest clearances of the Ministry of Environment and Forests (MoEF), Government of India and clearance of land for Ash Dyke by the State Government. This was also subject to adjustments in costs, consequent upon revision in COD of Unit-I by 42 months, from the date of Environmental Clearance by the MoEF, GoI and Unit-II by six months thereafter.

9. The Commission vide its order dated 1.5.2017 in Review Petition No. 50/RP/2016 in Petition No. 294/GT/2014, had admitted Rs.503884.86 lakh as the opening capital cost as on 1.4.2014. The same capital cost of Rs.503884.86 lakh has been considered as the opening capital cost as on 1.4.2014.

<u>Additional Capital Expenditure</u>

10. Regulation 14(1) and Regulation 14(3) of the 2014 Tariff Regulations provide as follows:

> *"14 (1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*
>
> *(i) Un-discharged liabilities recognized to be payable at a future date;*
>
> *(ii) Works deferred for execution;*
>
> *(iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;*
>
> *(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and*
> *(v) Change in law or compliance of any existing law:*
>
> *Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff.*
>
> *xxx*
>
> *14(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:*
>
> *(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;*
> *(ii) Change in law or compliance of any existing law;*
> *(iii) Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security;*
> *(iv) Deferred works relating to ash pond or ash handling system in the original scope of work;*
> *(v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such un-discharged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;*
> *(vi) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;*
> *(vii) Any additional capital expenditure which has become necessary for efficient*

operation of generating station other than coal/lignite based stations or transmission system as the case may be. The claim shall be substantiated with the technical justification duly supported by the documentary evidence like test results carried out by an independent agency in case of deterioration of assets, report of an independent agency in case of damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level; …..”

Additional capital expenditure allowed vide order dated 1.5.2017 in Review Petition No. 50/RP/2016 (in Petition No. 294/GT/2014) read with order dated 29.7.2016 in Petition No. 294/GT/2014

11. The details of the additional capital expenditure allowed vide order dated 1.5.2017 in Review Petition No. 50/RP/2016 (in Petition No. 294/GT/2014) read with order dated 29.7.2016 in Petition No. 294/GT/2014 is summarized as follows:

(Rs. in lakh)

	Regulation	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Buildings							
Main Plant & Offsite including Plant Roads	14(1)(ii)	3752.88	0.00	0.00	0.00	0.00	3752.88
Residential Quarters	14(1)(ii)	3557.32	0.00	0.00	0.00	0.00	3557.32
Misc. T/S Work	14(1)(ii)	1091.50	0.00	0.00	0.00	0.00	1091.50
Field hostel/EDC/ET Hostel	14(1)(ii)	630.93	0.00	0.00	0.00	0.00	630.93
Roads Bridges & Culverts	14(1)(ii)	2922.48	0.00	0.00	0.00	0.00	2922.48
Total Building		**11955.11**	**0.00**	**0.00**	**0.00**	**0.00**	**11955.11**
Plant & Machinery							
Steam Generator	14(1)(ii)	416.67	0.00	0.00	0.00	0.00	416.67
Turbine Generator Work	14(1)(ii)	2513.11	0.00	0.00	0.00	0.00	2513.11
Coal Handling Plant	14(1)(ii)	734.70	0.00	0.00	0.00	0.00	734.70
Ash Handling Plant including DAES system	14(1)(ii) & 14(3)(iv)	2701.97	617.88	0.00	0.00	0.00	3319.85
Ash Dyke raising works	14(1)(ii) & 14(3)(iv)	2626.43	2877.00	2200.00	2640.00	1000.00	11343.43
Offsite Works	14(1)(ii)	346.24	0.00	0.00	0.00	0.00	346.24
Electrical Works	14(1)(ii)	1737.30	0.00	0.00	0.00	0.00	1737.30
Other Works	14(1)(ii)	0.00	0.00	0.00	0.00	0.00	0.00
Initial Capital Spares	14(1)(iii)	1948.18	0.00	0.00	0.00	0.00	1948.18
Total Plant & Machinery		**13024.60**	**3494.88**	**2200.00**	**2640.00**	**1000.00**	**22359.48**
Railway Siding	14(1)(ii)	2431.99	0.00	0.00	0.00	0.00	2431.99
Office Furniture & Furnishing	14(1)(ii)	150.00	0.00	0.00	0.00	0.00	150.00
Office Equipment	14(1)(ii)	100.00	0.00	0.00	0.00	0.00	100.00
IT Equipment	14(1)(ii)	153.87	0.00	0.00	0.00	0.00	153.87
Total additional capital expenditure allowed		**27815.57**	**3494.88**	**2200.00**	**2640.00**	**1000.00**	**37150.45**

12. The Petitioner, in Form-9A of the petition, has submitted the actual additional capital expenditure incurred for the 2014-19 tariff period in respect of the generating station. It has also submitted that the additional capital expenditure claimed are on accrual basis and cash basis and includes both IDC and un-discharged liabilities. Accordingly, the additional capital expenditure claimed by the Petitioner (on cash basis) for the 2014-19 tariff period is as follows:

(Rs. in lakh)

	Regulation	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Buildings							
Main Plant & Offsite including Plant Roads	14(1)(ii), 3(13) & 54	4213.65	4547.62	1303.60	580.42	123.17	10768.46
Residential Quarters		1802.49	3038.20	46.32	0.00	0.00	4887.01
Miscellaneous T/S Work		149.36	43.00	0.00	0.00	0.00	192.36
Field hostel/EDC/ ET Hostel		317.48	128.70	0.00	0.00	0.00	446.18
Roads Bridges & Culverts		1061.06	942.93	0.00	0.00	0.00	2003.99
Total Building		**7544.04**	**8700.44**	**1349.92**	**580.42**	**123.17**	**18297.99**
Plant & Machinery							
Steam Generator	14(1)(ii), 3(13) & 54	772.00	10.12	0.00	0.00	0.00	782.12
Turbine Generator Work		4575.22	432.08	0.00	0.00	0.00	5007.30
Coal Handling Plant		1273.31	19.85	0.00	0.00	0.00	1293.16
Ash Handling Plant (including DAES System)	14(1)(ii), 14(3)(iv)	3176.89	9.87	123.29	401.29	20.53	3731.87
Ash Dyke raising works		1499.51	2119.25	1216.17	253.50	2443.95	7532.38
Offsite Works	14(1)(ii), 3(13) & 54	427.22	70.16	0.00	0.00	0.00	497.38
Electrical Works		702.20	312.24	0.00	0.00	0.00	1014.44
Other Works		1612.12	1351.21	657.80	298.31	202.42	4121.86
Initial Capital Spares	14(1)(iii)	2851.02	0.00	0.00	0.00	0.00	2851.02
Total Plant & Machinery		**16889.49**	**4324.78**	**1997.26**	**953.10**	**2666.90**	**26831.53**
Railway Siding		1655.20	1491.64	609.83	411.75	0.00	4168.42

	Regulation	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Office Furniture and Furnishing	14(1)(ii), 14(3)(iv)	94.49	0.00	0.00	0.00	0.00	94.49
Office Equipment		142.23	0.00	0.00	0.00	0.00	142.23
IT Equipment		99.41	0.00	0.00	0.00	0.00	99.41
New Items							
LED lighting system for plant premises	14(3)(ii)	0.00	0.00	0.00	24.74	130.57	155.31
Automatic Generation Control (AGC)		0.00	0.00	0.00	0.00	34.01	34.01
Total additional capital expenditure (Excluding De-capitalization)		**26424.86**	**14516.87**	**3957.01**	**1970.01**	**2954.65**	**49823.40**
De-capitalization of spares – part of capital cost	14(4)	(-)310.82	(-) 262.88	(-) 341.21	(-)318.95	(-)380.18	(-)1614.03
Other De-capitalization		0.00	(-)0.48	0.00	0.00	0.00	(-)0.48
De-capitalization of lights (plant & m/c -part of capital cost)		0.00	0.00	0.00	(-)10.02	(-)55.12	(-)65.14
Total additional capital expenditure (excluding un-discharged liabilities)		**26114.04**	**14253.51**	**3615.80**	**1641.04**	**2519.35**	**48143.73**
Discharge of Liabilities	14(1)(i), 14(3)(v) & 14(3)(vi)	5144.40	1069.90	904.33	1060.27	807.55	8986.46
Total additional capital expenditure claimed		**31258.49**	**15323.39**	**4520.13**	**2701.31**	**3326.90**	**57130.22**

13. It is observed that there is variation in the additional capital expenditure allowed by order dated 1.5.2017 in Review Petition No. 50/RP/2016 (in Petition No. 294/GT/2014) read with order dated 29.7.2016 in Petition No. 294/GT/2014 and those claimed by the Petitioner in the present petition. This variation is on account of (i) the difference in the additional capital expenditure allowed by order dated 1.5.2017 in Review Petition No. 50/RP/2016 (in Petition No. 294/GT/2014) read with order dated 29.7.2016 in Petition No. 294/GT/2014 that was on projection basis, whereas, the additional capital expenditure claimed in the present petition is on the basis of actual

capitalisation during the 2014-19 tariff period and (ii) due to the new items/ assets being claimed in the present petition. It is also observed that the Petitioner has claimed IDC as part of the actual additional capital expenditure incurred during the years 2014-15 and 2015-16. We now examine the item-wise actual additional capital expenditure claimed by the Petitioner for the 2014-19 tariff period.

(A) Additional capital expenditure towards allowed works

(a) Main Plant and Offsite including Plant Roads and Residential Quarters / Township

14. The additional capital expenditure with respect to Main Plant and Off-site including Plant Roads and Residential Quarters/ Township admitted by the Commission vide order dated 1.5.2017 in Review Petition No. 50/RP/2016 (in Petition No. 294/GT/2014) read with order dated 29.7.2016 in Petition No. 294/GT/2014 and claimed by the Petitioner (on cash basis) is as under:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**Total**
Main Plant & Offsite including Plant Roads						
Approved on Projection basis	3752.88	0.00	0.00	0.00	0.00	3752.88
Claimed in present petition	4213.65	4547.62	1303.60	580.42	123.17	10768.46
Residential Quarters/Township						
Approved on Projection basis	3557.32	0.00	0.00	0.00	0.00	3557.32
Claimed in present petition	1802.49	3038.20	46.32	0.00	0.00	4887.01

15. Against the projected additional capitalization of Rs.3752.88 lakh and Rs.3557.32 lakh allowed in 2014-15 for the work of Main plant & Offsite including Plant Roads and Residential quarters/ Township respectively, the Petitioner has claimed total actual additional capital expenditure of Rs.10768.46 lakh and Rs.4887.01 lakh respectively, during the 2014-19 tariff period, under Regulation 14(1)(ii) read with Regulation 3(13) and Regulation 54 of the 2014 Tariff Regulations (Power to relax). In

justification of the same, the Petitioner has submitted that these are mainly civil works forming part of the original scope of work, which were severely affected by HUD-HUD cyclone and could be capitalized only after the cut-off date of the generating station. The Petitioner has, therefore, prayed to consider the effect of HUD-HUD cyclone, as an 'Act of God' and as a 'Force Majeure' event and to allow the additional capitalization of these items/ works under Regulation 54 of the 2014 Tariff Regulations.

16. The Respondent, TANGEDCO has submitted that the Commission vide its order dated 29.7.2016 in Petition No. 294/GT/2014 had allowed additional capitalisation of Rs.11955.11 lakh towards these two items up to the cut-off date (31.3.2015), but the Petitioner has claimed additional capital expenditure of Rs.18298 lakh towards buildings for the entire tariff period. The Respondent has, therefore, submitted that the additional capital expenditure claimed by the Petitioner beyond the cut-off date may be disallowed and the Petitioner may be directed to meet the same through the O&M expenses allowed in terms of the 2014 Tariff Regulations. The Petitioner, has, however, clarified that it has filed appeal (Appeal No. 25 of 2017) before the Appellate Tribunal for Electricity (in short 'APTEL") and the same is pending. Similar submission has been made by the Respondent, KSEBL. The Petitioner in its rejoinder has submitted that some part of the work was completed before the cut-off date and the remaining work could only be completed after the cut-off date, due to HUD-HUD cyclone.

17. The submissions of the parties have been considered. The Commission in its orders dated 29.7.2016 in Petition No. 294/GT/2014 and order dated 1.5.2017 and Review Petition No. 50/RP/2016 had allowed the additional capitalization of Rs.3752.88 lakh in 2014-15, but disallowed the additional capital expenditure of Rs.900 lakh and Rs.200 lakh in 2015-16 towards the Main Plant & Offsite including Plant Roads and

Construction of Residential Quarters/ Township respectively observing that the claim of the Petitioner for 2015-16 was being disallowed on account of the laxity on the part of the Petitioner in coordinating with the contractors/ agency. The relevant portion of the order dated 1.5.2017 in Review Petition No. 50/RP/2016 is extracted below:

> "*7. The petitioner has submitted that while the Commission had condoned the delay in achieving COD on account of heavy rainfall and cyclones during the year 2010, the relief was denied to the petitioner in the order dated 29.7.2016 when such cyclones had occurred during the years 2013 and 2014 after the COD but prior to the cut-off date. It has also submitted that there was no laxity on part of the petitioner in coordination with its contractors to get the work completed within the scheduled completion period and the Commission has erred in ignoring the various letters placed on record by the petitioner wherein it had repeatedly request to its contractors to expedite the work at site. This submission of the petitioner is not acceptable. The extension of cut-off date as considered in order dated 26.9.2012 was based on the facts and circumstances stated by the petitioner therein and cannot be a ground for granting relief in the instant petition. In fact, the Commission in this order dated 29.7.2016 had considered the impact of cyclone Phalin in October 2013 and cyclone Hudhud in October 2014 and had observed that these natural calamities cannot be said to have impacted the work since the process of cancellation of the contract due to failure of the contract M/s ERA and awarding the contract to other agency had begun only during the period from January 2014 to March 2014. The Commission had also examined the various correspondences between the petitioner and the contractor including the letters referred to by the petitioner and had observed that there has been laxity on the part of the petitioner in coordinating with the contractors/ agency for completion of the said works by M/s ERA for which the petitioner was responsible. Hence the contention of the petitioner that the Commission had not considered the letters between the parties for grant of relief is baseless and arbitrary. Accordingly, the Commission after considering the submissions of the petitioner had by a conscious decision rejected the prayer of the petitioner for extending the cut-off date of the generating station and thereby the claim for capitalization of Rs. 900.00 lakh in 2015-16 was also not allowed. In this circumstances, we find no reason to review the order dated 29.7.2016 on this ground. The petitioner has sought to reargue the case on merits and the same is not permissible in review. In our considered view, no valid ground exists for review of order dated 29.7.2016 and hence the review sought for by the petitioner on this ground fails*."

18. It is evident from above that the claim of the Petitioner for this asset/work, beyond the cut-off date, had already been rejected by order dated 1.5.2017 in Review Petition No. 50/RP/2016 and, hence, it cannot be reviewed in this order. However, the actual additional capital expenditure claimed by the Petitioner for Rs.4213.65 lakh for Main Plant & Offsite including Plant Roads and Rs.1802.49 lakh for Residential Quarters/ Township in 2014-15, claimed by the Petitioner in 2014-15 is allowed as the same is within the cut-off date of the generating station.

19. It is observed that the Petitioner has claimed total un-discharged liability of Rs.785.79 lakh during the 2014-19 tariff period (i.e. Rs.219.30 lakh in 2014-15, Rs.337.74 lakh in 2015-16, Rs.160.84 lakh in 2016-17, Rs.63.09 lakh in 2017-18 and Rs.4.81 lakh in 2018-19) towards Main Plant & Offsite including Plant Roads and Rs.152.92 lakh in 2014-17 (i.e. Rs.63.92 lakh in 2014-15, Rs.36.15 lakh in 2015-16 and Rs.52.85 lakh in 2016-17) towards Residential Quarters/ Township. As the actual additional capital expenditure claimed by the Petitioner has been allowed only up to the cut-off date of the generating station, the un-discharged liability claimed by the Petitioner beyond the cut-off date has not been allowed. Thus, the additional capital expenditure claimed and allowed for Main Plant & Offsite including Plant Roads and Residential Quarters/ Township is summarised as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Main Plant & Offsite including Plant Roads						
Claimed	4213.65	4547.62	1303.60	580.42	123.17	10768.46
Allowed	4213.65	0.00	0.00	0.00	0.00	**4213.65**
Residential Quarters/Township						
Claimed	1802.49	3038.20	46.32	0.00	0.00	4887.01
Allowed	1802.49	0.00	0.00	0.00	0.00	**1802.49**

(b) Steam Generator

20. The projected additional capital expenditure towards Steam Generator allowed vide order dated 1.5.2017 in Review Petition No. 50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014 and claimed by the Petitioner (on cash basis) under Regulation 14(1)(ii) read with Regulation 3(13) and Regulation 54 (Power to relax) of the 2014 Tariff Regulations is as follows:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Steam Generator						
Approved on Projection basis	416.67	0.00	0.00	0.00	0.00	416.67
Claimed in present petition	772.00	10.12	0.00	0.00	0.00	782.12

21. The Petitioner has submitted that these are mainly civil works forming part of the original scope of work which were severely affected by HUD-HUD cyclone and could get capitalized only after the cut-off date. The Petitioner has, therefore, prayed to consider the effect of HUD-HUD cyclone, as an "Act of God" and as a 'Force Majeure' event and allow the capitalization of this work under Regulation 54 of the 2014 Tariff Regulations. The Respondent, KSEBL has submitted that the claim of the Petitioner for Rs.782.12 lakh may be disallowed, as no justification has been provided for the huge increase of 88% as against the projected additional capitalisation of Rs.416.67 lakh allowed by order dated 29.7.2016 in Petition No. 294/GT/2014. The Petitioner has clarified that the additional capital expenditure claimed has been approved by order dated 29.7.2016 in Petition No. 294/GT/2014. It has further submitted that the projections made were based upon the estimated capitalization. However, the final capitalization is based on the actual expenditure incurred and capitalized along with expenditure already incurred lying in the capital work in progress (CWIP), if any.

22. The submissions of the parties have been considered. It is observed that the actual additional capital expenditure of Rs.772.00 lakh in 2014-15 for Steam Generator is in excess of the projected additional capitalization of Rs.416.67 lakh allowed vide order dated 1.5.2017 in Review Petition No. 50/RP/2016 read with order dated 29.7.2016 in Petition No.294/GT/2014. However, as the actual additional capital expenditure of Rs.772 lakh in 2014-15 has been incurred within the cut-off date of the

generating station, the same is allowed. As regards the actual additional capital expenditure of Rs.10.12 lakh claimed in 2015-16, i.e. beyond the cut-off date, the same is disallowed in terms of the observations (quoted in earlier part of this order) of the Commission in order dated 1.5.2017 in Review Petition No. 50/RP/2016, wherein, the claims of the Petitioner beyond the cut-off date was disallowed.

23. It is further observed that the Petitioner has claimed un-discharged liability of Rs.33.05 lakh in 2014-15 towards the said work. As the additional capital expenditure claimed by the Petitioner has been allowed only up to the cut-off date, the un-discharged liability claimed beyond the cut-off date has not been allowed. Thus, the actual additional capital expenditure claimed and allowed for Steam Generator is summarised below:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Steam Generator						
Claimed	772.00	10.12	0.00	0.00	0.00	782.12
Allowed	772.00	0.00	0.00	0.00	0.00	772.00

(c) Turbine Generator Work

24. The projected additional capital expenditure for Turbine Generator allowed vide order dated 1.5.2017 in Review Petition No.50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014 and claimed by the Petitioner (on cash basis) under Regulation 14(1)(ii) read with Regulation 3(13) and Regulation 54 of the 2014 Tariff Regulations (Power to relax), is as follows:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Turbine Generator Work						
Approved on Projection basis	2513.11	0.00	0.00	0.00	0.00	2513.11
Claimed in present petition	4575.22	432.08	0.00	0.00	0.00	5007.30

25. In justification of the same, the Petitioner has submitted that these are mainly civil works relating to original scope which were severely affected by HUD-HUD cyclone and could be capitalized only after the cut-off date. The Petitioner has prayed that the Commission may consider the effect of HUD-HUD cyclone, an “Act of God” as Force Majeure event and allow the additional capitalization of the expenditure under Regulation 54 of the 2014 Tariff Regulations. The Respondent, KSEBL has submitted that the claim of the Petitioner for Rs.5007.30 lakh may be disallowed as no justification has been provided for the huge increase of 99.24% as against the additional capitalisation of Rs.2513.11 lakh allowed by order dated 29.7.2016 in Petition No. 294/GT/2014. The Petitioner has clarified that the additional capital expenditure claimed had been admitted by order dated 29.7.2016 in Petition No. 294/GT/2014. It has further submitted that the projections made were based upon the estimated capitalization. However, final capitalization is based on the actual expenditure incurred and capitalized along with expenditure already incurred lying in the capital work in progress (CWIP), if any.

26. The submissions of the parties have been considered. It is observed that the claim of the Petitioner for actual additional capital expenditure of Rs.4575.22 lakh in 2014-15 is higher than the projected additional capital expenditure of Rs.2513.11 lakh allowed by order dated 1.5.2017 in Review Petition No. 50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014. As the additional capital expenditure claimed by the Petitioner for Rs.4575.22 lakh in 2014-15, is within the cut-off date, the same is allowed. As regards the actual additional capital expenditure of Rs.432.08 lakh claimed in 2015-16, i.e. beyond the cut-off date, the same is disallowed in terms of the observations (quoted in earlier part of this order) of the Commission in order dated

1.5.2017 in Review Petition No. 50/RP/2016, wherein, the claims of the Petitioner beyond the cut-off date had been disallowed.

27. It is observed that the Petitioner has claimed un-discharged liability of Rs.808.26 lakh (Rs.693.92 lakh in 2014-15 and Rs.114.34 lakh in 2015-16) in respect of the said work. As the additional capital expenditure claimed by the Petitioner has been allowed only up to the cut-off date, the un-discharged liabilities claimed beyond the cut-off date have not been allowed. Thus, the actual additional capital expenditure clamed and allowed for Turbine Generator is summarised below:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**Total**
Turbine Generator						
Claimed	4575.22	432.08	0.00	0.00	0.00	5007.30
Allowed	4575.22	0.00	0.00	0.00	0.00	4575.22

(d) Off-site works

28. The projected additional capital expenditure for Off-site works admitted by order dated 1.5.2017 in Review Petition No. 50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014 and claimed by the Petitioner (on cash basis) under Regulation 14(1)(ii) read with Regulation 3(13) and Regulation 54 (Power to relax) of the 2014 Tariff Regulations, is as follows:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**Total**
Offsite Works						
Approved on Projection basis	346.24	0.00	0.00	0.00	0.00	346.24
Claimed in present petition	427.22	70.16	0.00	0.00	0.00	497.38

29. The Petitioner has clarified that the projections made were based upon the estimated capitalization. However, the variation in final capitalization is based on the actual expenditure incurred and capitalized along with expenditure already incurred lying in the CWIP, if any.

30. The submissions of the Petitioner have been considered. It is observed that the claim of the Petitioner for actual additional capital expenditure of Rs.427.22 lakh in 2014-15 is higher than the projected additional capital expenditure of Rs.346.24 lakh allowed by order dated 1.5.2017 in Review Petition No. 50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014. As the additional capital expenditure claimed by the Petitioner for Rs.427.22 lakh in 2014-15 is within the cut-off date, the same is allowed. As regards the actual additional capital expenditure of Rs.346.24 lakh claimed in 2015-16, i.e. beyond the cut-off date, the same is disallowed in terms of the observations (as quoted in earlier part of this order) of the Commission in order dated 1.5.2017 in Review Petition No. 50/RP/2016, wherein, the claims of the Petitioner beyond the cut-off date was disallowed.

31. It is observed that the Petitioner has claimed un-discharged liability of Rs.258.17 lakh during 2014-16 (i.e. Rs.246.13 lakh in 2014-15 and Rs.12.04 lakh in 2015-16) for the said work. As the additional capital expenditure claimed by the Petitioner has been allowed only up to the cut-off date, the un-discharged liability claimed by the Petitioner beyond the cut-off date has been disallowed. Thus, the additional capital expenditure claimed and allowed for Off-site works is as under:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**Total**
Off-site works						
Claimed	427.22	70.16	0.00	0.00	0.00	497.38
Allowed	427.22	0.00	0.00	0.00	0.00	427.22

(e) Other works

32. It is observed that the Commission vide order dated 1.5.2017 in Review Petition No.50/RP/2016 had not allowed any projected additional capitalization under the head ‘Other works’ in 2014-15. However, the Petitioner has claimed total actual additional

capital expenditure of Rs.4121.86 lakh during 2014-19 (i.e. Rs.1612.12 lakh in 2014-15, Rs.1351.21 lakh in 2015-16, Rs.657.80 lakh in 2016-17, Rs.298.31 lakh in 2017-18 and Rs.202.42 lakh in 2018-19) under the head 'Other works' in terms of Regulation 14(1)(ii) read with Regulation 3(13) and Regulation 54 (Power to relax) of the 2014 Tariff Regulations. In justification of the same, the Petitioner has submitted that these are mainly civil and other work relating to original scope which were severely affected by HUD-HUD cyclone and could be capitalized only after the cut-off date. The Petitioner has submitted that the Commission may consider the effect of HUD-HUD cyclone, as an "Act of God" as Force Majeure event and allow the additional capitalization under Regulation 54 of the 2014 Tariff Regulations.

33. The Respondent, TANGEDCO has submitted that in order dated 29.7.2016 in Petition No. 294/GT/2014, the additional capital expenditure claimed in 2014-15 was disallowed on the ground of laxity on the part of the Petitioner in coordinating with the contractor/ agency for completion of the work prior to scheduled date of completion. The Respondent has accordingly prayed that the claim of the Petitioner may be disallowed.

34. The submissions have been considered. It is observed that in order dated 29.7.2016 in Petition No. 294/GT/2014, the projected additional capital expenditure of Rs.2441.02 lakh in 2014-15 as claimed by the Petitioner for 'Other Works', was disallowed in the absence of any detailed break-up. The Petitioner was, however, granted liberty to claim the same, with proper justification and supporting documents at the time of truing-up of tariff. The relevant portion of the order is extracted below:

> "*The petitioner has claimed projected additional capital expenditure of Rs.2441.02 lakh towards Other works in 2014-15 under Regulation 14(1)(ii) of the 2014 Tariff Regulations. The petitioner has not submitted the detailed break-up of the works under this head. In the absence of this, the claim for additional capitalization has not been considered. The petitioner shall be at liberty to claim the same with proper justification and relevant documents in support of its claim for capitalization at the time of revision of tariff based on truing-up in terms of Regulation 8 of the 2014 Tariff Regulations.*"

35. The Petitioner has furnished the detailed break-up of the claim under 'Other works' in 2014-15 as follows:

(Rs. in lakh)

Sl. No.	Head of Work/ Equipment	Party Name	Accrual basis	Un-discharged liability	Cash basis
1	Control and Instrumentation	Emerson Process Management (India) and other	88.84	30.19	58.64
2	LP (Station) Piping package	Subhash Projects and Marketing Limited and other	1561.52	13.07	1548.45
3	Ambient Air Quality Monitoring System	Chemtrols Industries Limited	0.34	0.00	0.34
4	LAN networking system	Unitech systems and other	4.23	1.03	3.20
5	Power System	ELBE Engineering Services	1.91	0.43	1.48
		Total	**1656.84**	**44.72**	**1612.12**

36. It is evident from the details/ justification furnished by the Petitioner that some of the claims for additional capital expenditure is beyond the cut-off date (31.3.2015) of the generating station. Based on the details/ justification furnished by the Petitioner, we allow the total actual additional capitalization of Rs.1612.12 lakh for 'Other works' in 2014-15. As regards the total actual additional capital expenditure of Rs.2509.74 lakh claimed during the period 2015-19 for 'Other works', the Petitioner has not furnished any justification or the break-up details. In the absence of break-up and lack of justification, the total actual additional capital expenditure of Rs.2509.74 lakh claimed by the Petitioner for 'Other Works' during the period 2015-19 has been disallowed.

37. It is further observed that the Petitioner has claimed un-discharged liabilities of Rs.406.08 lakh during 2014-19 (i.e. Rs.44.72 lakh in 2014-15, Rs.89.14 lakh in 2015-16, Rs.130.14 lakh in 2016-17, Rs.33.86 lakh in 2017-18 and Rs.108.22 lakh in 2018-19) for the said work. As the additional capital expenditure claimed by the Petitioner has been allowed only up to the cut-off date (31.3.2015), the un-discharged liability claimed

by the Petitioner beyond the cut-off date has been disallowed. Thus, the un-discharged liability of Rs.44.72 lakh, as claimed by the Petitioner in 2014-15, has only been allowed.

(f) Ash Handling Plant (including DAES System) and Ash Dyke Raising works

38. The projected additional capital expenditure for Ash handling Plant (including DAES system) and Ash Dyke raising works admitted by the Commission vide order dated 1.5.2017 in Review Petition No. 50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014 and claimed by the Petitioner (on cash basis), in the present petition, is as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Ash Handling Plant (including DAES system)						
Approved on Projection basis	2701.97	617.88	0.00	0.00	0.00	3319.85
Claimed in present petition	3176.89	9.87	123.29	401.29	20.53	3731.87
Ash Dyke raising works						
Approved on Projection basis	2626.43	2877.00	2200.00	2640.00	1000.00	11343.43
Claimed in present petition	1499.51	2119.25	1216.17	253.50	2443.95	7532.38

39. Against the total projected additional capitalization of Rs.3319.85 lakh for Ash handling plant (including DAES system) and Rs.11343.43 lakh for Ash Dyke raising works allowed under Regulation 14(1)(ii) and Regulation 14(3)(iv) of the 2014 Tariff Regulations respectively, vide order dated 1.5.2017 in Review Petition No. 50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014, the Petitioner has claimed total actual additional capital expenditure of Rs.3731.87 lakh (Rs.3176.89 lakh in 2014-15, Rs.9.87 lakh in 2015-16, Rs.123.29 lakh in 2016-17, Rs.401.29 lakh in 2017-18 and Rs.20.53 lakh in 2018-19) for Ash handling plant (including DAES system) under Regulation 14(1)(ii) of the 2014 Tariff Regulations and Rs.7532.38 lakh (Rs.1499.51 lakh in 2014-15, Rs.2119.25 lakh in 2015-16, Rs.1216.17 lakh in 2016-17, Rs.253.50 lakh in 2017-18 and Rs.2443.95 lakh in 2018-19) for Ash Dyke raising works under

Regulation 14(3)(iv) of the 2014 Tariff Regulations. The Petitioner has submitted that out of Rs.11264.25 lakh (Rs.3731.87 lakh for Ash handling plant including DAES system and Rs.7532.38 lakh for Ash dyke raising works), the additional expenditure of Rs.4676.40 lakh (Rs.3176.89 lakh + Rs.1499.51 lakh) was capitalized in 2014-15 and the balance amount was capitalized in the subsequent years.

40. The Commission, in the order dated 29.7.2016 in Petition No. 294/GT/2014, had directed the Petitioner to submit the detailed break-up of the activities along with the cost incurred for each work under raising of ash dyke works, the estimated expenditure envisaged for ash handling system/ ash dyke raising within the original scope of work and the actual additional capital expenditure incurred as on COD of the generating station, and the actual/ projected expenditure from COD till 2018-19, at the time of truing up of tariff. The actual additional capital expenditure incurred for Ash handling/ Ash related works till 31.3.2019, as furnished by the Petitioner is as under:

(Rs. in crore)

Description of work	**Regulation**	**Amount capitalized**	**Tariff Period**
Ash handling system and ash disposal area development works		131.50	Till Station COD (i.e. 30.9.2012)
Ash Dyke starter, ash water recirculation system and ash related works	9(1)(ii)	7.08	From Station COD till 31.3.2014
Ash pond raising and ash handling related works	14(1)(ii) and 14(3)(iv)	112.62	2014-19
Total		**251.20**	

41. The Petitioner has further submitted that the cost of civil material has increased exponentially over a period of last decade. It has also submitted that the cost of coarse aggregates, sand, labour costs etc. has also increased significantly and, therefore, it will not be justified to link the cost of such special types of civil materials/ labour skills required for ash dyke related works, with either CPI or the weighted average of WPI/CPI, or any other index, as none of these indices reflect the escalation in such types of

materials, clubbed with ever increasing labour costs. Thus, the Petitioner, for the purpose of comparison for the approved cost at the time of approval, has escalated the cost, with an escalation factor of 15% during the intervening period. It is observed that the Petitioner has not furnished any reason for considering the escalation factor of 15%, but has submitted that the escalated cost would have been much higher than the expenditure incurred/ projected to be incurred, up to the 2014-19 tariff period, and that the works claimed is within the original scope of works and may be allowed.

42. The matter has been considered. As regards Ash handling plant, the Petitioner, in Form 5B of Petition No.303/GT/2014 (vide affidavit dated 14.8.2014) wherein tariff for 2009-14 period was determined, had submitted the original estimated cost as Rs.15475.00 lakh. In Form 5B of the said petition, the Petitioner had also claimed additional capital expenditure of Rs.9553.59 lakh up to CoD of the generating station and the actual additional capital expenditure of Rs.1233.70 lakh from CoD of the generating station till 31.3.2014 and the same was allowed by order dated 2.11.2015 in Petition No.303/GT/2014. Therefore, the total additional capital expenditure allowed for Ash handling plant till 31.3.2014 was Rs.10787.29 lakh (Rs.9553.59 + Rs.1233.70 lakh). In this petition, the Petitioner has claimed total actual additional capital expenditure of Rs.3731.87 lakh for Ash handling plant during the 2014-19 tariff period. As the total additional capital expenditure of Rs.14519.16 lakh (Rs.10787.29 lakh allowed vide order dated 2.11.2015 in Petition No. 303/GT/2014 + Rs.3731.87 lakh claimed in this petition) till 31.3.2019 is within the Investment Approval cost of Rs.15475.00 lakh, the additional capital expenditure as claimed by the Petitioner for Ash handling plant (including DAES system) during the 2014-19 tariff period, is allowed under Regulation 14(1)(ii) and 14(3)(iv) of the 2014 Tariff Regulations.

43. As regards Ash Dyke raising works, the Petitioner, in Form 5B of Petition No. 303/GT/2014 wherein tariff for 2009-14 period was determined, had submitted the original estimate cost for Ash Dyke raising works as Rs.10015.00 lakh. In Form 5B of the said petition, the Petitioner had claimed additional capital expenditure of Rs.2479.09 lakh up to CoD of the generating station and the same was allowed by order dated 2.11.2015 in Petition No. 303/GT/2014. The Petitioner, in the present petition, has claimed total actual capital expenditure of Rs.7532.38 lakh (on cash basis) during the 2014-19 tariff period. Therefore, the total additional capital expenditure claimed by the Petitioner till 31.3.2019 is Rs.10011.47 lakh (Rs.7532.38 lakh claimed in this petition + Rs.2479.09 lakh allowed vide order dated 2.11.2015 in Petition No. 303/GT/2014) which is within the Investment Approval amount of Rs.10015.00 lakh. Thus, the total additional capital expenditure as claimed by the Petitioner for Ash Dyke raising works for the 2014-19 tariff period is allowed under Regulation 14(1)(ii) and Regulation 14(3)(iv) of the 2014 Tariff Regulations.

44. It is observed that the Petitioner has claimed un-discharged liability of Rs.536.35 lakh during 2014-19 (i.e. Rs.530.16 lakh in 2014-15, Rs.0.15 lakh in 2016-17, Rs.4.37 lakh in 2017-18 and Rs.1.67 lakh in 2018-19) towards Ash Handling Plant (including DAES system) and Rs.288.23 lakh during 2014-19 (i.e. Rs.166.65 lakh in 2014-15, Rs.49.20 lakh in 2015-16, Rs.20.32 in 2016-17, Rs.51.53 lakh in 2017-18 and Rs.0.52 lakh in 2018-19) towards Ash Dyke raising works. As the total actual additional capital expenditure claimed by the Petitioner has been allowed, as stated in the previous paragraphs, the un-discharged liabilities claimed by the Petitioner have also been allowed.

(g) Railway Siding

45. The projected additional capital expenditure for Railway siding admitted by order dated 1.5.2017 in Review Petition No. 50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014 and claimed by the Petitioner (on cash basis) in the present petition under Regulations 14(1)(ii), 14(1)(iii) and 14(1)(iv) of the 2014 Tariff Regulations are as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Railway siding						
Approved on Projection basis	2431.99	0.00	0.00	0.00	0.00	2431.99
Claimed in present petition	1655.20	1491.64	609.83	411.75	0.00	4168.42

46. In justification of the same, the Petitioner has submitted that the projected additional capital expenditure of Rs.2431.99 lakh in 2014-15 was allowed vide order dated 29.7.2016 in Petition No. 294/GT/2014 and order dated 1.5.2017 in Review Petition No. 50/RP/2016, as the said work formed part of the original scope of work of the project. It has submitted that the additional capital expenditure of Rs.733.51 lakh claimed for 2015-16 was, however, disallowed by the said order, on the ground that the revenue collected from the sale of fly ash/ fly ash based products was required to be utilized by the Petitioner, to meet the additional capital expenditure incurred for transportation of dry ash, through railway rakes, to nearby cement industries for fulfilling the obligations of 100% ash utilization as per MoEF notification dated 3.11.2009. The Petitioner has further submitted that out of the additional capital expenditure of Rs.2431.99 lakh allowed in 2014-15, part works were capitalized within the cut-off date (till 31.3.2015) and the balance work was capitalized subsequently, due to severe HUD-HUD cyclone. The Petitioner has also submitted that it has not earned any revenue, on net basis, from the sale of fly ash and has, accordingly, prayed that the actual additional

capital expenditure of Rs.4168.42 lakh claimed for the period 2014-19, may be allowed in exercise of the power to relax, under Regulation 54 of the 2014 Tariff Regulations.

47. The Respondent, TANGEDCO has stated that the additional capital expenditure claimed beyond the cut-off date may not be allowed. The Respondent, KSEBL has submitted that the claim during the period 2015-19 had been disallowed earlier and, therefore, it would not be prudent to allow the said expenditure now. The Petitioner has, however, clarified that MoEF&CC notification dated 27.1.2016 had been declared as 'Change in law' by order dated 5.11.2018 in Petition No. 172/MP/2016. The Petitioner has further submitted that this is a planned work, which has been taken up only after completion of the dry ash evacuation system and the balance work of Signalling and Telecom system associated with the Railway siding, was taken up only after the completion of the Rail line work.

48. The submissions have been considered. In order dated 1.5.2017 in Review Petition No. 50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014, the Petitioner was directed to utilize the revenue collected from sale of fly ash/ fly ash based products, as per MoEF notification dated 3.11.2009, for the Railway Siding work. It is observed from the following table submitted by the Petitioner that it has not earned any revenue, on net basis, from the sale of fly ash:

(Rs. in lakh)

		2016-17	**2017-18**	**2018-19**	**Total expenditure claimed**
Expenditure towards fly ash transportation	(A)	-	-	5081.07	5081.07
Revenue earned from sale of fly ash	(B)	40.17	30.74	102.77	173.68
Net additional O&M expenses claimed*	(C = B- A)	(-) 40.17	(-) 30.74	4978.30	4907.39
Net additional O&M expenses claimed for the generating station	(D = C/2)	-	-	-	2453.69

*****For Simhadri- I and II combined (O & M considered in the ratio of capacity of Simhadri Stages- I and II)

49. It is observed that the Petitioner has furnished the Auditor certificate in support of the fly ash transportation charges, but has failed to furnish other additional information as sought vide order dated 5.11.2018 in Petition No. 172/MP/2016. It is pertinent to mention that the work of 'Railway Siding' cannot be considered as a change in law event or for compliance to any existing law to allow the additional capital expenditure incurred by the Petitioner under Regulation 14(3)(ii) of the 2014 Tariff Regulations.

50. It is observed that the Petitioner has also claimed un-discharged liability of Rs.161.33 lakh (Rs.18.04 lakh in 2014-15, Rs.7.68 lakh in 2015-16, Rs.37.81 lakh in 2016-17 and Rs.97.80 lakh in 2017-18) for the said work. As the additional capital expenditure claimed by the Petitioner has been allowed only up to the celling, the un-discharged liability claimed by the Petitioner beyond the ceiling has been disallowed. Therefore, the total actual additional capital expenditure admitted by order dated 1.5.2017 in Review Petition No. 50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014 is allowed to be capitalised during the years 2014-15 and 2015-16 under Regulations 14(1)(ii), 14(3)(ii) and 14(3)(iv) of the 2014 Tariff Regulations as follows:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**Total**
Railway sliding						
Claimed	1655.20	1491.64	609.83	411.75	0.00	4168.42
Allowed	1655.20	776.79	0.00	0.00	0.00	2431.99

(h) Office Furniture and Furnishing and IT Equipment

51. The additional capital expenditure with respect to Office Furniture and Furnishing and IT Equipment allowed by order dated 1.5.2017 in Review Petition No. 50/RP/ 2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014 and claimed by the Petitioner (on cash basis), in the present petition under Regulation 14(1)(ii) read with

Regulation 3(13) and Regulation 54 (Power to relax) of the 2014 Tariff Regulations, is as follows:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Office Furniture and Furnishing						
Approved on Projection basis	150.00	0.00	0.00	0.00	0.00	150.00
Claimed in present petition	94.49	0.00	0.00	0.00	0.00	94.49
IT Equipment						
Approved on Projection basis	153.87	0.00	0.00	0.00	0.00	153.87
Claimed in present petition	99.41	0.00	0.00	0.00	0.00	99.41

52. In justification of the same, the Petitioner has submitted that the actual additional capital expenditure for these works, which are within the original scope of work, completed within the cut-off date and have already been approved, may be allowed.

53. We notice that the claim of the Petitioner for Office Furniture and Furnishing and IT Equipment is a deferred work which has been completed within the cut-off date and the same has been allowed vide order dated 1.5.2017 in Petition No. 50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014. Accordingly, the actual additional capital expenditure of Rs.94.49 lakh for Office Furniture and Furnishing and Rs.99.41 lakh for IT equipment claimed in 2014-15 is allowed. It is observed that the Petitioner has claimed un-discharged liability of Rs.32.33 lakh during 2014-15 towards Office Furniture and Furnishing and Rs.16.60 lakh towards IT Equipment. As the additional capital expenditure claimed by the Petitioner has been allowed, the un-discharged liability claimed by the Petitioner has also been allowed. We, however, make it clear that in case any further additional capital expenditure is claimed under the same heads during the subsequent tariff period(s), resulting in the total additional capital expenditure under this head exceeding the overall approved amount, the Petitioner shall furnish detailed justification for such cost escalation along with justification that such

escalation, if any, was not due to delay on the part of the Petitioner in the execution of this work.

(i) Office Equipment

54. The projected additional capital expenditure for Office equipment admitted by order dated 1.5.2017 in Review Petition No. 50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014 and claimed by the Petitioner (on cash basis) in the present petition, under Regulation 14(1)(ii) read with Regulation 3(13) and Regulation 54 (Power to relax) of the 2014 Tariff Regulations, is as under:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**Total**
Office Equipment						
Approved on Projection basis	100.00	0.00	0.00	0.00	0.00	100.00
Claimed in present petition	142.23	0.00	0.00	0.00	0.00	142.23

55. In justification of the same, the Petitioner has submitted that the actual additional capital expenditure for these works, which are within the original scope of work, completed within the cut-off date and have already been approved, may be allowed.

56. It is observed that the claim of the Petitioner for Rs.142.23 lakh in 2014-15 for Office equipment is more than the additional capital expenditure allowed (Rs.100.00 lakh) vide order dated 1.5.2017 in Review Petition No. 50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014. As the actual additional capital expenditure of Rs.142.23 lakh claimed in 2014-15 has been incurred within the cut-off date of the generating station, the same is allowed.

57. It is observed that the Petitioner has claimed un-discharged liability of Rs.10.09 lakh in 2014-15 for the said work. As the additional capital expenditure claimed by the Petitioner has been allowed, the un-discharged liability claimed by the Petitioner in

2014-15 has also been allowed. We, however, make it clear that in case any further additional capital expenditure is claimed under the same heads during the subsequent tariff period(s), resulting in the total additional capital expenditure under this head exceeding the overall approved amount, the Petitioner shall furnish detailed justification for such cost escalation along with justification that such escalation, if any, was not due to delay on the part of the Petitioner in the execution of this work.

(j) Coal Handling Plant

58. The projected additional capital expenditure for Coal Handling Plant (CHP) allowed vide order dated 1.5.2017 in Review Petition No. 50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014 and claimed by the Petitioner (on cash basis) under Regulation 14(1)(ii) read with Regulation 3(13) and Regulation 54 of the 2014 Tariff Regulations (Power to relax), is as follows:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**Total**
Coal Handling Plant						
Approved on Projection basis	734.70	0.00	0.00	0.00	0.00	734.70
Claimed in present petition	1273.31	19.85	0.00	0.00	0.00	1293.16

59. In justification of the same, the Petitioner has submitted that these are mainly civil works relating to original scope which were severely affected by HUD-HUD cyclone and could only be capitalized after the cut-off date. The Petitioner has prayed that the Commission may consider the effect of HUD-HUD cyclone, an “Act of God” as Force Majeure event and allow the additional capitalization under Regulation 54 (power to relax) of the 2014 Tariff Regulations. The Respondent, KSEBL has submitted that the Commission may disallow the additional capital expenditure claimed by the Petitioner, as no justification has been provided for such huge increase of 76% in the additional capital expenditure claimed by the Petitioner.

60. The Petitioner has submitted that the projections made were based upon the estimated capitalization. However, the final capitalization is based on the actual expenditure incurred and capitalized along with expenditure already incurred lying in the capital work in progress (CWIP), if any.

61. The submissions of the parties have been considered. It is observed that the Petitioner has claimed total actual additional capital expenditure of Rs.1293.16 lakh (Rs.1273.31 lakh in 2014-15 and Rs.19.85 lakh in 2015-16) which constitutes an increase of 76% as against the additional capitalization allowed (Rs.734.70 lakh) by order dated 1.5.2017. It is also observed that the Petitioner, in Form 5B of Petition No. 303/GT/2014 (petition for determination of tariff of the generating station for the 2009-14 tariff period) had furnished the original estimate cost for Coal Handling Plant as Rs.27794.00 lakh. Also, the Commission in its order dated 2.11.2015 in Petition No. 303/GT/2014, had allowed the actual additional capital expenditure of Rs.11915.90 lakh up to CoD and actual additional capital expenditure of Rs.1233.70 lakh, incurred for combined work of CHP and Ash Related Work, between CoD and 31.3.2014. Therefore, the total additional capital expenditure allowed for CHP till 31.3.2014 is Rs.13149.60 lakh. The Petitioner, in Petition No. 294/GT/2014, had projected additional capital expenditure of Rs.734.70 lakh in 2014-15, which was allowed vide order dated 29.7.2016. Therefore, the total additional capital expenditure allowed till 31.3.2019, on projection basis, vide order dated 29.7.2016 in Petition No. 294/GT/2014 is Rs.13884.30 lakh. Considering the actual additional capital expenditure of Rs.1293.16 lakh during 2014-16 claimed by the Petitioner, the cumulative expenditure works out to Rs.14442.76 lakh (Rs.13884.30 lakh + Rs.1293.16 lakh) and is within the investment approval of Rs.27794.00 lakh. As the final capitalization of the item/ asset is based on

the actual additional expenditure incurred and is within the approved investment approval, we, in exercise of the power under Regulation 54 (Power to relax) of the 2014 Tariff Regulations, allow the actual additional capital expenditure of Rs.1273.31 lakh and Rs.19.85 lakh in 2014-15 and 2015-16 respectively, as claimed by the Petitioner.

62. It is further observed that the Petitioner has claimed un-discharged liability of Rs.250.02 lakh (Rs.240.16 lakh in 2014-15 and Rs.9.86 lakh in 2015-16) for the said work. As the additional capital expenditure claimed by the Petitioner has been allowed, the un-discharged liability claimed by the Petitioner has also been allowed.

(k) Electrical Works

63. The projected additional capital expenditure for Electrical works admitted by the Commission vide order dated 1.5.2017 in Review Petition No. 50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014 and claimed by the Petitioner (on cash basis) under Regulation 14(1)(ii) read with Regulation 3(13) and Regulation 54 of the 2014 Tariff Regulations (Power to relax), is as follows:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Electrical works						
Approved on Projection basis	1737.30	0.00	0.00	0.00	0.00	1737.30
Claimed in present petition	702.20	312.24	0.00	0.00	0.00	1014.44

64. In justification of the same, the Petitioner has submitted that these are mainly civil works within the original scope which were severely affected by HUD-HUD cyclone and could be capitalized only after the cut-off date. The Petitioner has prayed that the Commission may consider the effect of HUD-HUD cyclone, an “Act of God” as Force Majeure event and allow the additional capitalization under Regulation 54 “power to relax" of the 2014 Tariff Regulations.

65. The Commission vide order dated 2.11.2015 in Petition No. 303/GT/2014 (petition for determination of tariff of the generating station for the 2009-14 tariff period) had allowed the actual additional capital expenditure of Rs.844.14 lakh incurred between CoD of the generating station and 31.3.2014. It is observed that the projected additional capital expenditure of Rs.1737.30 lakh in 2014-15 was approved by order dated 29.7.2016 in Petition No. 294/GT/2014. Therefore, the total additional capital expenditure allowed till 31.3.2019 is Rs.2581.44 lakh (Rs.844 lakh + Rs.1737.30 lakh). The Petitioner has claimed total actual additional capital expenditure of Rs.1014.44 lakh (Rs.702.20 lakh in 2014-15 and Rs.312.14 lakh in 2015-16), which is lesser than the additional capital expenditure admitted by order dated 29.7.2016 in Petition No. 294/GT/2014. As the additional expenditure claimed by the Petitioner till 31.3.2019, are mainly civil works within the original scope and is within the approved investment approval cost, we, in exercise of Regulation 54 (Power to relax) of the 2014 Tariff Regulations, allow the actual additional capital expenditure of Rs.702.20 lakh and Rs.312.24 lakh claimed by the Petitioner in 2014-15 and 2015-16 respectively.

66. It is observed that the Petitioner has claimed un-discharged liabilities of Rs.97.35 lakh during 2014-16 (i.e., Rs.43.07 lakh in 2014-15 and Rs.54.28 lakh in 2015-16) for the said work. As the additional capital expenditure claimed by the Petitioner has been allowed, the un-discharged liabilities claimed by the Petitioner have also been allowed.

(l) Miscellaneous T/S Work, Field hostel/ EDC/ ET Hostel and Roads, Bridges & Culverts

67. The additional capital expenditure for Miscellaneous T/S work, Field hostel/ EDC/ ET Hostel and Roads Bridges & Culverts allowed by order dated 1.5.2017 in Review Petition No. 50/RP/2016 (in Petition No. 294/GT/2014) read with order dated 29.7.2016 in Petition No. 294/GT/2014 and claimed by the Petitioner (on cash basis) is as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Miscellaneous T/S Work						
Approved on Projection basis	1091.50	0.00	0.00	0.00	0.00	1091.50
Claimed in present petition	149.36	43.00	0.00	0.00	0.00	192.36
Field hostel/EDC/ET Hostel						
Approved on Projection basis	630.93	0.00	0.00	0.00	0.00	630.93
Claimed in present petition	317.48	128.70	0.00	0.00	0.00	446.18
Roads Bridges & Culverts						
Approved on Projection basis	2922.48	0.00	0.00	0.00	0.00	2922.48
Claimed in present petition	1061.06	942.93	0.00	0.00	0.00	2003.99
Total additional capital expenditure approved for above						
Approved on Projection basis	4644.91	0.00	0.00	0.00	0.00	4644.91
Claimed in present petition	1527.90	1114.63	0.00	0.00	0.00	2642.53

68. Against the total projected additional capitalization of Rs.4644.91 lakh allowed in 2014-15 (i.e. Rs.1091.50 lakh for Miscellaneous T/S Work, Rs.630.93 lakh for Field hostel/ EDC/ ET Hostel and Rs.2922.48 lakh for Roads, Bridges & Culverts), under Regulation 14(1)(ii) of 2014 Tariff Regulations vide order dated 1.5.2017 in Review Petition No.50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014, the Petitioner has claimed total actual additional capital expenditure of Rs.2642.53 lakh [Rs.192.36 lakh (Rs.149.36 lakh + Rs.43.00 lakh) towards the Miscellaneous T/S Work, Rs.446.18 lakh (Rs.317.48 lakh and Rs.128.70 lakh) for Field hostel/ EDC/ ET Hostel and Rs.2003.99 lakh (Rs.1061.06 lakh + Rs.942.93 lakh) towards Roads, Bridges & Culverts] under Regulation 14(1)(ii) read with Regulation 3(13) and Regulation 54 (Power to Relax) of the 2014 Tariff Regulations. In justification of the same, the Petitioner has submitted that these are mainly civil works forming part of the original scope of work, which were severely affected by HUD-HUD cyclone and could be capitalized only after the cut-off date. The Petitioner has, therefore, prayed to consider

the effect of HUD-HUD cyclone, as an “Act of God” and as a ‘Force Majeure’ event and allow the additional capitalization for this work, under Regulation 54 of the 2014 Tariff Regulations.

69. We notice that the total actual additional capital expenditure claimed for the years 2014-15 and 2015-16 is Rs.2642.53 lakh and the same is lesser than the projected additional capital expenditure of Rs.4644.91 lakh, allowed in respect of these works, in order dated 1.5.2017 in Review Petition No. 50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014. Since these are spill over works and the claim is lesser than the projected additional capitalization allowed earlier, we, in exercise of the powers under Regulation 54 of the 2014 Tariff Regulations, allow the additional capital expenditure claimed in respect of these works.

70. It is further observed that the Petitioner has claimed un-discharged liability of Rs.55.90 lakh (Rs.55.59 lakh in 2014-15 and Rs.0.31 lakh in 2015-16) towards Miscellaneous T/S Work, Rs.127.87 lakh (Rs.122.22 lakh in 2014-15 and Rs.5.65 lakh in 2015-16) towards Field hostel/ EDC/ ET Hostel and Rs.312.21 lakh (Rs.162.42 lakh in 2014-15 and Rs.149.79 lakh in 2015-16) towards Roads, Bridges & Culverts. As the additional capital expenditure allowed earlier (Rs.4644.91 lakh) has been restricted to the additional capital expenditure claimed (Rs.2642.53 lakh), the un-discharged liability claimed by the Petitioner is allowed only up to the limit of approved additional capital expenditure (on cash basis). Accordingly, the additional capital expenditure claimed and allowed for Misc. T/S Work, Field hostel/ EDC/ ET Hostel and Roads, Bridges & Culverts is summarised below:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Miscellaneous T/S Work						
Claimed	149.36	43.00	0.00	0.00	0.00	192.36
Approved	149.36	43.00	0.00	0.00	0.00	192.36
Field hostel/EDC/ET Hostel						
Claimed	317.48	128.70	0.00	0.00	0.00	446.18
Approved	317.48	128.70	0.00	0.00	0.00	446.18
Roads Bridges & Culverts						
Claimed	1061.06	942.93	0.00	0.00	0.00	2003.99
Approved	1061.06	942.93	0.00	0.00	0.00	2003.99

(B) Additional capital expenditure towards new works

(a) LED Lighting

71. The Petitioner has claimed total actual additional capital expenditure of Rs.155.31 lakh (Rs.24.74 lakh in 2017-18 and Rs.130.57 lakh in 2018-19) under Regulation 14(3)(ii) of the 2014 Tariff Regulations and has de-capitalized Rs.65.14 lakh (Rs.10.02 lakh in 2017-18 and Rs.55.12 lakh in 2018-29) under Regulation 14(4) of the 2014 Tariff Regulations towards LED lighting system, thereby resulting in net actual additional capital expenditure of Rs.90.17 lakh (Rs.155.31 lakh - Rs.65.14 lakh). The Petitioner has submitted that the additional capital expenditure has been incurred in compliance to the Ministry of Power (MoP), GoI letter dated 2.8.2017, which mandated the Petitioner to replace all old bulbs with LED bulbs in all buildings of the Petitioner, including compound/ street lighting occupied by Petitioner. Accordingly, the Petitioner has prayed that the additional capital expenditure of Rs.155.31 lakh may be allowed under Change in law. The Respondent, TANGEDCO has submitted that the letter from MoP, GoI do not fall within the ambit of change in law and, hence, the claim may be disallowed. The Respondent, KSEBL has submitted that there is no provision under the 2014 Tariff Regulations, to claim such expenses and, therefore, the Petitioner may be directed to meet the expenses from the existing normative O&M expenses allowed to the generating station.

72. The submissions have been considered. It is noticed that the additional capital expenditure incurred towards installation of ‘LED based light fittings’ is in terms of the MoP, GoI letter dated 2.8.2017, which recommends the replacement of existing old bulbs with LED bulbs, thereby resulting in the reduction of about 50% to 90% in energy consumption by LED lighting. In our view, the MoP, GoI letter is recommendatory in nature and cannot be construed as a change in law event or the compliance to an existing law. Moreover, the benefits of replacement of existing lighting system with LED lighting system, accrues to the Petitioner. In view of this, the additional capital expenditure claimed on account of installation of LED lighting system is disallowed. However, the de-capitalization claimed by the Petitioner towards de-capitalization of old lights (plant & m/c - part of capital cost) is allowed in terms of Regulation 14(4) of the 2014 Tariff Regulations.

(b) Automatic Generation Control

73. The Petitioner has claimed actual additional capital expenditure of Rs.34.01 lakh towards Automatic Generation Control (AGC) in 2018-19 under Regulation 14(3)(ii) of the 2014 Tariff Regulations and has submitted that the same has been incurred as per the directions contained in order dated 13.10.2015 in Petition No. 11/SM/2015. The relevant portion of the said order is extracted as follows:

> *“16. In due recognition of the above factors, the Commission would like to chart out a road map for introduction of reserves in the country. Accordingly, the Commission directs as under:*
> *(a) xxx*
> *(b) The Commission reiterates the need for mandating Primary Reserves as well as Automatic Generation Control (AGC) for enabling Secondary Reserves.*
>
> *(i) All generating stations that are regional entities must plan to operationalize AGC along with reliable telemetry and communication by 1st April, 2017. This would entail a one-time expense for the generators to install requisite software and firmware, which could be compensated for. Communication infrastructure must be planned by the CTU and developed in parallel, in a cost-effective manner*.”

74. It is evident from order dated 13.10.2015 that all generating stations have been mandated to operationalize AGC along with reliable telemetry and communication by 1.4.2017. In view of this, the actual additional capital expenditure of Rs.34.01 lakh claimed for AGC in 2018-19 is allowed under Regulation 14(3)(ii) of the 2014 Tariff Regulations. The Petitioner has claimed un-discharged liability of Rs.2.27 lakh in 2018-19 for the said work. As the additional capital expenditure claimed by the Petitioner has been allowed, the un-discharged liability claimed by the Petitioner has also been allowed.

(c) Initial Spares

75. The Petitioner has claimed initial spares amounting to Rs.2851.02 lakh in 2014-15 under Regulation 14(1)(iii) of the 2014 Tariff Regulations. The Petitioner has submitted that as initial spares claimed are within the ceiling of 2.50% of the capital cost, as specified under the 2009 Tariff Regulations and are incurred within the cut-off date, the same may be allowed.

76. It is observed that by order dated 2.11.2015 in Petition No. 303/GT/2014 (wherein tariff for 2009-14 period was determined), the capitalization of spares amounting to Rs.10537.71 lakh up to 31.3.2014 was allowed. Also, initial spares amounting to Rs.1948.18 lakh in 2014-15 was allowed vide order dated 29.7.2016 in Petition No. 294/GT/2014 under Regulation 14(1)(iii) of the 2014 Tariff Regulations. The Petitioner, in the present petition, has claimed initial spares for Rs.2851.02 lakh in 2014-15. Therefore, the total initial spares claimed by the Petitioner up to 31.3.2015 are Rs.13388.73 lakh. The opening capital cost allowed as on 1.4.2014 is Rs.503884.86 lakh and the actual additional capital expenditure allowed for the period from 1.4.2014 to 31.3.2015 (cut-off date) is Rs.31248.04 lakh. Thus, the total capital cost as on

31.3.2015 works out to Rs.535132.90 lakh. Accordingly, the total initial spares (2.50% of capital cost as on cut-off date) allowable as per Regulation 8 of the 2009 Tariff Regulations, works out to Rs.13378.32 lakh, up to 31.3.2015. As the initial spares amounting to Rs.10537.71 lakh has already been allowed till 31.3.2015, the balance initial spares amounting to Rs.2840.61 lakh (Rs.13378.32 lakh - Rs.10537.71 lakh) is permitted (as against claim of Rs.2851.02 lakh) as initial spares up to the cut-off date of the generating station.

77. It is observed that the Petitioner has claimed un-discharged liability of Rs.85.04 lakh in 2014-15 towards initial spares. As initial spares claimed by the Petitioner has been allowed up to Rs.2840.61 lakh, the un-discharged liability claimed by the Petitioner beyond the said limit has been disallowed. Thus, the total initial spares allowed up to the cut-off date is summarized below:

(Rs. in lakh)

	2014-15
Initial spares allowed in Commission's order dated 2.11.2015 in Petition No. 303/GT/2014	10537.71
Initial spares claimed in the present petition	2851.02
Total Initial spares claimed	13388.73
Capital cost as on 1.4.2014	503884.86
Additional capital expenditure allowed in 2014-15	31248.03
Capital cost as on 31.3.2015	535132.89
Initial spares permissible as per Regulation 8 of the 2009 Tariff Regulations	2.50%
Total initial spares permissible as per Regulation 8 of the 2009 Tariff Regulations	13378.32
Balance initial spares allowed	**2840.61**

Interest During Construction (IDC)

78. The Petitioner has claimed IDC of Rs.1303.81 lakh in 2014-15 and Rs.515.31 lakh in 2015-16 as part of the additional capital expenditure. The Respondent, TANGEDCO has submitted that the same may be disallowed in terms of Regulation 11(A)(1) of the 2014 Tariff Regulations. The Petitioner has submitted that since additional capitalisation has been funded by both debt as well as equity, it includes the interest of debt incurred

during the installation of assets and is considered as part fund invested for the asset. Accordingly, the Petitioner has stated that the capitalization of asset/ work always includes IDC and as per provisions of Ind-AS, the borrowing costs are interest and other costs that an entity incurs in connection with the borrowing of funds and are directly attributable to the acquisition, construction or production of a qualifying asset form part of the cost of that asset. Accordingly, the Petitioner has stated that these provisions establish the criteria for recognition of interest as a component of the amount of item of property, plant and equipment.

79. The submissions of the parties have been considered. It is observed that Regulations 9(3)(b) and 14(1)(ii) of the 2014 Tariff Regulations (as quoted in paragraph 7 and paragraph 10 above) provides for the consideration of additional capital expenditure in respect of existing project as a part of capital cost, as per conditions specified therein. Further, the borrowing cost for the acquisition, construction and production of a qualifying asset is considered as part of the capital cost. It is observed that IDC claimed by the Petitioner, corresponds to the additional capital expenditure, against assets, that are part of the original scope of work of project, but deferred for execution. In view of this, the IDC claimed by the Petitioner is allowed.

De-capitalisation of Spares (part of capital cost)

80. The Petitioner has claimed the de-capitalization of Rs.1679.65 lakh during the 2014-19 tariff period under Regulation 14(4) of the 2014 Tariff Regulations and has submitted that the assets were de-capitalized on the ground that these have become unserviceable. The de-capitalization during the year as claimed by the Petitioner is as follows:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
310.82	263.36	341.21	328.97	435.30

81. The Respondent, TANGEDCO has submitted that the Petitioner has claimed de-capitalization, without submitting the details of the assets de-capitalized and without confirming as to whether the original cost of the asset had been deducted from the value of gross fixed asset. In response, the Petitioner has clarified that the details regarding de-capitalization have already been furnished in Form 9 Bi of the petition for the respective years.

82. The de-capitalization of assets claimed by the Petitioner is as follows:

(Rs. in lakh)

Head of Work / Equipment	**Year put to use**	**Original Value of the asset capitalized**				
		2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
(A) MBOA - Part of capital cost						
Furniture and Fixtures	2011-12	0.42	0.00	0.00	0.00	0.00
	2012-13	0.39	0.00	0.00	0.00	0.00
	2013-14	0.28	0.00	0.00	0.00	0.00
Other office equipment	2011-12	8.43	0.00	0.00	0.00	0.00
	2012-13	4.93	0.00	0.00	0.00	0.00
	2013-14	1.55	0.00	0.00	0.00	0.00
	2014-15	2.30	0.00	0.00	0.00	0.00
EDP, WP machines & SATCOM Equipment	2011-12	19.49	0.00	0.00	0.00	0.00
	2012-13	8.16	0.00	0.00	0.00	0.00
	2013-14	0.15	0.00	0.00	0.00	0.00
Plant & Machinery (part of capital cost)	2011-12	0.00	0.48	0.00	10.02	55.12
Sub-Total (A)		**46.08**	**0.48**	**0.00**	**10.02**	**55.12**
(B) Capital Spares - Part of capital cost	2011-12	38.74	56.40	80.53	166.22	343.57
	2012-13	152.61	122.88	222.17	74.74	36.61
	2013-14	73.40	33.88	25.31	76.81	0.00
	2014-15	0.00	49.72	13.19	1.17	0.00
Sub-Total (B)		**264.74**	**262.88**	**341.21**	**318.95**	**380.18**

83. The de-capitalization as claimed by the Petitioner is allowed under Regulation 14(4) of the 2014-19 Tariff Regulations.

Discharge of liabilities

84. The Petitioner has claimed discharge of liabilities under clause (i) of Regulation 14(1) and clauses (v) and (vi) of Regulation 14(3) of the 2014 Tariff Regulations and has prayed that the same may be allowed. The un-discharged liability claimed by the Petitioner as on 1.4.2014 is Rs.12577.73 lakh. Further, the Petitioner has claimed un-discharged liability of Rs.4438.96 lakh during the period 2014-19 (Rs.2742.87 lakh in 2014-15, Rs.915.79 lakh in 2015-16, Rs.376.97 lakh in 2016-17, Rs.282.40 lakh in 2017-18 and Rs.120.93 lakh in 2018-19). Out of the un-discharged liability of Rs.4438.96 lakh claimed, un-discharged liabilities corresponding to the approved additional capital expenditure of Rs.41622.87 lakh (on cash basis) as on 31.3.2019 is Rs.3049.35 lakh (Rs.2639.79 lakh in 2014-15, Rs.318.69 lakh in 2015-16, (-) Rs.4.67 lakh in 2016-17, Rs.87.64 lakh in 2017-18 and Rs.7.90 lakh in 2018-19). Further, the Petitioner has claimed reversal of liability of Rs.626.67 lakh during the 2014-19 tariff period. The same is allowed. Out of total discharge of liability of Rs.8986.46 lakh as claimed by the Petitioner, the net discharge of liabilities for Rs.8297.44 lakh is allowed during the 2014-19 tariff period as summarized below:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**Total**
Claimed	5144.40	1069.90	904.33	1060.27	807.55	8986.46
Disallowed	0.00	55.51	194.42	279.39	159.69	689.02
Allowed	**5144.40**	**1014.39**	**709.91**	**780.89**	**647.86**	**8297.44**

85. The un-discharged liability, as on 31.3.2019, is Rs.6702.96 lakh. As the un-discharged liability corresponding to the disallowed additional capitalization during the 2014-19 tariff period has not been allowed, the Petitioner is directed not to claim any un-discharged liability against the disallowed additional capital expenditure, in the subsequent tariff periods.

Reconciliation of additional capital expenditure

86. The reconciliation of the actual additional capital expenditure for the 2014-19 tariff period with books of accounts, as submitted by the Petitioner is as follows:

(Rs. in lakh)

Sl. No.		2014-15	2015-16	2016-17	2017-18	2018-19
1	Closing Gross Block as per IGAAP Audited Balance sheet as on 31.3.2016	0.00	0.00	970436.85	0.00	0.00
2	Capital spares capitalized	0.00	0.00	1874.28	0.00	0.00
3	Opening Gross Block after IND AS adjustment	916717.35	922488.23	972311.14	977656.61	998202.26
4	Add: Additions as per Note-2			6865.47	6302.83	5805.37
5	Add: Additions as per Note-2 out of adjustment column			2515.77	17459.51	5358.29
6	Less: De-capitalization as per Note-2 out of adjustment column			761.02	2393.16	3389.59
7	**Total addition as per IND AS BS (4+5-6)**			**8620.22**	**21369.18**	**7774.07**
	IND AS Adjustment					
8	Add: Vendor discounting out of assets in the year			7.28	15.27	9.73
9	Less: Unwinding expenses capitalized during the year			0.00	0.00	0.00
10	Less: IND AS Adj of De-capitalization out of ROW 6 (mitigating the impact of carrying cost exemption to arrive)			606.63	375.68	393.86
11	Less: Total addition in capital OH asset class (including adjustments also)			2675.39	2311.66	2346.87
12	Add: De-capitalization of capital Overhauling during the year			0.00	1848.53	2566.24
13	Add/Less: Any other IND AS adjustment having impact on PPE (Power, Plant and equipment)			0.00	0.00	0.00

Sl. No.		2014-15	2015-16	2016-17	2017-18	2018-19
14	**IND AS ADJ -Sub total (8-9-10-11+12+13)**			(-)**3274.74**	(-)**823.53**	(-)**164.76**
15	Closing Gross Block after IND AS adjustment (row 3+7+14)	**922488.23**	**970436.85**	**977656.61**	**998202.26**	**1005811.57**
16	Addition as per IGAAP (15-3)	5770.88	47948.62	**5345.48**	**20545.65**	**7609.31**
17	Less: Simhadri STPS Stage I	(-) 24541.87	29501.07	1267.88	17602.58	3215.24
18	**Net Additions pertaining to Simhadri STPS Stage-II**	**30312.75**	**18447.55**	**4077.59**	**2943.07**	**4394.07**
19	Less: Exclusions (items not allowed /not claimed)	1455.79	3278.26	84.82	1019.65	1753.79
20	**Net additional capital expenditure Claimed (accrual basis) [18-19]**	**28856.96**	**15169.29**	**3992.78**	**1923.43**	**2640.28**
21	Less: Un-discharged liabilities	2742.87	915.79	376.97	282.40	120.93
22	**Net additional capital expenditure Claimed (cash basis)**	**26114.09**	**14253.50**	**3615.80**	**1641.03**	**2519.35**
23	Discharge of liability pertaining to allowed/ new claimed works for prior period	5144.40	1069.90	904.33	1060.27	807.55
24	**Total additional capital expenditure claimed (22+23)**	**31258.49**	**15323.39**	**4520.13**	**2701.31**	**3326.90**

<u>Exclusions</u>

87. From the details furnished by the Petitioner, it is noticed 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 is discussed as follows:

2014-15

88. The exclusions claimed by the Petitioner in 2014-15 are as under:

(Rs. in lakh)

	Head of Work/ Equipment	Accrual basis	Un-discharged liability included in col. 3	Cash basis	IDC included in col. 3
(A)	Loan FERV	1465.88	0.00	1465.88	0.00
(B)	Inter Unit Transfer	(-)10.09	0.00	(-)10.09	0.00
	Total Exclusions claimed (C) = (A+B)	**1455.79**	**0.00**	**1455.79**	**0.00**

(a) Loan FERV

89. The Petitioner has excluded Rs.1465.88 lakh in 2014-15 on account of Loan FERV. The Petitioner has submitted that it is entitled to directly claim ERV on Foreign currency loans as per the 2014 Tariff Regulations and, therefore, has kept FERV under exclusion. As the Petitioner is required to bill the said amount directly to the beneficiaries in terms of the regulations, the exclusion of Loan FERV is allowed.

(b) Inter-Unit Transfer

90. The Petitioner has excluded an amount of Rs.10.09 lakh in 2014-15 on account of Inter-Unit Transfer. In justification of the same, the Petitioner has submitted that items under inter-unit transfer were not considered by the Commission for tariff purpose and, hence, kept under exclusion. We are of the considered view that both positive and negative entries arising out of inter-unit transfers of temporary nature shall be ignored for the purpose of tariff. In view of above, the exclusion of inter-unit transfer as claimed by the Petitioner is allowed.

91. Accordingly, the exclusions allowed/ not allowed, on cash basis, in 2014-15 is as follows:

(Rs. in lakh)

	2014-15
Exclusions claimed on cash basis **(A)**	1455.79
Exclusions allowed on cash basis **(B)**	1455.79
Exclusion not Allowed (A-B)	0.00

2015-16

92. The exclusions claimed by the Petitioner in 2015-16 is as under:

(Rs. in lakh)

	Head of Work/ Equipment	Year put to use	Accrual basis as per IGAAP	Un-discharged liability included in col. 3	Cash basis	IDC included in col. 3
(A)	**Items not claimed**					
(A.1)	MBOA		338.99	35.35	303.64	0.00
(A.2)	Capital spares		1032.95	315.41	717.53	0.00
	Sub-Total (A)		**1371.94**	**350.76**	**1021.18**	**0.00**
(B)	**De-capitalization**					
(B.1)	**MBOA (part of capital cost)**					
	Lab and workshop equipment	2011-12	(-) 0.17	0.00	(-) 0.17	0.00
	Other office equipment	2011-12	(-) 3.57	0.00	(-) 3.57	0.00
	EDP, WP machines & SATCOM equipment	2011-12	(-) 30.99	0.00	(-) 30.99	0.00
		2012-13	(-) 1.46	0.00	(-) 1.46	0.00
	Sub-Total (B.1)		(-) **36.18**	**0.00**	(-) **36.18**	**0.00**
(B.2)	**Capital Spares (not Part of capital cost)**	2015-16	(-) 36.87	0.00	(-) 36.87	0.00
	Sub-Total (B)		(-) **73.05**	**0.00**	(-) **73.05**	**0.00**
(C)	Loan FERV		2107.91	0.00	2107.91	0.00
(D)	Inter Unit Transfer		(-) 14.51	0.00	(-) 14.51	0.00
(E)	Reversal of liability		(-) 114.03	(-) 114.03	0.00	0.00
	Total Exclusions claimed (F)=(A+B+C+D+E)		**3278.26**	**236.73**	**3041.53**	**0.00**

Items not claimed

(a) Capitalization of MBOA

93. The Petitioner has procured Miscellaneous Bought out Assets (MBOAs) amounting to Rs.338.99 lakh, including un-discharged liability of Rs.35.35 lakh in 2015-16. In justification of the same, the Petitioner has submitted that as capitalization of MBOA procured after the cut-off date of the generating station is not allowed for the purpose of tariff, the Petitioner has excluded the said amount. 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.303.64 lakh, on cash basis, under this head, is in order and is allowed.

(b) Capitalization of Spares

94. The Petitioner has procured capital spares amounting to Rs.1032.95 lakh including un-discharged liability of Rs.315.41 lakh in 2015-16. In justification for the same, the Petitioner has submitted that as capital spares capitalized after the cut-off date are not allowed in terms of the 2014 Tariff Regulations, the same has been kept under exclusions. Since capitalization of spares over and above initial spares, procured after the cut-off date of the generating station are not allowed for the purpose of tariff, as they form part of O&M expenses as and when consumed, the Petitioner has excluded the said amount. Accordingly, the exclusion of the said amount under this head is in order and is allowed.

(c) De-capitalization of Miscellaneous Bought out Assets (MBOA) forming part of the capital cost

95. The Petitioner has de-capitalized MBOA amounting to Rs.36.18 lakh in 2015-16 in books of accounts. After examining the exclusions sought on de-capitalization of MBOA, it is noticed that an amount of Rs.7.38 lakh has been recovered by the Petitioner as depreciation. The de-capitalization of MBOA includes Laboratory and Workshop equipment, other office equipment, EDP, WP machines & SATCOM Equipment which were capitalized prior to the cut-off date of the generating station. Hence, the de-capitalized amount pertains to MBOA which were part of the capital cost of the generating station for the purpose of the tariff. As such, the de-capitalized amount is required to be deducted for arriving at the capital cost for the purpose of tariff. Accordingly, exclusion of Rs.36.18 lakh on account of de-capitalization of MBOA is not allowed for the purpose of tariff.

(d) De-capitalization of Capital spares (not part of capital cost)

96. The Petitioner has excluded de-capitalized spares amounting to Rs.36.87 lakh in 2015-16 for the purpose of tariff. In justification of the same, the Petitioner has submitted that the capitalization of spares beyond the cut-off date, is not permissible in terms of the 2014 Tariff Regulations and, accordingly, the capitalization of spares has been claimed as exclusion in the present petition. Since capitalization of spares after the cut-off date is not permissible and, therefore, do not form part of the capital cost for the purpose of tariff, the exclusion of de-capitalization of the spares as claimed by the Petitioner, is in order and allowed.

(e) Loan FERV

97. The Petitioner has excluded Rs.2107.91 lakh in 2015-16 on account of Loan FERV. The Petitioner has submitted that it is entitled to directly claim ERV on Foreign currency loans as per the 2014 Tariff Regulations and therefore, has kept FERV under exclusion. As the Petitioner is required to bill the said amount directly to the beneficiaries, the exclusion of Loan FERV is allowed.

(f) Inter-Unit Transfer

98. The Petitioner has excluded Rs.14.51 lakh in 2015-16 on account of Inter-Unit Transfer. In justification of the same, the Petitioner has submitted that items under inter-unit transfer were not considered by the Commission for tariff purpose and, hence, kept under exclusion. We are of the considered view that both positive and negative entries arising out of inter unit-transfers of a temporary nature shall be ignored for the purpose of tariff. In view of above, the exclusion of inter-unit transfer as claimed by the Petitioner is allowed.

(g) Reversal of Liability

99. The Petitioner has claimed reversal of liability of Rs.114.03 lakh in 2015-16 of the same value as un-discharged liability (zero on net basis). The Petitioner has submitted that as the tariff allowed is on cash basis, the reversal of liabilities has been kept under exclusion. We are in agreement with the Petitioner that reversal of liabilities shall not impact the capital cost considered for the purpose of tariff, which has been determined on cash basis. Accordingly, the exclusion of Rs.114.03 lakh is in order and allowed.

100. Accordingly, the exclusions allowed/ not allowed, on cash basis, in 2015-16 is as follows:

(Rs. in lakh)

	2015-16
Exclusions claimed on cash basis **(A)**	3278.26
Exclusions allowed on cash basis **(B)**	3314.44
Exclusion not allowed (A-B)	(-)36.18

2016-17

101. The exclusions claimed by the Petitioner in 2016-17 are as under:

(Rs. in lakh)

	Head of Work / Equipment	**Year put to use**	**Accrual basis as per Note 2 of BS**	**Ind AS Adjust-ment**	**Accrual basis as per IGAAP**	**Un-discharged liability included in col. 3**	**Cash basis**	**IDC included in col. 3**
(A)	**Items not claimed**							
(A.1)	Parking Sheds At Stage-II Area		17.27	0.00	17.27	1.05	16.22	0.00
(A.2)	Scrap Yard In CHP		12.88	0.00	12.88	4.83	8.04	0.00
(A.3)	MBOA		308.43	0.00	308.43	4.26	304.17	0.00
(A.4)	Overhaul		623.62	(-) 623.62	0.00	0.00	0.00	0.00
(A.5)	Capital spares (Items not claimed)		768.29	0.00	768.29	20.26	748.03	0.00
	Sub-Total (A)		**1730.49**	**(-) 623.62**	**1106.87**	**30.41**	**1076.46**	**0.00**
(B)	**De-capitalization**							
(B.1)	**MBOA- part of capital cost**							
	Furniture and Fixtures	2011-12	(-)0.27	(-)0.57	(-)0.84	0.00	(-)0.84	0.00
		2014-15	0.00	(-)8.98	(-)8.98	0.00	(-)8.98	0.00
	EDP, WP machines & SATCOM Equipment	2011-12	(-)11.89	(-)47.21	(-)59.09	0.00	(-)59.09	0.00
		2012-13	(-)8.28	(-)11.23	(-)19.50	0.00	(-)19.50	0.00
		2013-14	(-)8.36	(-)7.13	(-)15.49	0.00	(-)15.49	0.00
		2014-15	(-)1.66	(-)2.53	(-)4.19	0.00	(-)4.19	0.00

	Head of Work / Equipment	Year put to use	Accrual basis as per Note 2 of BS	Ind AS Adjust-ment	Accrual basis as per IGAAP	Un-discharged liability included in col. 3	Cash basis	IDC included in col. 3
	Communication equipment	2011-12	(-)0.26	(-)1.46	(-)1.72	0.00	(-)1.72	0.00
		2013-14	0.00	(-)0.03	(-)0.03	0.00	(-)0.03	0.00
	Other Office Equipment	2012-13	(-)1.49	(-)4.92	(-)6.41	0.00	(-)6.41	0.00
		2014-15	0.00	(-)0.85	(-)0.85	0.00	(-)0.85	0.00
	Hospital equipment	2011-12	0.00	(-)0.04	(-)0.04	0.00	(-)0.04	0.00
	Sub-Total (B.1)		(-)**32.21**	(-)**84.93**	(-)**117.15**	**0.00**	(-)**117.15**	**0.00**
(B.2)	Capital Spares - not Part of capital cost	2015-16	(-)71.91	0.00	(-)71.91	0.00	(-)71.91	0.00
		2016-17	(-)88.56	0.00	(-)88.56	0.00	(-)88.56	0.00
	Sub-Total (B.2)		(-)**160.47**	**0.00**	(-)**160.47**	**0.00**	(-)**160.47**	**0.00**
(B.3)	**MBOA-not part of capital cost**							
	Furniture & fixtures	2015-16	(-)9.44	0.00	(-)9.44	0.00	(-)9.44	0.00
	EDP, WP machines & SATCOM Equipment	2015-16	(-)0.42	(-)1.21	(-)1.63	0.00	(-)1.63	0.00
	Other Office Equipment	2015-16	(-)0.11	(-)0.96	(-)1.07	0.00	(-)1.07	0.00
	Sub-Total (B.3)		(-)**9.97**	(-)**2.16**	(-)**12.13**	**0.00**	(-)**12.13**	**0.00**
(C)	Loan FERV		(-)**470.68**	**0.00**	(-) **470.68**	**0.00**	(-)**470.68**	**0.00**
(D)	Inter Unit Transfer		(-)**3.04**	(-)**10.26**	(-)**13.30**	**0.00**	(-)**13.30**	**0.00**
(E)	IND AS adjustment of inter class asset transfer		**3.90**	(-)**3.90**	**0.00**	**0.00**	**0.00**	**0.00**
(F)	Reversal of liability		(-) **248.33**	**0.00**	(-)**248.33**	(-)**248.33**	**0.00**	**0.00**
	Total Exclusions claimed (F)= (A+B+C+D+E+F)		**809.69**	**(-)724.88**	**84.82**	**(-)217.92**	**302.74**	**0.00**

Items not claimed

(a) Parking sheds at Stage-II area and Scrapyard in CHP

102. The Petitioner has claimed Rs.17.27 lakh (including un-discharged liability of Rs.1.05 lakh) and Rs.12.88 lakh (including un-discharged liability of Rs.4.83 lakh) in 2016-17 towards Parking sheds at Stage-II area and Scrapyard in CHP respectively**.** In justification for the same, the Petitioner has submitted that as capitalization of these items is not admissible as per the 2014 Tariff Regulations, the same has been excluded. In view of the fact that positive entries corresponding to the disallowed assets were not

allowed to be a 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 and, hence, allowed.

(b) Capitalization of MBOA

103. The Petitioner has procured Miscellaneous Bought out Assets (MBOA) amounting to Rs.308.43 lakh, including un-discharged liability of Rs.4.26 lakh in 2016-17. In justification of the same, the Petitioner has submitted that as capitalization of MBOA procured after the cut-off date of the generating station is not allowed for the purpose of tariff, the Petitioner has excluded the said amount. In view of the fact that positive entries corresponding to the disallowed assets were not allowed to be a 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.304.17 lakh (Rs.308.43 lakh – Rs.4.26 lakh), on cash basis, under this head, is in order and is allowed.

(c) Ind-AS Adjustment (Overhauling)

104. As regards the expenditure for overhauling, the reconciliation statement furnished by the Petitioner indicates an expenditure of Rs.623.62 lakh in 2016-17, with corresponding negative entries of same amounts as IND-AS adjustment. As such, after adjustment, the net claim, against overhauling, reduces to zero as per IGAPP. Considering the fact that the expenditure on overhauling form part of the normative O&M expenses, the accounting adjustment leading to zero expenditure is in order and does not impact the claim made by the Petitioner.

(d) Capitalization of Spares

105. The Petitioner has claimed capital spares amounting to Rs.768.29 lakh in 2016-17 including un-discharged liability of Rs.20.26 lakh in 2016-17. In justification of the same, the Petitioner has submitted that as capital spares capitalized after the cut-off date are not allowed in terms of the 2014 Tariff Regulations, the same has been kept under exclusions. Since capitalization of spares over and above initial spares, procured after the cut-off date of the generating station are not allowed for the purpose of tariff, as they form part of O&M expenses as and when consumed, the Petitioner has excluded the said amount. Accordingly, the exclusion of the said amounts under this head is in order and is allowed.

(e) De-capitalization of Miscellaneous Bought out Assets (MBOA) forming part of the capital cost

106. The Petitioner has de-capitalized MBOAs amounting to Rs.117.15 lakh in 2016-17 in books of accounts. After examining the exclusions sought on de-capitalization of MBOA, it is noticed that Rs.24.66 lakh has been recovered by the Petitioner as depreciation. The de-capitalization of MBOA includes furniture & fixtures EDP, WP machines & SATCOM equipment, Communication equipment, Other Office Equipment, Hospital equipment, which were capitalized prior to the cut-off date of the generating station. Hence, the de-capitalized amount pertains to MBOA which were part of the capital cost of the generating station for the purpose of the tariff. As such, the de-capitalized amount is required to be deducted for arriving at the capital cost for the purpose of tariff. Accordingly, the exclusion of Rs.117.15 lakh on account of de-capitalization of MBOA is not allowed for the purpose of tariff.

(f) De-capitalization of capital spares (not part of capital cost)

107. The Petitioner has excluded de-capitalized spares amounting to Rs.160.47 lakh in 2016-17 for the purpose of tariff. In justification of the same, the Petitioner has submitted that the capitalization of spares, beyond the cut-off date, is not permissible in terms of the 2014 Tariff Regulations and, accordingly, the capitalization of spares has been claimed as exclusion in the present petition. Since capitalization of spares after the cut-off date is not permissible and, therefore, do not form part of the capital cost for the purpose of tariff, the exclusion of de-capitalization of the spares as claimed by the Petitioner is in order and allowed.

(g) De-capitalization of Miscellaneous Bought out Assets (MBOA) not forming part of the capital cost

108. The Petitioner has claimed exclusion of de-capitalized MBOA amounting to Rs.12.13 lakh in 2016-17 which do not form part of the capital cost. It is observed from the submissions of the Petitioner that these MBOA items have not been allowed in tariff and do not form part of the capital cost. Since these assets do not form part of the capital cost, the exclusion for de-capitalization of these MBOA items for the said amount is allowed.

(h) Loan FERV

109. The Petitioner has excluded Rs.470.68 lakh in 2016-17 on account of Loan FERV. The Petitioner has submitted that it is entitled to directly claim ERV on Foreign currency loans as per the 2014 Tariff Regulations and, therefore, has kept FERV under exclusion. As the Petitioner is required to bill the said amount directly to the beneficiaries, the exclusion of Loan FERV is allowed.

(i) Inter-Unit Transfer

110. The Petitioner has excluded Rs.13.30 lakh in 2016-17 on account of Inter-Unit transfer and has submitted that items under inter-unit transfer were not considered by the Commission for tariff purposes and, hence, kept under exclusion. We are of the considered view that both positive and negative entries arising out of inter unit-transfers of temporary nature shall be ignored for the purpose of tariff. In view of above, the exclusion of inter-unit transfer as claimed by the Petitioner is allowed.

(j) Ind-AS Adjustment (inter class asset transfer)

111. As regards Ind-AS Adjustment (inter class asset transfer), the reconciliation statement submitted by the Petitioner indicates an expenditure of Rs.3.90 lakh in 2016-17, with corresponding negative entry of same amount as Ind-AS adjustment. As such, after adjustment, the net claim against overhauling reduces to zero, as per IGAPP. Considering the fact that the expenditure on overhauling form part of normative O&M expenses, the accounting adjustment leading to zero expenditure is in order and does not impact the claim made by the Petitioner.

(k) Reversal of Liability

112. The Petitioner has claimed reversal of liability of Rs.248.33 lakh in 2016-17 of the same value as un-discharged liability (zero on net basis). The Petitioner has submitted that as the tariff allowed is on cash basis, the reversal of liabilities has been kept under exclusion. We are in agreement with the Petitioner that reversal of liabilities shall not impact the capital cost considered for the purpose of tariff, which has been determined on cash basis. Accordingly, the exclusion of Rs.248.33 lakh is in order and allowed.

113. Accordingly, the exclusions allowed/ not allowed on cash basis, in 2016-17 is as follows:

(Rs. in lakh)

	2016-17
Exclusions claimed on cash basis **(A)**	84.82
Exclusions allowed on cash basis **(B)**	201.96
Exclusion not Allowed (A-B)	(-)117.15

2017-18

114. The exclusions claimed by the Petitioner in 2017-18 are as follows:

(Rs. in lakh)

	Head of Work/ Equipment	Year put to use	Accrual basis as per Note 2 of BS	Ind AS Adjust-ment	Accrual basis as per IGAAP	Un-discharged liability included in col. 3	Cash basis	IDC included in col. 3
(A)	**Items not claimed**							
(A.1)	30 Meter High Mast Lighting At Stadium Area		**21.63**	**0.00**	**21.63**	**3.78**	**17.85**	**0.00**
(A.2)	MBOA		287.18	0.09	287.28	15.04	272.24	0.00
(A.3)	Overhaul		680.47	(-)680.47	0.00	0.00	0.00	0.00
(A.4)	Capital spares		981.72	0.00	981.72	236.94	744.78	0.00
	Sub-Total (A)		**1971.01**	**(-)680.38**	**1290.63**	**255.75**	**1034.87**	**0.00**
	De-capitalization							
(B.1)	MBOA- part of capital cost							
	EDP, WP machines & SATCOM Equipment	2011-12	(-)0.09	(-)0.77	(-)0.86	0.00	(-)0.86	0.00
		2012-13	(-)1.67	(-)2.61	(-)4.28	0.00	(-)4.28	0.00
		2013-14	(-)1.02	(-)0.99	(-)2.01	0.00	(-)2.01	0.00
	Sub-Total (B.1)		**(-)2.78**	**(-)4.38**	**(-)7.15**	**0.00**	**(-)7.15**	**0.00**
(B.2)	**MBOA-not part of capital cost**							
	EDP, WP machines & SATCOM Equipment	2016-17	(-)2.06	(-)0.26	(-)2.32	0.00	(-)2.32	0.00
		2017-18	(-)0.52	0.00	(-)0.52	0.00	(-)0.52	0.00
	Sub-Total (B.2)		**(-)2.59**	**(-)0.26**	**(-)2.85**	**0.00**	**(-)2.85**	**0.00**
(B.3)	**Capital Spares - not part of capital cost**	2015-16	(-)0.11	0.00	(-)0.11	0.00	(-)0.11	0.00
		2016-17	(-)17.72	0.00	(-)17.72	0.00	(-)17.72	0.00
	Sub-Total (B.2)		**(-)17.83**	**0.00**	**(-)17.83**	**0.00**	**(-)17.83**	**0.00**
(B.4)	Overhaul (IND AS adjustment)		(-)700.06	700.06	0.00	0.00	0.00	0.00
	Sub-Total (B)		**(-)723.25**	**695.42**	**(-)27.83**	**0.00**	**(-)27.83**	**0.00**
(C)	**Loan FERV**							
	Era Infra Engineering Lim.		(-)19.98	0.00	(-)19.98	0.00	(-)19.98	0.00
	BHEL		(-)156.84	0.00	(-)156.84	0.00	(-)156.84	0.00
	Larsen & Toubro Ltd.		(-)15.45	0.00	(-)15.45	0.00	(-)15.45	0.00
	Sub-Total (C)		**(-)192.28**	**0.00**	**(-)192.28**	**0.00**	**(-)192.28**	**0.00**
(D)	**Inter Unit Transfer**		**0.48**	**0.84**	**1.33**	**0.00**	**1.33**	**0.00**
(E)	**Reversal of liability**							

	Head of Work/ Equipment	Year put to use	Accrual basis as per Note 2 of BS	Ind AS Adjust-ment	Accrual basis as per IGAAP	Un-discharged liability included in col. 3	Cash basis	IDC included in col. 3
	Main Plant Buildings U4		(-)0.21	0.00	(-)0.21	(-)0.21	0.00	0.00
	Main Plant Buildings		(-)4.38	0.00	(-)4.38	(-)4.38	0.00	0.00
	New Admin Building Gate Complex		(-)2.71	0.00	(-)2.71	(-)2.71	0.00	0.00
	EDC Building		(-)2.74	0.00	(-)2.74	(-)2.74	0.00	0.00
	ET's Hostel		(-)0.98	0.00	(-)0.98	(-)0.98	0.00	0.00
	D 1 Type Quarters		(-)9.82	0.00	(-)9.82	(-)9.82	0.00	0.00
	Filed Hostel		(-)3.71	0.00	(-)3.71	(-)3.71	0.00	0.00
	Pre Treatment Plant		(-)27.37	0.00	(-)27.37	(-)27.37	0.00	0.00
	Spares		(-)0.24	0.00	(-)0.24	(-)0.24	0.00	0.00
	MBOA		(-)0.03	0.00	(-)0.03	(-)0.03	0.00	0.00
	Sub-Total (E)		**(-)52.20**	**0.00**	**(-)52.20**	**(-)52.20**	**0.00**	**0.00**
	Total Exclusions claimed (F)= (A+B+C+D+E)		**1003.76**	**15.89**	**1019.65**	**203.56**	**816.09**	**0.00**

Items not claimed

(a) 30 Meter high mast lighting at stadium area

115. The Petitioner has claimed amount of Rs.21.63 lakh including un-discharged liability of Rs.3.78 lakh, towards 30 Meter high mast lighting at stadium area**.** In justification of the same, the Petitioner has submitted that as capitalization of these items is not admissible as per the 2014 Tariff Regulations, the same has been excluded. Considering 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 and, hence, allowed.

(b) Capitalization of MBOA

116. The Petitioner has claimed Miscellaneous Bought out Assets (MBOA) amounting to Rs.287.28 lakh, including un-discharged liability of Rs.15.04 lakh in 2017-18. In justification of the same, the Petitioner has submitted that as capitalization of MBOA procured after the cut-off date of the generating station is not allowed for the purpose of tariff, the Petitioner has excluded the said amount. Considering the fact that positive

entries corresponding to the disallowed assets were not allowed to be a 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.272.24 lakh (Rs.287.28 lakh - Rs.15.04 lakh) on cash basis, under this head, is in order and is allowed.

(c) Ind-AS Adjustment (Overhauling)

117. As regards Ind-AS adjustment (overhauling), the reconciliation statement as submitted by the Petitioner indicates an expenditure of Rs.680.47 lakh in 2017-18, with corresponding negative entries of the same amounts as Ind-AS adjustment. As such, after adjustment, the net claim against overhauling reduces to zero as per IGAPP. Considering the fact that the expenditure on overhauling form part of the normative O&M expenses, the accounting adjustment leading to zero expenditure is in order and does not impact the claim made by the Petitioner.

(d) Capitalization of Spares

118. The Petitioner has procured capital spares amounting to Rs.981.72 lakh in 2017-18, including un-discharged liability of Rs.236.94 lakh in 2017-18. In justification of the same, the Petitioner has submitted that as capital spares capitalized after the cut-off date are not allowed in terms of the 2014 Tariff Regulations, the same has been kept under exclusions. Since capitalization of spares over and above initial spares, procured after the cut-off date of the generating station are not allowed for the purpose of tariff, as they form part of O&M expenses as and when consumed, the Petitioner has excluded the said amount. Accordingly, the exclusion of the said amounts under this head is in order and is allowed.

(e) De-capitalization of MBOAs forming part of the capital cost

119. The Petitioner has de-capitalized MBOA amounting to Rs.7.15 lakh in 2017-18 in the books of accounts. After examining the exclusions sought on de-capitalization of MBOA, it is noticed that an amount of Rs.1.71 lakh has been recovered by the Petitioner as depreciation. The de-capitalization of MBOA includes EDP, WP machines & SATCOM equipment, which were capitalized prior to the cut-off date of the generating station. Hence, the de-capitalized amount pertains to MBOAs which were part of the capital cost of the generating station, for the purpose of tariff. As such, the de-capitalized amount is required to be deducted for arriving at the capital cost for the purpose of tariff. Accordingly, the exclusion of Rs.7.15 lakh towards de-capitalization of MBOA is not allowed for the purpose of tariff.

(f) De-capitalization of MBOA not forming part of the capital cost

120. The Petitioner has claimed exclusion of de-capitalized MBOA amounting to Rs.2.85 lakh in 2017-18, which do not form part of the capital cost. It is observed from the submissions of the Petitioner that these MBOA items have not been allowed in tariff and do not form part of the capital cost. Since these assets do not form part of the capital cost, the exclusion for de-capitalization of these MBOA items for the said amounts are allowed.

(g) De-capitalization of capital spares (not part of capital cost)

121. The Petitioner has excluded de-capitalized spares amounting to Rs.17.83 lakh in 2017-18, for the purpose of tariff. In justification of the same, the Petitioner has submitted that the capitalization of spares beyond the cut-off date is not permissible in terms of the 2014 Tariff Regulations and, accordingly, the capitalization of spares has been claimed as exclusion in the present petition. Since capitalization of spares after

the cut-off date is not permissible and, therefore, do not form part of the capital cost for the purpose of tariff, the exclusion of de-capitalization of the spares as claimed by the Petitioner is in order and allowed.

(h) Ind-AS Adjustment (Overhauling)

122. As regards Ind-AS adjustment (overhauling), the reconciliation statement submitted by the Petitioner indicates an expenditure of (-) Rs.700.06 lakh in 2017-18, with corresponding positive entry of the same amount as IND-AS adjustment. As such, after adjustment, the net claim against overhauling reduces to zero as per IGAPP. Considering the fact that the expenditure on overhauling form part of the normative O&M expenses, the accounting adjustment leading to zero expenditure is in order and does not impact the claim made by the Petitioner.

(i) Loan FERV

123. The Petitioner has excluded Rs.192.28 lakh in 2017-18 on account of Loan FERV. The Petitioner has submitted that it is entitled to directly claim ERV on Foreign currency loans as per the 2014 Tariff Regulations and, therefore, has kept FERV under exclusion. As the Petitioner is required to bill the said amount directly to the beneficiaries, the exclusion of Loan FERV is allowed.

(j) Inter-Unit Transfer

124. The Petitioner has excluded an amount of Rs.1.33 lakh in 2017-18 on account of Inter-Unit transfer. In justification of the same, the Petitioner has submitted that items under inter-unit transfer were not considered by the Commission for tariff purposes and, hence, kept under exclusion. We are of the considered view that both positive and negative entries arising out of inter unit-transfers of temporary nature shall be ignored

for the purpose of tariff. In view of above, the exclusion of inter-unit transfer as claimed by the Petitioner is allowed.

(k) Reversal of Liability

125. The Petitioner has claimed reversal of liability of Rs.52.20 lakh in 2017-18 of the same value as un-discharged liability (zero on net basis). The Petitioner has submitted that as the tariff allowed is on cash basis, the reversal of liabilities has been kept under exclusion. We agree with the Petitioner that reversal of liabilities shall not impact the capital cost considered for the purpose of tariff which has been determined on cash basis. Accordingly, the exclusion of (-) Rs.52.20 lakh is in order and allowed.

126. Accordingly, the exclusions allowed/ not allowed on cash basis, in 2017-18 are as follows:

(Rs. in lakh)

	2017-18
Exclusions claimed on cash basis **(A)**	1019.65
Exclusions allowed on cash basis **(B)**	1026.80
Exclusion not Allowed (A-B)	(-)7.15

2018-19

127. The exclusions claimed by the Petitioner in 2018-19 are as follows:

(Rs. in lakh)

	Head of Work / Equipment	**Year put to use**	**Accrual basis as per Note 2 of BS**	**Ind AS Adjust-ment**	**Accrual basis as per IGAAP**	**Un-discharged liability included in col. 3**	**Cash basis**	**IDC included in col. 3**
(A)	**Items not claimed**							
(A.1)	MBOA		4.39	0.00	4.39	0.00	4.39	0.00
(A.2)	Complete VFD System		30.97	0.00	30.97	0.00	30.97	0.00
(A.3)	Overhaul		2333.95	(-)2333.95	0.00	0.00	0.00	0.00
(A.4)	Capital spares		916.23	0.00	916.23	62.59	853.64	0.00
	Sub-Total (A)		**3285.54**	**(-)2333.95**	**951.59**	**62.59**	**889.00**	**0.00**
(B)	**De-capitalization**							
(B.1)	**MBOA-part of capital cost**							
	Furniture and Fixtures	2014-15	(-)0.20	0.00	(-)0.20	0.00	(-)0.20	0.00
	Other office equipment's	2011-12	(-)0.26	(-)0.09	(-)0.35	0.00	(-)0.35	0.00
		2014-15	(-)0.55	(-)0.01	(-)0.56	0.00	(-)0.56	0.00
		2011-12	(-)10.98	(-)35.73	(-)46.71	0.00	(-)46.71	0.00

	Head of Work / Equipment	Year put to use	Accrual basis as per Note 2 of BS	Ind AS Adjust-ment	Accrual basis as per IGAAP	Un-discharged liability included in col. 3	Cash basis	IDC included in col. 3
	EDP, WP machines & SATCOM Equipment	2013-14	(-)12.23	(-)17.52	(-)29.75	0.00	(-)29.75	0.00
		2014-15	(-)6.14	(-)2.51	(-)8.65	0.00	(-)8.65	0.00
	Communication equipment	2014-15	0.00	(-)1.14	(-)1.14	0.00	(-)1.14	0.00
	Sub-Total (B.1)		**(-)30.36**	**(-)57.00**	**(-)87.36**	**0.00**	**(-)87.36**	**0.00**
(B.2)	**Capital Spares - not Part of capital cost**	2015-16	(-)24.84	0.00	(-)24.84	0.00	(-)24.84	0.00
		2016-17	(-)3.21	0.00	(-)3.21	0.00	(-)3.21	0.00
		2017-18	(-)22.30	0.00	(-)22.30	0.00	(-)22.30	0.00
	Sub-Total (B.2)		**(-)50.35**	**0.00**	**(-)50.35**	**0.00**	**(-)50.35**	**0.00**
(B.3)	**MBOA-not part of capital cost**							
	EDP, WP machines & SATCOM Equipment	2015-16	(-)0.609	0.00	(-)0.61	0.00	(-)0.61	
		2016-17	(-)8.42	0.00	(-)8.42	0.00	(-)8.42	
		2017-18	(-)1.29	0.00	(-)1.29	0.00	(-)1.29	
	Sub-Total (B.3)		**(-)10.32**	**0.00**	**(-)10.32**	**0.00**	**(-)10.32**	**0.00**
(B.4)	Overhaul		(-)1304.09	1304.09	0.00	0.00	0.00	0.00
	Sub-Total (B)		**(-)1395.11**	**1247.09**	**(-)148.02**	**0.00**	**(-)148.02**	**0.00**
(C)	**Loan FERV**				**1310.68**	**0.00**	**1310.68**	**0.00**
	Era Infra Engineering Lim.		136.22	0.00	136.22	0.00	136.22	0.00
	BHEL		1069.13	0.00	1069.13	0.00	1069.13	0.00
	Larsen & Toubro Ltd.		105.33	0.00	105.33	0.00	105.33	0.00
	Sub-Total (C)		**1310.68**	**0.00**	**1310.68**	**0.00**	**1310.68**	**0.00**
(D)	Inter Unit Transfer		**(-)148.19**	**(-)0.16**	**(-)148.35**	**0.00**	**(-)148.35**	**0.00**
(E)	Reversal of liability							
	CW System		(-)32.49	0.00	(-)32.49	(-)32.49	0.00	0.00
	Roads		(-)4.39	0.00	(-)4.39	(-)4.39	0.00	0.00
	Main Plant Buildings		(-)1.45	0.00	(-)1.45	(-)1.45	0.00	0.00
	Main Plant Buildings		(-)1.11	0.00	(-)1.11	(-)1.11	0.00	0.00
	Steam Generator		(-)4.81	0.00	(-)4.81	(-)4.81	0.00	0.00
	ESP		(-)1.41	0.00	(-)1.41	(-)1.41	0.00	0.00
	Turbine Generator		(-)3.86	0.00	(-)3.86	(-)3.86	0.00	0.00
	Steam Generator		(-)4.84	0.00	(-)4.84	(-)4.84	0.00	0.00
	Turbine Generator		(-)3.82	0.00	(-)3.82	(-)3.82	0.00	0.00
	ESP		(-)1.34	0.00	(-)1.34	(-)1.34	0.00	0.00
	Boundary Wall Ash Silo Area		(-)0.62	0.00	(-)0.62	(-)0.62	0.00	0.00
	Lp (Station) Piping Package U4		(-)145.90	0.00	(-)145.90	(-)145.90	0.00	0.00
	Service building -II		(-)6.09	0.00	(-)6.09	(-)6.09	0.00	0.00
	Sub-Total (E)		**(-)212.12**	**0.00**	**(-)212.12**	**(-)212.12**	**0.00**	**0.00**
	Total Exclusions claimed (E)= (A+B+C+D+E+F+ G+H+I+J)		**2840.80**	**(-)1087.01**	**1753.79**	**(-)149.53**	**1903.32**	**0.00**

Items not claimed

(a) Complete VFD System

128. The Petitioner has claimed amount of Rs.30.97 lakh towards Complete VFD System. In justification of the same, the Petitioner has submitted that as the capitalization of these items is not admissible as per the 2014 Tariff Regulations, the same has been excluded. Considering the fact that positive entries corresponding to the disallowed assets were not allowed to be a 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 and, hence, allowed.

(b) Capitalization of MBOA

129. The Petitioner has procured MBOAs amounting to Rs.4.39 lakh in 2018-19. In justification of the same, the Petitioner has submitted that as capitalization of MBOA procured after the cut-off date of the generating station is not allowed for the purpose of tariff, the Petitioner has excluded the said amount. Considering the fact that positive entries corresponding to the disallowed assets were not allowed to be a 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. 4.39 lakh on cash basis, under this head, is in order and is allowed.

(c) Ind-AS Adjustment (Overhauling)

130. As regards Ind-AS overhauling, the reconciliation statement submitted by the Petitioner indicates an expenditure of Rs.2333.95 lakh in 2018-19, with corresponding negative entries of same amounts as IND-AS adjustment. As such, after adjustment, the net claim against overhauling reduces to zero as per IGAPP. Considering the fact that the expenditure on overhauling form part of the normative O&M expenses, the

accounting adjustment leading to zero expenditure is in order and does not impact the claim made by the Petitioner.

(d) Capitalization of Spares

131. The Petitioner has procured capital spares amounting to Rs.916.23 lakh in 2018-19 including un-discharged liability of Rs.62.59 lakh in 2018-19. In justification, the Petitioner has submitted that as capital spares capitalized after the cut-off date are not allowed in terms of the 2014 Tariff Regulations, the same has been kept under exclusions. Since capitalization of spares over and above initial spares, procured after the cut-off date of the generating station are not allowed for the purpose of tariff, as they form part of O&M expenses as and when consumed, the Petitioner has excluded the said amount. Accordingly, the exclusion of the said amounts under this head is in order and is allowed.

(e) De-capitalization of Miscellaneous Bought out Assets (MBOA) forming part of capital cost

132. The Petitioner has de-capitalized MBOA amounting to Rs.87.36 lakh in 2018-19 in books of accounts. After examining the exclusions sought on de-capitalization of MBOA, it is noticed that an amount of Rs.26.62 lakh has been recovered by the Petitioner as depreciation. The de-capitalization of MBOA includes Furniture and Fixtures, Other office equipment, EDP, WP machines & SATCOM Equipment, Communication equipment, which were capitalized prior to the cut-off date of the generating station i.e., 31.3.2015. Hence, the de-capitalized amount pertains to MBOA which were part of the capital cost of the generating station for the purpose of the tariff. As such, the de-capitalized amount has been deducted for arriving at the capital cost, for the purpose of tariff. Accordingly, the exclusion of (-) Rs.87.36 lakh on account of de-capitalization of MBOA is not allowed for the purpose of tariff.

(f) De-capitalization of Miscellaneous Bought out Assets (MBOA) not forming part of the capital cost

133. The Petitioner has claimed exclusion of de-capitalized MBOA amounting to Rs.10.32 lakh in 2018-19 which do not form part of the capital cost. It is observed from the submissions of the Petitioner that these MBOA items have not been allowed in tariff and do not form part of the capital cost. Since these assets do not form part of the capital cost, the exclusion for de-capitalization of these MBOA items for the said amounts are allowed.

(g) De-capitalization of Capital Spares (not Part of capital cost)

134. The Petitioner has excluded de-capitalized spares amounting to Rs.50.35 lakh in 2018-19 for the purpose of tariff. In justification of the same, the Petitioner has submitted that the capitalization of spares beyond the cut-off date is not permissible in terms of the 2014 Tariff Regulations and, accordingly, the capitalization of spares has been claimed as exclusion in the present petition. Since capitalization of spares after the cut-off date is not permissible and, therefore, do not form part of the capital cost for the purpose of tariff, the exclusion of de-capitalization of the spares as claimed by the Petitioner is in order and allowed.

(h) Ind-AS Adjustment (Overhauling)

135. As regards Ind-AS (overhauling), the reconciliation statement submitted by the Petitioner indicates an expenditure of (-) Rs.1304.09 lakh in 2018-19, with corresponding positive entry of same amount as IND-AS adjustment. As such, after adjustment, the net claim against overhauling reduces to zero as per IGAPP. Considering the fact that the expenditure on overhauling form part of the normative O&M expenses, the accounting adjustment leading to zero expenditure is in order and does not impact the claim made by the Petitioner.

(i) Loan FERV

136. The Petitioner has excluded an amount of Rs.1310.68 lakh in 2018-19 on account of Loan FERV. The Petitioner has submitted that it is entitled to directly claim ERV on Foreign currency loans as per the 2014 Tariff Regulations and, therefore, has kept FERV under exclusion. As the Petitioner is required to bill the said amount directly on the beneficiaries, the exclusion of Loan FERV is allowed.

(j) Inter-Unit Transfer

137. The Petitioner has excluded an amount of (-) Rs.148.35 lakh in 2018-19 on account of Inter-Unit Transfer. In justification of the same, the Petitioner has submitted that the items under inter-unit transfer were not considered by the Commission for tariff purposes and, hence, kept under exclusion. We are of the considered view that both positive and negative entries arising out of inter unit-transfers of temporary nature shall be ignored for the purpose of tariff. In view of above, the exclusion of inter-unit transfer as claimed by the Petitioner is allowed.

(k) Reversal of Liability

138. The Petitioner has claimed reversal of liability of (-) Rs.212.12 lakh in 2018-19 of the same value as un-discharged liability (zero on net basis). The Petitioner has submitted that as tariff allowed is on cash basis, the reversal of liabilities has been kept under exclusion. We are in agreement with the Petitioner that the reversal of liabilities shall not impact the capital cost considered for the purpose of tariff, which has been determined on cash basis. Accordingly, the exclusion of (-) Rs.212.12 lakh is in order and allowed.

139. Accordingly, the exclusions allowed/ not allowed on cash basis, in 2018-19 are as follows:

(Rs. in lakh)

	2018-19
Exclusions claimed on cash basis **(A)**	1753.79
Exclusions allowed on cash basis **(B)**	1841.14
Exclusion not allowed (A-B)	(-) 87.36

140. Based on the above discussion, the net additional capital expenditure claimed and allowed for the 2014-19 tariff period is summarised as follows:

(Rs. in lakh)

		2014-15	2015-16	2016-17	2017-18	2018-19	Total
(A) Additional capital expenditure allowed in order dated 1.5.2017							
Buildings							
Main Plant & Offsite including Plant Roads	Claimed	4213.65	4547.62	1303.60	580.42	123.17	10768.46
	Allowed	4213.65	0.00	0.00	0.00	0.00	4213.65
Residential Quarters/ Township	Claimed	1802.49	3038.20	46.32	0.00	0.00	4887.01
	Allowed	1802.49	0.00	0.00	0.00	0.00	1802.49
Miscellaneous T/S Work	Claimed	149.36	43.00	0.00	0.00	0.00	192.36
	Allowed	149.36	43.00	0.00	0.00	0.00	192.36
Field hostel/EDC/ET Hostel	Claimed	317.48	128.70	0.00	0.00	0.00	446.18
	Allowed	317.48	128.70	0.00	0.00	0.00	446.18
Roads Bridges & Culverts	Claimed	1061.06	942.93	0.00	0.00	0.00	2003.99
	Allowed	1061.06	942.93	0.00	0.00	0.00	2003.99
Total Building	Admitted in 50/RP/2016	**11955.11**	**0.00**	**0.00**	**0.00**	**0.00**	**11955.11**
	Claimed	**7544.04**	**8700.44**	**1349.92**	**580.42**	**123.17**	**18297.99**
	Allowed	**7544.04**	**1114.63**	**0.00**	**0.00**	**0.00**	**8658.67**
Plant & Machinery							
Steam Generator	Claimed	772.00	10.12	0.00	0.00	0.00	782.12
	Allowed	772.00	0.00	0.00	0.00	0.00	772.00
Turbine Generator Work	Claimed	4575.22	432.08	0.00	0.00	0.00	5007.30
	Allowed	4575.22	0.00	0.00	0.00	0.00	4575.22
Coal Handling Plant	Claimed	1273.31	19.85	0.00	0.00	0.00	1293.16
	Allowed	1273.31	19.85	0.00	0.00	0.00	1293.16
Offsite Works	Claimed	427.22	70.16	0.00	0.00	0.00	497.38
	Allowed	427.22	0.00	0.00	0.00	0.00	427.22
Electrical Works	Claimed	702.20	312.24	0.00	0.00	0.00	1014.44
	Allowed	702.20	312.24	0.00	0.00	0.00	1014.44
Other Works	Claimed	1612.12	1351.21	657.80	298.31	202.42	4121.86
	Allowed	1612.12	0.00	0.00	0.00	0.00	1612.12
Initial Capital Spares	Claimed	2851.02	0.00	0.00	0.00	0.00	2851.02
	Allowed	2840.61	0.00	0.00	0.00	0.00	2840.61
Ash Handling Plant (including DAES System)	Claimed	3176.89	9.87	123.29	401.29	20.53	3731.87
	Allowed	3176.89	9.87	123.29	401.29	20.53	3731.87
Ash Dyke raising works	Claimed	1499.51	2119.25	1216.17	253.50	2443.95	7532.38
	Allowed	1499.51	2119.25	1216.17	253.50	2443.95	7532.38
Total Plant & Machinery	Claimed	**16889.49**	**4324.78**	**1997.26**	**953.10**	**2666.90**	**26831.53**
	Allowed	**16879.08**	**2461.21**	**1339.46**	**654.79**	**2464.48**	**23799.02**
Railway Siding	Claimed	1655.20	1491.64	609.83	411.75	0.00	4168.42
	Allowed	1655.20	776.79	0.00	0.00	0.00	2431.99
Office Furniture and Furnishing	Claimed	94.49	0.00	0.00	0.00	0.00	94.49
	Allowed	94.49	0.00	0.00	0.00	0.00	94.49
Office Equipment	Claimed	142.23	0.00	0.00	0.00	0.00	142.23
	Allowed	142.23	0.00	0.00	0.00	0.00	142.23

		2014-15	2015-16	2016-17	2017-18	2018-19	Total
IT Equipment	Claimed	99.41	0.00	0.00	0.00	0.00	99.41
	Allowed	99.41	0.00	0.00	0.00	0.00	99.41
(B) New Items							
LED lighting system	Claimed	0.00	0.00	0.00	24.74	130.57	155.31
	Approved	0.00	0.00	0.00	0.00	0.00	0.00
Automatic Generation Control (AGC)	Claimed	0.00	0.00	0.00	0.00	34.01	34.01
	Approved	0.00	0.00	0.00	0.00	34.01	34.01
Total Additions allowed (A+B)	Claimed	**26424.86**	**14516.87**	**3957.01**	**1970.01**	**2954.65**	**49823.39**
	Approved	**26414.45**	**4352.63**	**1339.46**	**654.79**	**2498.49**	**35259.82**
De-capitalization							
De-capitalization of lights (plant & m/c -part of capital cost)	Claimed	0.00	0.00	0.00	10.02	55.12	65.14
	Allowed	0.00	0.00	0.00	10.02	55.12	65.14
De-capitalization of spares -part of capital cost	Claimed	310.82	262.88	341.21	318.95	380.18	1614.03
	Allowed	310.82	262.88	341.21	318.95	380.18	1614.03
Other De-capitalization	Claimed	0.00	0.48	0.00	0.00	0.00	0.48
	Allowed	0.00	0.48	0.00	0.00	0.00	0.48
Less: Total De-capitalization during the year/period	Claimed	310.82	263.36	341.21	328.97	435.30	1679.65
	Allowed	310.82	263.36	341.21	328.97	435.30	1679.65
Add: Discharge of liability of allowed items	Claimed	**5144.40**	**1069.90**	**904.33**	**1060.27**	**807.55**	**8986.46**
	Allowed	**5144.41**	**1014.39**	**709.91**	**780.89**	**647.86**	**8297.45**
Total additional capitalization including discharge of liability	Claimed	**31258.44**	**15323.41**	**4520.13**	**2701.31**	**3326.90**	**57130.19**
	Allowed	**31248.04**	**5103.66**	**1708.16**	**1106.70**	**2711.05**	**41877.61**
Less: Exclusions not allowed		0.00	36.18	117.15	7.15	87.36	247.83
Net Additional Capital Expenditure allowed		**31248.04**	**5067.48**	**1591.02**	**1099.55**	**2623.69**	**41629.78**

Capital Cost allowed for the 2014-19 tariff period

141. Accordingly, the capital cost allowed for the 2014-19 tariff period is as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost (A)	503884.86	535132.90	540200.38	541791.40	542890.95
Add: Admitted Additional capital expenditure (B)	31248.04	5067.48	1591.02	1099.55	2623.69
Closing Capital Cost (C) = (A+B)	535132.90	540200.38	541791.40	542890.95	545514.64
Average Capital Cost (D) = (A+C)/2	519508.88	537666.64	540995.89	542341.17	544202.79

Debt-Equity Ratio

142. Regulation 19 of the 2014 Tariff Regulations provides as follows:

> *"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.*

143. The gross normative loan and equity amounting to Rs.352719.41 lakh and Rs.151165.46 lakh, as considered in order dated 1.5.2017 in Review Petition No.50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014, has been considered for the purpose of tariff. Further, the additional capital expenditure admitted as above has been allocated in the debt-equity ratio of 70:30.

Return on Equity

144. Regulation 24 of the 2014 Tariff Regulations provides as follows:

"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
(v) Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:
(vi) 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:
(vii) additional RoE shall not be admissible for transmission line having length of less than 50 kilometer."

145. Regulation 25 of the 2014 Tariff Regulations provides as follows:

"25. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee as the case may be. The actual tax income on other income stream (i.e. income of non-generation or non-transmission business as the case may be) shall not be considered for the calculation of "effective tax rate".

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

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

Illustration.

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

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

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

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

(c) Effective Tax Rate for the year 2014-15 = 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 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."

146. The base rate of return on equity, as allowed under Regulation 24 of the 2014 Tariff Regulations, is required to be grossed up with the effective tax rate in the respective financial years. Also, in term of Regulation 25(3) of the 2014 Tariff Regulations, the generating company 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 income tax authorities, pertaining to the 2014-19 tariff period, on actual gross income of any financial year.

147. The Respondent, KSEBL has submitted that the rate of Return on Equity shall be reduced by 1.00% for such period in the absence of 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. The Respondent has also stated that as no tax has been paid by the Petitioner for the 2014-19 tariff period, Return on Equity may be allowed only on the base rate of 15.5%. The Petitioner has submitted that it has furnished all the documents required for claim of Return on Equity and has computed RoE in accordance with Regulation 24 of the 2014 Tariff Regulations. The Petitioner has further added that as the Petitioner is a corporate legal entity who is obligated to pay tax and not the generating station, the tax liability imposed on the Petitioner is to be grossed up as per Regulation 25 of the 2014 Tariff Regulations. The Petitioner has clarified that the generating station is not a corporate legal entity/ company but is only a generating station and, hence, not liable or eligible to pay MAT.

148. The submissions of the parties have been considered. We are conscious that the entities covered under MAT regime are paying Income Tax as per MAT rate notified for respective financial year under IT Act, 1961, which is levied on the book profit of the entity computed as per the Section 115JB of the IT Act, 1961. Section 115JB (2) defines book profit as net profit in the statement of Profit & Loss prepared in accordance with Schedule-III of the Companies Act, 2013, subject to some additions and deductions as mentioned in the IT Act, 1961. Since the Petitioner has been paying income tax on income computed under Section 115JB of the IT Act, 1961, as per the MAT rates of the respective financial year, the notified MAT rate for respective financial year shall be considered as effective tax rate for the purpose of grossing up of Return on Equity for

truing up of the tariff for the 2014-19 tariff period, in terms of the 2014 Tariff Regulations. The interest imposed on any additional income tax demand as per the assessment order of the Income Tax Authorities shall be considered on actual payment. However, the penalty (for default on the part of the assessee) if any, imposed, shall not be taken into account for the purpose of grossing up of rate of return on equity. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries on year-to-year basis.

149. The Petitioner has claimed Return on Equity for the 2014-19 tariff period, after grossing up the Return on Equity of 15.50% with the effective tax rates (based on MAT rates) for each year as per Regulation 24 of the 2014 Tariff regulations. Return on Equity has been trued up on the basis of the MAT rate applicable for the respective years and the same is allowed for the generating station as under:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Normative Equity-Opening (A)	151165.46	160539.87	162060.12	162537.42	162867.29
Addition of Equity due to additional capital expenditure (B)	9374.41	1520.24	477.31	329.87	787.11
Normative Equity-Closing (C) = (A) + (B)	160539.87	162060.12	162537.42	162867.29	163654.39
Average Normative Equity (D) = (A+C)/2	155852.67	161299.99	162298.77	162702.35	163260.84
Return on Equity (Base Rate) (E)	15.500%	15.500%	15.500%	15.500%	15.500%
Effective Tax Rate (F)	20.961%	21.342%	21.342%	21.342%	21.549%
Rate of Return on Equity (Pre-Tax) (G) = (E)/(1-F)	19.610%	19.705%	19.705%	19.705%	19.758%
Return on Equity (Pre-Tax) annualised (H) = (D)x(G)	**30562.71**	**31784.16**	**31980.97**	**32060.50**	**32257.08**

Interest on Loan

150. Regulation 26 of the 2014 Tariff Regulations provides as follows:

"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 De-capitalization 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."

151. The Respondent, KSEBL has submitted that as the additional capital expenditure claimed by the Petitioner is not in order, the interest on loan claimed for the additional

capital expenditure may be disallowed. The Petitioner has clarified that out of 73 loans appearing in Form-13, only 50 loans are floating loans and the rest are fixed interest rate loan. It has also furnished a copy of floating interest rate in support of its claim. With respect to refinancing of loan, the Petitioner has submitted that some of the loans allocated to this generating station have been refinanced by taking new loans with a lower rate of interest and the benefits of refinancing of loans has also been shared with the beneficiaries in the ratio of 2:1 as per Regulation 8(6) read with Regulation 26(7) of the 2014 Tariff Regulations.

152. The Commission, in its ROP in the truing-up petitions in respect of other generating stations of the Petitioner, had directed the Petitioner to submit the repayment schedule of all loans, for the purpose of reconciliation of refinancing of loans and to specify the period over which the benefits of prepayment has been claimed in respect of each of such loans. In respect of this generating station, the Petitioner vide affidavit dated 4.6.2021 has furnished the statement of prepayment and refinancing of loan, indicating the details of the original loan and refinancing loan along with corresponding interest rate savings retained while sharing the loan refinancing gains with the beneficiaries in terms of the 2014 Tariff Regulations. Also, Form-8 provides for interest rate, term of loan and repayment schedule of all loans required for the refinancing of original loans. The Petitioner has claimed weighted average rate of Interest on loan, based on its actual loan portfolio and the rate of interest. It is observed that the loan details submitted by the Petitioner in Form 13 vary from the rate of interest submitted by the Petitioner, in response to the replies of the Respondent, KSEBL. Further, the Petitioner has also not furnished adequate explanation for consideration of the rate of interest in Form 13. In the absence of proper explanation as regards the consideration

of rate of interest in Form 13, the rate of interest, based on loan details submitted by the Petitioner, in the petition, and subsequent submissions has been considered for the purpose of tariff.

153. Accordingly, Interest on loan has been worked out as under:

(i) Gross normative loan amounting to Rs.352719.41 lakh as considered in order dated 1.5.2017 in Review Petition No. 50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014 has been considered as on 1.4.2014;

(ii) Cumulative repayment amounting to Rs.50518.22 lakh as considered in order dated 1.5.2017 in Review Petition No. 50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014 has been considered as on 1.4.2014.

(iii) Accordingly, the net normative opening loan as on 1.4.2014 is Rs.302201.19 lakh.

(iv) Addition to normative loan on account of additional capital expenditure approved above has been considered.

(v) Depreciation allowed has been considered as repayment of normative loan during the respective year of the 2014-19 tariff period. Further, repayments have been adjusted for de-capitalization of assets considered for the purpose of tariff.

(vi) In line with the provisions of the regulations stated above, the weighted average rate of interest has been calculated by applying the actual loan portfolio existing as on 1.4.2014, along with subsequent additions during the 2014-19 tariff period, if any, for the generating station. In case of loans carrying floating rate of interest, the details of rate of interest, as provided by the Petitioner, has been considered for the purpose of tariff.

154. Necessary calculation for interest on loan is as follows:

(Rs in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Gross opening loan (A)	352719.41	374593.04	378140.27	379253.99	380023.67
Cumulative repayment of loan upto previous year (B)	50518.22	77048.49	104380.77	131762.98	159212.64
Net Loan Opening (C) = (A) - (B)	302201.19	297544.55	273759.51	247491.01	220811.03
Addition due to additional capital expenditure (D)	21873.63	3547.24	1113.71	769.69	1836.58
Repayment of loan during the year (E)	26559.47	27374.71	27475.38	27539.68	27633.31

	2014-15	2015-16	2016-17	2017-18	2018-19
Less: Repayment adjustment on account of de-capitalization (F)	29.19	42.43	93.18	90.02	180.56
Net Repayment (G) = (E) - (F)	26530.27	27332.28	27382.21	27449.67	27452.75
Net Loan Closing (H) = (C) +(D) - (G)	297544.55	273759.51	247491.01	220811.03	195194.87
Average Loan (I) = (C+H)/2	299872.87	285652.03	260625.26	234151.02	208002.95
Weighted Average Rate of Interest of loan (J)	8.8443%	8.9023%	8.7034%	8.4685%	8.3389%
Interest on Loan (K) = (I)x(J)	**26521.69**	**25429.70**	**22683.19**	**19829.08**	**17345.22**

<u>Depreciation</u>

155. Regulation 27 of the 2014 Tariff Regulations provides as follows:

"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 up to 31.3.2014 from the gross depreciable value of the assets.

(7) The generating company or the transmission license, 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 de-capitalized asset during its useful services."

156. The cumulative depreciation of Rs.50931.80 lakh, as on 1.4.2014, as considered in order dated 1.5.2017 in Review Petition No.50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014 has been considered for the purpose of tariff. Since as on 1.4.2014, the used life of the generating station is 2.02 years, which is less than 12 years from the effective station COD of 24.3.2012, depreciation has been calculated by applying the weighted average rate of depreciation (WAROD), calculated in terms of the Regulation 27 of the 2014 Tariff Regulations. The calculation of WAROD is enclosed as Annexure-I to this order. Accordingly, depreciation has been worked out and allowed as under:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Average Capital Cost (A)	519508.88	537666.64	540995.89	542341.17	544202.79
Value of freehold land included in average capital cost (B)	0.00	0.00	0.00	0.00	0.00
Aggregated Depreciable Value (C)= [(A-B)x90%]	467557.99	483899.98	486896.30	488107.06	489782.51
Remaining aggregate depreciable value at the	416626.19	406437.91	382101.95	355930.50	330156.29

	2014-15	2015-16	2016-17	2017-18	2018-19
beginning of the year (D) = [(C) - (Cumulative Depreciation (shown at L), at the end of the previous year)*]					
No. of completed years at the beginning of the year (E)	2.02	3.02	4.02	5.02	6.02
Balance useful life at the beginning of the year (F) = [25 - (E)]	22.98	21.98	20.98	19.98	18.98
Weighted Average Rate of Depreciation (WAROD) (G)	5.112%	5.091%	5.079%	5.078%	5.078%
Combined Depreciation during the year/ period (H) = [(A) x (G)]	26559.47	27374.71	27475.38	27539.68	27633.31
Combined Depreciation during the year/ period (annualized) (I) = (G)	26559.47	27374.71	27475.38	27539.68	27633.31
Cumulative depreciation at the end of the year (before adjustment for de-capitalization) (J) = [(I) + (Cumulative Depreciation (shown at L), at the end of the previous year)*]	77491.27	104836.78	132269.73	159716.24	187259.53
Less: Depreciation adjustment on account of de-capitalization (K)	29.19	42.43	93.18	90.02	180.56
Cumulative depreciation at the end of the year (L) = [(J) - (K)]	**77462.07**	**104794.35**	**132176.56**	**159626.22**	**187078.97**

**Cumulative depreciation at the end of 2013-14 is Rs.50931.80 lakh.*

Operation & Maintenance Expenses

157. Regulation 29(2) of the 2014 Tariff Regulations provides as follows:

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

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

Year	200/210/250 MW sets	300/330/350 MW sets	500 MW sets	600 MW sets and above
FY 2014-15	23.90	19.95	16.00	14.40
FY 2015-16	25.40	21.21	17.01	15.31
FY 2016-17	27.00	22.54	18.08	16.27
FY 2017-18	28.70	23.96	19.22	17.30
FY 2018-19	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:

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

158. The O&M expenses claimed by the Petitioner, in Form-3A of the petition, are as follows:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
O&M expenses (normative) under Regulation 29(1) of the 2014 Tariff Regulations (A)	14400.00	15309.00	16272.00	17298.00	18387.00
O&M expenses under Regulation 29(2) of the 2014 Tariff Regulations					
Water Charges (B)	662.74	815.77	681.43	794.29	746.70
Capital Spares consumed (C)	264.74	299.75	501.67	336.78	430.52
Total O&M expenses claimed (Regulation 29(1) & Regulation 29(2) of the 2014 Tariff Regulations (D) = (A+B+C)	**15327.48**	**16424.52**	**17455.10**	**18429.07**	**19564.22**
Impact of Pay revision (E)	0.00	52.00	1292.85	1692.82	2177.34
Impact of GST (F)	0.00	0.00	0.00	177.02	256.58
Ash Transportation Expenditure (G)	0.00	0.00	0.00	0.00	2453.69
Total O&M expenses claimed (H) = (D+E+F+G)	**15327.48**	**16476.52**	**18747.95**	**20298.91**	**24451.83**

159. The Commission in its order dated 29.7.2016 in Petition No. 294/GT/2014 had, in exercise of the power under Regulation 55 of the 2014 Tariff Regulations (Power to remove difficulty), made applicable the proviso under sub-clause (a) of clause 1 of Regulation 29 of 2014 Tariff Regulations to the units whose COD occurred on or after 1.4.2009, for grant of O&M expenses to the units of the generating station. The relevant portion of the order dated 29.7.2016 is extracted below:

"52. …There is no corresponding provision in the 2014 Tariff Regulations for determination of the O&M expenses of the units commissioned on or after 1.4.2009 but before 31.3.2014 during the 2009-14 period. However, in the 2014 Tariff Regulations, the O&M expenses of 3rd and 4th Unit of the generating stations having capacity of 500 MW

and above whose COD occurred on or after 1.4.2014 are required to be worked out by multiplying the O&M norms with the factor of 0.9%. This has given rise to a situation where in the restrictions imposed on admissible O&M expenses of the 3rd and 4th units of the generating station commissioned during 2009-14 period are not continued during 2014-19 period, though the intent is that the O&M expenses of 3rd and 4th units of a generating station should be rationalized by multiplying with a factor of 0.9 since these units are sharing certain common facilities developed for Units 1 and 2 of the generating station. In our view, this anomalous situation can be addressed if the provision to Regulation 29(a) of 2014 Tariff Regulations is made applicable in respect of generating stations whose additional units have been commissioned on or after 1.4.2009. This in our view, will balance the interest of the generating station and the beneficiaries and will be in conformity with the objective of section 61(d) of the Act.

xxx

57. The 2009 Tariff Regulations as well as 2014 Tariff Regulations have been made by the Commission in exercise of its legislative power under Section 178 of the Act read with Section 61 of the Act. Section 61 provides for the guiding principles for specifying the terms and conditions for determination of tariff. Two of the guiding principles enumerated under Section 61 are extracted as under:-

> *"(c) the factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;*
>
> *(d) Safeguarding of consumer's interest and at the same time, recovery of the cost of electricity in a reasonable manner."*

58. Therefore, some of the relevant factors to be considered while specifying the terms and conditions of tariff would relate to the economical use of resources, efficiency, good performance, safeguarding the consumer interest while ensuring the recovery of the cost of electricity in a reasonable manner. During the making of the 2009 Tariff Regulations, the Commission took note of the facts that the generators like NTPC are going for expansion of the existing generating stations for optimum utilization of the resources. Since, the expansion units would be sharing some of the common facilities already in place and the normative O&M expenses allowed in the regulation captures the economic scale for a capacity range of 1000 to 1200 MW on an average, the Commission felt that the O&M expenses for the extension unit of the same type at the same location should not be of the same order. Accordingly, the Commission provided for multiplying factors to be applied to the normative O&M expenses to arrive at the O&M expenses in respect of future additional units whose COD would occur on or after 1.4.2009…

59. It is apparent from the above that the intention of providing multiplying factor for determination of O&M charges for additional units was to pass on the benefits of economic scale to the consumers. The said provisions are also in conformity with the provisions of the Act particularly sub-section (c) and (d) of Section 61 of the Act. However, while framing the 2014 Tariff Regulations, the above aspects could not be captured in respect of the expansion units which were commissioned on or after 1.4.2009 but before 31.3.2014. The Commission considers it appropriate to remove the difficulty by exercise of its power under Regulation 55 of the 2014 Tariff Regulations by providing that the proviso under sub-clause (a) of Clause 1 of Regulation 29 of 2014 Tariff Regulations shall be made applicable to the units whose COD occurred on or after 1.4.2009. We have exercised our power to remove difficulty in order to give effect to the Regulations in the true letter and spirit of the Act.

160. Accordingly, in line with the above decision, the 3rd and 4th units of the generating station, with a capacity of 500 MW, which commissioned after 1.4.2009, is entitled to

the O&M expenses with a multiplication factor of 0.9%. The Petitioner has claimed the normative O&M expenses as allowed by order dated 1.5.2017 in Review Petition No.50/RP/2016 read with order dated 29.7.2016 in Petition No. 294/GT/2014, in terms of the proviso to Regulation 29(1)(a) of the 2014 Tariff Regulations. Hence, the normative O&M expenses claimed by the Petitioner are allowed.

Water Charges

161. Regulation 29(2) of the 2014 Tariff Regulations provide as follows:

> "*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:*

162. In respect of some of the truing-up petitions of other generating stations of the Petitioner, the Commission, vide ROP had directed the Petitioner to submit the (i) year-wise audited computation of the actual water charges claimed for the 2014-19 tariff period, including the actual quantity of water consumed; (ii) rate (Rs./m^3) charged by the State authorities; (iii) any other charges included in the water charges, in addition to the charges calculated based on the above; and (iv) Auditor certificate to the effect that such other charges above were booked under the head 'water charges' during the 2014-19 tariff period. In respect of this generating station, the Petitioner, vide affidavit dated 4.6.2021, has submitted the auditor certificate, in support of the water charges. The details in support of water charges paid by the Petitioner during the 2014-19 tariff period is summarized below:

(Rs. in lakh)

	Units	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Type of Cooling Tower	-	NDCT				
Type of Cooling Water System	-	Closed Cycle				
Water allocation$	*(TMC)*	0.414				

	Units	2014-15	2015-16	2016-17	2017-18	2018-19
Actual water drawl (sweet water)	*(KL)*	10659712	11155099	7749540	9514756	9242551
Ratio of Water Charges	*(in Rs./KL)*	13.01	13.66	14.34	15.06	15.81
Actual water drawl (sweet water)*	*(KL)*		84218384	80527420	83180957	90931407
Rate of water charges (sea water)	*(in Rs./KL)*		0.05	0.05	0.05	0.05
Special Charges as per agreement^^	*(in Rs. lakh)*		105.66	163.89	100.45	80.37
Total water charges paid for Simhadri I and II combined	*(in Rs. lakh)*	1386.829	1629.444	1369.904	1562.603	1587.086
Total water charges paid for Simhadri STPS Stage-I	*(in Rs. lakh)*	724.09	813.68	688.47	768.31	840.39
Total water charges paid for Simhadri STPS Stage-II	*(in Rs. lakh)*	662.74	815.77	681.43	729.29	746.70

*$Contracted quantity for Simhadri-I & II Combined, *Port Officer, Kakinada raised a demand for payment of sea water charges w.e.f. FY 2009-10 onwards. NTPC has taken up with Govt. of Andhra Pradesh for waiver of sea water charges upto FY 2014-15. However, expenditure for FY 2015-16 and FY 2016-17 was accounted in FY 2016-17 and thereafter the same was accounted every year. Demand raised by Port was based on design capacity of the Station whereas the expenditure is booked based on actual drawl. The difference between the amount demanded and the amount accounted has been kept as contingent liability. ^^ Dead Storage pumping charges: Sweet water is being supplied from Yeleru reservoir through canal by gravity flow. Due deficit rainfall in Yeleru reservoir catchment area, level was below gravity level flow. Pumping power charges were paid additional to normal water charges.*

163. As per MOEF&CC Notification dated 28.6.2018, the specific water consumption of 3.5 m^3/MWh, is not applicable to the generating station, on account of usage of sea water for cooling purpose. Accordingly, on prudence check, the water charges allowed in terms of Regulation 29(2) of the 2014 Tariff Regulations is as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
662.74	815.77	681.43	794.29	746.70

Capital Spares

164. The last proviso to 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:*
>
> *xxxxx*
>
> *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 capitalisation or consumption of stores and spares and renovation and modernization."

165. The Petitioner has claimed total actual capital spares for Rs.1833.46 lakh (Rs.264.74 lakh in 2014-15, Rs.299.75 lakh in 2015-16, Rs.501.67 lakh in 2016-17, Rs.336.78 lakh in 2017-18 and Rs.430.52 lakh in 2018-19). The Petitioner has stated that in order to meet the customers demand and to maintain high machine availability at all times by the generating station, the units/ equipment are taken under overhaul/ maintenance and inspected regularly for wear and tear. It has stated that during such works, spares parts of equipment which had been damaged/ unserviceable are replaced/ consumed so that the machines continue to perform at expected efficiency, on a sustained basis. Therefore, the Petitioner has prayed that capital spares replaced/ consumed by the generating station during the 2014-19 tariff period, may be allowed.

166. The Commission vide RoP of the hearing dated 13.8.2020, had directed the Petitioner to furnish the audited statement with respect to the consumption of capital spares, as per Form-17. In response, the Petitioner vide affidavit dated 4.6.2021 has submitted the auditor certificate in support of capital spares consumed. The details of the Capital Spares submitted by the Petitioner in Form 9Bi is as follows:

(Rs. in lakh)

Year	Capital Spares (part of capital cost) (A)	Capital Spares (not part of capital cost) (B)	Total Capital Spares consumed (A) + (B)
2014-15	264.74	0.00	264.74
2015-16	262.89	36.87	299.75
2016-17	341.21	160.47	501.67
2017-18	318.95	17.83	336.78
2018-19	380.18	50.35	430.52

167. We have examined the list of the capital spares consumed by the Petitioner. It is evident from the audited statement and Form 9Bi of the respective years that capital

spares claimed comprise of two categories i.e. (i) spares which form part of the capital cost and (ii) spares which do not form part of the capital cost of the project. In respect of capital spares which form part of the capital cost of the project, the Petitioner has been recovering tariff since their procurement and, therefore, the same cannot be allowed as part of additional O&M expenses. Accordingly, only those capital spares, which do not form part of the capital cost of the project, are being considered. 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 standardised 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 Form-17 of the petition, has been considered for the purpose of tariff. Based on this, the details of the allowed capital spares considered for 2014-19 tariff period is summarized as follows:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Capital Spares (not part of capital cost) claimed (A)	0.00	36.87	160.47	17.83	50.35
Value of capital spares (of Rs.1 lakh and below) disallowed on individual basis (B)	0.00	19.89	18.63	9.81	6.51
Net total value of capital spares considered (C) = (A) - (B)	0.00	16.98	141.83	8.02	43.84

168. Further, we are 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 2014-19 tariff period. Therefore, on prudence check of the information furnished by

the Petitioner in Form-17 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 follows:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Net total value of capital spares considered (A)	0.00	16.98	141.83	8.02	43.84
Salvage value @ 10% (B)	0.00	1.70	14.18	0.80	4.38
Net Claim allowed (C) = (A)x(B)	**0.00**	**15.28**	**127.65**	**7.22**	**39.46**

<u>Impact of Goods and Service Tax (GST)</u>

169. The Petitioner has claimed additional O&M expenses amounting to Rs.177.02 lakh in 2017-18 and Rs.256.58 lakh in 2018-19 on account of GST. The Respondent, TANGEDCO has submitted that the Petitioner has not furnished any data showing the details of Plant & Machinery or Goods which attracted the additional liability towards GST w.e.f. 1.7.2017. It has, therefore, submitted that the claim may be disallowed. The Petitioner has clarified that GST, being a change in law, falls under Regulation 3(9) read with Regulation 14(3) of the 2014 Tariff Regulations. The Petitioner has also submitted the auditor certificate in support of its claim.

170. The submissions have been considered. It is observed that the Commission, while specifying the O&M expense norms for the 2014-19 tariff period, had considered taxes to form part of the O&M expense calculations and accordingly, had factored the same in the said norms. This is evident from paragraph 49.6 of the SOR (Statement of Objects and Reasons) to the 2014 Tariff Regulations, which is extracted as follows:

> *"49.6 With regards to suggestion received on other taxes to be allowed, the Commission while approving the norms of O&M expenses has considered the taxes as part of O&M expenses while working out the norms and therefore the same has already been factored in..."*

171. Further, the escalation rates considered in the O&M expense norms under the 2014 Tariff Regulations is only after accounting for the variations during the past five

years of the 2014-19 tariff period, which in our view, takes care of any variation in taxes also. It is pertinent to mention that in case of reduction of taxes or duties, no reimbursement is ordered. In this background, we find no reason to grant additional O&M expenses towards payment of GST.

Impact of wage revision

172. The Petitioner has claimed amount of Rs.5215.01 lakh (Rs.52.00 lakh in 2015-16, Rs.1292.85 lakh in 2016-17, Rs.1692.82 lakh in 2017-18 and Rs.2177.34 lakh in 2018-19) as additional O&M expenses on account of the impact of pay revision of employees of CISF and Kendriya Vidyalya Staff from 1.1.2016 and the employees of the Petitioner posted in the generating station with effect from 1.1.2017. However, it is noticed that the said claim of the Petitioner includes the impact on account of the payment of additional PRP/ ex-gratia to its employee's consequent upon wage revision. As such, as per consistent methodology adopted by the Commission of excluding PRP/ ex-gratia from actual O&M expenses of past data for finalization of O&M norms for various tariff settings, the additional PRP/ ex-gratia paid, as a result of wage revision impact, has been excluded from the wage revision impact claimed by the Petitioner in the present case. Accordingly, the claim of the Petitioner in respect of wage revision impact stands reduced to Rs.4614.58 lakh with the following year-wise break-up.

(Rs. in lakh)

	2015-16	**2016-17**	**2017-18**	**2018-19**	**Total**
Wage revision impact claimed excluding PRP/ ex-gratia	52.00	1292.85	1570.19	1699.54	4614.58

173. The Respondent, TANGEDCO has submitted that the normative O&M expenses allowed by the Commission are higher than the earlier tariff regulations. The Respondent has further submitted that the Petitioner has not furnished the statement showing the existing Basic Pay and the revised Basic Pay, in respect of non-executives

& workmen, executives and has only furnished the year wise impact of wage revision, in respect of the above categories. The Respondent has also submitted that pay revision may not be allowed, as the fixed charges in respect of the generating station will be escalated and will have a huge financial impact on the utilities. The Respondent has also stated that the Petitioner may be directed to meet the expenditure towards wage revision to CISF, from the O&M expenses allowed under Regulation 29 of the 2014 Tariff Regulations. The Respondent, KSEBL has submitted that the claim may be disallowed, as the wage revision expenditure, over and above the normative O&M expenses, will enrich the generator further, at the cost of the beneficiaries, and will affect the end consumers. The Petitioner has, however, clarified that the impact of 7th Pay Commission, the OM dated 3.8.2017 and the 3rd Pay Revision Committee for CPSUs were not in existence and/ or incorporated while framing the 2014 Tariff Regulations and the impact thereof, ought to be made a pass through in tariff, under Regulation 54 and 55 of the 2014 Tariff Regulations.

174. The Commission, while specifying the O&M expense norms under the 2014 Tariff Regulations, had considered the actual O&M expense data for the period from 2008-09 to 2012-13. However, considering the submissions of the stakeholders, the Commission in the Statement of Object and Reasons (SOR) to the 2014 Tariff Regulations had observed that the increase in employees cost due to impact of pay revision impact will be examined on a case to case basis balancing the interest of generating stations and the consumers. The relevant extract of SOR is extracted as follows:

> *"29.26 Some of the generating stations have suggested that the impact of pay revision should be allowed on the basis of actual share of pay revision instead of normative 40% and one generating company suggested that the same should be considered as 60%. In the draft Regulations, the Commission had provided for a normative percentage of employee cost to total O&M expenses for different type of generating stations with an intention to provide a ceiling limit so that it does not lead to any exorbitant increase in the O&M expenses resulting in spike in tariff. The Commission would however, like to review*

the same considering the macroeconomics involved as these norms are also applicable for private generating stations. In order to ensure that such increase in employee expenses on account of pay revision in case of central generating stations and private generating stations are considered appropriately, ***the Commission is of the view that it shall be examined on case to case basis, balancing the interest of generating stations and consumers.***

33.2 The draft Regulations provided for a normative percentage of employee cost to total O&M expenses for generating stations and transmission system with an intention to provide a ceiling limit so that the same should not lead to any exorbitant increase in the O&M expenses resulting in spike in tariff. The Commission shall examine the increase in employee expenses on case to case basis and shall consider the same if found appropriate, to ensure that overall impact at the macro level is sustainable and thoroughly justified. Accordingly, clause 29(4) proposed in the draft Regulations has been deleted. ***The impact of wage revision shall only be given after seeing impact of one full year and if it is found that O&M norms provided under Regulations are inadequate/insufficient to cover all justifiable O&M expenses for the particular year including employee expenses, then balance amount may be considered for reimbursement.****"*

175. In compliance to the said direction, the Petitioner vide affidavit dated 4.6.2021 has furnished the detailed break-up of the actual O&M expenses incurred during the 2014-19 tariff period (including any arrear paid after 31.3.2019 on account of pay revision) for combined Stages (Stage-I and Stage-II) of the generating station tabulated as follows:

(Rs. in lakh)

Sl. No.	**Items**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
1	Consumption of stores & spares	5191.5	5797.62	4920.04	6002.96	7198.49
2	Repair & Maintenance	7358.82	7989.69	8974.16	9737.78	10546.31
3	Insurance	582.78	535.78	516.89	434.05	456.99
4	Security	1752.31	2057.44	2362	2252.6	2469.76
5	**Water Charges**	**0**	**0**	**0**	**0**	**0**
6	**Administrative Expenses**					
6.1	Rent	0	0.75	0	0	0
6.2	Electricity charges	175.78	194.81	204.87	210.32	210.89
6.3	Travelling & Conveyance	653.92	578.65	549.84	555.37	741.19
6.4	Communication Expenses	87.33	118.52	110.31	93.33	189.96
6.5	Advertising	24.52	21.31	18.23	7.16	9
6.6	Foundation Laying & Inauguration	0.00	0.00	0.00	0.00	0.00
6.7	Donation	0.00	0.00	0.00	0.00	0.00
6.8	Entertainment	67.77	77.47	85.63	53.62	163.42
6.9	Filing fee	88.00	88.00	88.00	88.00	88.00

Sl. No.	Items	2014-15	2015-16	2016-17	2017-18	2018-19
	Subtotal (Administrative Expenses)	**1097.31**	**1079.52**	**1056.87**	**1007.8**	**1402.47**
7	**Employee Cost**					
7.1.1	Salaries, Wages & Allowances	7681.08	7296.61	8072.77	9314.58	9549.14
7.1.2	Pension	669.94	659.27	616.96	436.21	590.25
7.1.3	Gratuity	-36.53	-18.71	1125.1	314.17	316.37
7.1.4	Provident Fund	634.61	610.37	605.47	611.82	875.78
7.1.5	Leave Encashment	863.04	808.31	1118.05	948.01	1198.87
7.2	**Staff welfare expenses**					
7.2.1	-Medical expenses on superannuated employees	27.00	27.04	0.45	0.25	0.00
7.2.2	-Medical expenses on regular employees & others	684.21	795.55	468.86	634.21	761.57
7.2.3	-Uniform/Liveries & safety equipment	138.21	122.74	167.19	143.87	299.6
7.2.4	-Canteen expenses	145.65	155.11	171.5	202.07	298.54
7.2.5	-Other staff welfare expenses	149.8	166.18	197.82	150.98	425.02
	Subtotal (Staff welfare Expenses)	**1144.88**	**1266.63**	**1005.82**	**1131.37**	**1784.74**
7.3	Productivity linked Incentive	74.32	58.32	0.00	0.02	0.00
7.4	Expenditure on VRS	166.52	1.99	0.00	0.00	466.46
7.5	Ex-gratia	991.04	956.04	1067.81	1815.78	2123.51
7.6	Performance Related Pay (PRP)	0.00	0.00	0.00	0.00	0.00
	Sub Total (Employee Cost)	12188.9	11638.84	13611.97	14571.97	16905.12
8	Loss of Store	0.00	0.00	0.00	0.00	0.00
9	Provisions	135.49	53.06	241.65	19.86	4448.18
10	Prior Period Expenses	118.97	0.00	0.00	0.00	0.00
11	**Corporate Office expenses allocation**	**5533.54**	**5695.9**	**5821.11**	**6847.89**	**6535.71**
12	Others					
12.1	Rates & Taxes	22.34	34.07	18.22	358.01	413.75
12.2	Water Cess	132.13	117.49	109.88	40.74	9.83
12.3	Training & recruitment expenses	41.22	97.98	31.21	50.19	92.24
12.4	Tender Expenses	114.88	37.74	66.15	46.35	28.22
12.5	Guest house expenses	49.75	51.89	100.98	110.7	128.72
12.6	Education expenses	31.29	33.56	38.64	40.88	32.68
12.7	Community Development Expenses	1390.83	2764.56	1275.77	2462.18	1349.8

Sl. No.	Items	2014-15	2015-16	2016-17	2017-18	2018-19
12.8	Ash utilization expenses	(-) 4.12	0.99	(-) 4.77	(-) 0.57	4898.78
12.9	Books & Periodicals	1.15	1.52	1.31	0.58	0
12.1	Professional Charges	35.37	36.66	57.35	14.97	56.9
12.11	Legal expenses	16.81	28.72	50.03	27.62	12.98
12.12	EDP Hire & other charges	39.85	36.96	32.78	29.32	50.23
12.13	Printing & Stationery	42.25	44.86	34.69	24.28	20.49
12.14	RLDC Fee & Charges	162.39	17.58	24.5	101.72	136.44
12.15	Brokerage & Commission	7.05	10.3	3.36	57.09	45.08
12.16	Bank charges	5.75	1.74	1.51	1.64	0.66
12.17	Claims/advances written off	0.00	0.00	0.00	0.00	0.00
12.18	Hiring of vehicle	318.14	280.44	285.71	302.39	311.87
12.19	Payment to auditors	0.00	0.00	0.00	0.00	0.00
12.2	Misc. Expenses	215.7	210.28	211.04	164.46	190.25
	(Break-up of Misc.)					
12.20.1	Horticulture	91.53	70.9	81.17	61.56	130.93
12.20.2	Transport- Vehicle Running exp.	0.75	0.00	0.45	0.00	0.48
12.20.3	Hire charges & Operating exp - Construction Equipment	3.47	0.00	2.5	0.00	0.00
12.20.4	Tree Plantation exp.	0.00	49.04	13.34	0.00	0.52
12.20.5	R&D expenses	0.00	0.00	0.00	0.00	2.11
12.20.6	Cons-HSD/LDO-(Ind/Imp)-Other Vehicles	0.00	0.00	0.00	0.00	0.00
12.20.7	Compton-HSD/LDO-(Ind/Imp)-DG Set	0.00	0.00	0.00	0.00	0.00
12.20.8	Exp/ Inc frm Inv Diff	0.00	0.00	0.00	0.00	0.00
12.20.9	Detailed Project Report exp-Written off	0.00	0.00	0.00	0.00	0.00
12.20.10	Other Losses Written off	0.00	0.00	0.00	0.00	0.00
12.20.11	**Temporary Works Written off**	0.00	0.00	0.00	0.00	0.00
12.20.12	Loss on sale of Investments	0.00	0.00	0.00	0.00	0.00
12.20.13	Operating exp of diesel generating sets	0.00	0.00	0.00	0.00	0.00
12.20.14	Furnishing Expenses	1.19	6.36	0.91	1.79	4.13
12.20.15	Subscription to Trade and Other Assocn.	0.00	0.20	0.17	0.00	0.00
12.20.16	Hire Charges - Helicopter/Aircraft	0.00	20.39	0.0	21.68	0.00
12.20.17	Visa & Entry Permit Charges - Overseas	0.00	0.00	0.00	0.00	0.00
12.20.18	FX Monitoring Terminal Expenses	0.00	0.00	0.00	0.00	0.00

Sl. No.	Items	2014-15	2015-16	2016-17	2017-18	2018-19
12.20.19	Works/Conf.(Excl train R&D CENPEEP)Earlier Non FBT	24.22	7.34	2.01	0.00	0.00
12.20.20	Workshop/Conf. exp (train R&D CENPEEP) Earlier FBT	0.00	0.91	0.00	0.00	0.00
12.20.21	Hire charges - Office equipments	0.00	0.00	0.00	0.00	0.00
12.20.22	Payment for health club etc.	0.00	0.00	0.00	0.00	0.00
12.20.23	Gifts liable for Fringe Benefit Tax	0.00	0.00	0.00	0.00	0.00
12.20.24	Festival expenses liable Earlier (FBT)	0.00	0.00	0.00	0.00	0.00
12.20.25	Miscellaneous Expenses	91.88	53.49	108.96	75.21	49.33
12.20.26	Rounding Off Difference	0.00	0.00	0.00	0.00	0.00
12.20.27	CENPEEP Expenses	0.00	0.00	0.00	0.00	0.00
12.20.28	Regional Power Committee Expenses	2.67	1.65	1.52	4.21	2.75
12.20.29	Other Compensation	0.00	0.00	0.00	0.00	0.00
12.20.30	Capital Exp Not Represented by Assets	0.00	0.00	0.00	0.00	0.00
12.20.31	Demurrage Charges (Force Majeure)	0.00	0.00	0.00	0.00	0.00
12.20.32	Workshop/Conf Expenses- Without ITC	0.00	0.00	0.00	0.00	0.00
12.20.33	Misc. exp trf to CSR and IEDC	0.00	(-) 25.29	(-) 171.77	(-) 16.63	0.00
	Sub Total (Others)	**2622.77**	**3782.05**	**2166.6**	**3815.94**	**7778.9**
13	**(Total 1 to 12)**	36582.39	38629.9	39671.28	44690.87	57741.92
14	Revenue / Recoveries	(-) 45.96	(-) 30.07	(-) 48.5	(-) 22.90	(-0 22.94
15	Net Expenses	36536.42	38599.83	39622.78	44667.97	57718.98
16	**Capital spares consumed**					
	Total O&M Expenses	**36536.42**	**38599.83**	**39622.78**	**44667.97**	**57718.98**

176. The methodology indicated in the SOR above suggests a comparison of the normative O&M expenses with the actual O&M expenses, on a year to year basis. However, in this respect, the following facts need consideration:

a) The norms are framed based on the averaging of the actual O&M expenses of past five years to capture the year on year variations in sub-heads of O&M;

b) Certain cyclic expenditure may occur with a gap of one year or two years and as such adopting a longer duration i.e. five years for framing of norms also captures such expenditure which is not incurred on year to year basis;

c) When generating companies find that their actual expenditure has gone beyond the normative O&M expenses in a particular year put departmental restrictions and try to bring the expenditure for the next year below the norms.

177. In consideration of above facts, the Commission finds it appropriate to compare the normative O&M expenses with the actual O&M expenses for a longer duration so as to capture the variation in the sub-heads. Accordingly, it is decided that for ascertaining that whether the O&M expense norms provided under the 2014 Tariff Regulations are inadequate/ insufficient to cover all justifiable O&M expenses including employee expenses, the comparison of the normative O&M expenses and the actuals O&M expenses incurred shall be made for 2015-19 on a combined basis which is commensurate with the wage revision claim being spread over these four years.

178. The Commission vide RoP of the hearing dated 13.4.2021, directed the Petitioner to submit the following:

(a) Breakup of actual O&M expenditure for the tariff period 2014-19 under various subheads (as per Annexure-A enclosed) after including the pay revision impact (employees, CISF and KV), wage revision impact (minimum wages). (To be provided in both MS Excel and PDF format);

(b) Break-up of actual O&M expenses including pay revision impact for Corporate Centre/other offices & breakup of claimed wage revision impact on employee cost, expenses on corporate centre and on salaries of CISF & KV employee of the generating station (as per Annexure-B & Annexure-C enclosed) for the 2014-19 tariff period along with the allocation of the total O&M expenses to the various generating stations under construction, operational stations and any other offices along with basis of allocating such expenditure.(to be provided in both MS Excel and PDF format);

179. In response, the Petitioner vide affidavit dated 4.6.2021 has furnished the following details in respect of all the stages of the generating station (2000 MW) including this generating station (1000 MW):

(a) Detailed break-up of the actual O&M expenses for all the stages of the generating station (2000 MW) as well corporate center and its allocation to various generating stations;

(b) Comparative table indicating the actual O&M expenses incurred for Stage –II of the generating station (prorated in the ratio of 1000/2000 MW) against the normative O&M expenses allowed by the Commission during the 2014-19 tariff period for the generating station;

(c) Actual impact of pay revision certified by Auditor after comparing salaries/wages prior to and after pay revision of pay for the generating station (i.e. 1000 MW).

180. The matter has been examined based on the submissions of the parties and the documents available on record. The Petitioner has furnished the detailed break-up of the actual O&M expenses incurred during 2014-19 tariff period for combined stages i.e. Stage-I and II of the generating station (2000 MW). It is noticed that the total O&M expenses incurred is more that the normative O&M expenses recovered during each year of the 2014-19 tariff period. The impact of the wage revision could not be factored by the Commission while framing the O&M expense norms in the 2014-19 Tariff Regulations, since the pay/ wage revision came into effect from 1.1.2016 (CISF & KV employees) and 1.1.2017 (employees of the Petitioner) respectively. As such, in terms of relevant provisions of SOR of the 2014 Tariff Regulations, the approach followed for arriving at the allowable impact of pay revision is given in the subsequent paragraphs.

181. The first step is to compare the normative O&M expenses with the actual O&M expenses incurred during the period from 2015-16 to 2018-19, commensurate to the period for which wage revision impact has been claimed. For like to like comparison, the components of O&M expenses like productivity linked incentive, water charges, filing fees, ex-gratia, loss of provisions, prior period expenses, community development,

store expenses, ash utilization expenses, RLDC fee & charges and others (without breakup/ details) which were not considered while framing the O&M expenses norms for the 2014-19 tariff period, have been excluded from the yearly actual O&M expenses of the generating station as well as corporate centre. Having brought the normative O&M expenses and actual O&M expenses at same level, if normative O&M expenses for the period 2015-19 are higher than actual O&M expenses (normalized) for the same period, the impact of wage revision (excluding PRP and ex-gratia) as claimed for the period is not admissible/ allowed as the impact of pay revision gets accommodated within the normative O&M expenses. However, if the normative O&M expenses for the period 2015-19 are lesser than the actual O&M expenses (normalized) for the same period, the wage revision impact (excluding PRP and ex-gratia) to the extent of under recovery or wage revision impact (excluding PRP and ex-gratia), whichever is lower, is required to be allowed as wage revision impact for the period 2015-19.

182. In this regard, the details as furnished by the Petitioner for actual O&M expenses for Stage-I and Stage-II of the generating station (2000 MW) and wage revision impact (excluding PRP and ex-gratia) for this generating station (Stage-II) are as follows:

(Rs. in lakh)

	2015-16	**2016-17**	**2017-18**	**2018-19**	**Total**
Actual O&M expenses for generating station excluding water charges (2000 MW) (a)	38599.83	39622.78	44667.97	57718.98	180609.56
Actual O&M expenses (normalized) for Simhadri Stage -II of the generating station prorated based on capacity (b)	19299.92	19811.39	22333.99	28859.49	90304.78
Normative O&M expenses for Stage-II of the generating station (c)	15309.00	16272.00	17298.00	18387.00	67266.00
Under-recovery (d)=(c)-(b)	(-) 3990.92	(-) 3539.39	(-) 5035.99	(-) 10472.49	(-) 23038.78

	2015-16	2016-17	2017-18	2018-19	Total
Wage revision impact claimed (excluding PRP and ex gratia)	52.00	1292.85	1570.19	1699.54	**4614.58**

183. As stated, for like to like comparison of the actual O&M expenses and normative O&M expenses, the expenditure against O&M sub-heads, as stated in paragraph 94 above has been excluded, from the actual O&M expenses to arrive at the actual O&M expenses (normalized) for the combined Stage-I and Stage-II of the generating station (2000 MW). Accordingly, the following table portrays the comparison of normative O&M expenses versus the actual O&M expenses (normalized) along with wage revision impact claimed by the Petitioner for this generating station (Stage-II 1000 MW) for the period 2015-19 (on a combined basis) commensurate with the wage revision claim being spread over these four years.

(Rs. in lakh)

Sl. No		2015-16	2016-17	2017-18	2018-19	Total for 2015-2019
1	Actual O&M expenditure (normalized) for Simhadri STPS (Combined for stage-I and stage-II) (a)	33377.38	36180.21	38894.05	43446.64	184380.69
2	Actual O&M expenditure (normalized) for Simhadri STPS-II prorated based on capacity (b)	16688.69	18090.11	19447.02	21723.32	92190.34
2	Normative O&M expenses for Simhadri STPS-II (c)	15309.00	16272.00	17298.00	18387.00	81666.00
	Under-recovery (d) = (c)-(b)	(-)1379.69	(-)1818.11	(-)2149.02	(-)3336.32	(-)10524.34
3	Wage revision impact claimed excluding PRP/ex-gratia	52.00	1292.85	1570.19	1699.54	4614.58

184. It is observed that for the period 2015-16 to 2018-19, the normative O&M expenses is lesser than the actual O&M expenses (normalized) incurred and under-

recovery is to the tune of Rs.10524.34 lakh, which also includes under-recovery of Rs.4614.58 lakh due to wage revision impact. As such, in terms of methodology discussed above, the wage revision impact (excluding PRP/ incentive) of Rs.4614.58 lakh is allowed for the stage-II of the generating station.

185. Accordingly, we, in exercise of the Power under Regulation 54 of the 2014 Tariff Regulations, relax Regulation 29(1) of the 2014 Tariff Regulations, and allow the reimbursement of the wage revision impact amounting to Rs.4614.58 lakh, as additional O&M expenses for the period 2015-19. The arrear payments on account of the wage revision impact is payable by the beneficiaries in twelve equal monthly installments starting from the next bill after issue of this order. Keeping in view the consumer interest, we as a special case, direct that no interest shall be charged by the Petitioner on the arrear payments on the wage revision impact allowed in this order. This arrangement, in our view, will balance the interest of both the Petitioner and the Respondents. Also, considering the fact that the impact of wage revision is being allowed in exercise of the power to relax, the expenses allowed are not made part of the O&M expenses and the consequent annual fixed charges determined in this order.

Ash Transportation Expenses

186. The Petitioner has claimed an amount of Rs.2453.69 lakh in 2018-19 towards Ash Transportation expenses, as additional O&M expenses. The Petitioner has submitted that the notification dated 25.1.2016 of MoEF&CC, GOI, issued in terms of the provisions of the Environment (Protection) Act 1986, provides for the transportation cost of Fly ash generated at power stations, to be borne by such generating companies. The Petitioner has also stated that it had filed Petition No. 172/MP/2016 before this Commission, seeking reimbursement of the additional expenses incurred towards Fly

Ash transportation, directly from the beneficiaries as the same are statutory expenses. Accordingly, the Petitioner has sought reimbursement of the additional expenditure incurred towards fly ash transportation, as under:

(Rs. in lakh)

	2016-17	**2017-18**	**2018-19**	**Total for 2015-19**
Expenditure towards fly ash transportation (A)			5081.07	5081.07
Revenue earned from sale of fly ash (B)	40.17	30.74	102.77	173.68
Net additional O & M expenses claimed (C) = (B-A)#	(-) 40.17	(-) 30.74	4978.30	4907.39
Net additional O & M expenses claimed for Stage-II (C/2)				2453.69

#For Simhadri-I and II combined (O and M considered in the ratio of capacity of Simhadri Stage-I and Stage-II)

187. The Respondent, TANGEDCO has submitted that the Petitioner has not submitted any details as directed by the Commission *vide* its order dated 5.11.2018 in Petition No.172/MP/2016 and has stated that the claim may be disallowed. The Respondent, KSEBL has submitted that such expenses may be met from the existing normative O & M expenses allowed to the generating station.

188. The Commission *vide* RoP of hearing dated 13.8.2020 had directed the Petitioner to furnish the following additional information:

(i) Award of fly ash transportation contract through a transparent competitive bidding procedure. Alternatively, the schedule rates of the respective State Governments, as applicable for transportation of fly ash;

(ii) Details of the actual additional expenditure incurred on Ash transportation after 25.1.2016, duly certified by auditors;

(iii) Details of the Revenue generated from sale of fly ash/ fly ash products and the expenditure incurred towards Ash utilization up to 25.1.2016 and from 25.1.2016 to till date, separately;

(iv) Revenue generated from fly Ash sales maintained in a separate account as per the MoEF&CC notification;

(v) Accordingly, the Petitioner shall confirm that it has complied with the above conditions and submitted the details thereof along with the computation of the claimed cost towards Ash Transportation. The additional information submitted shall also include the name of the transporters, the distance of the end user (in km), the awarded rate in

Rs./ton per kilometer etc., and any other details as considered relevant to the said claim in terms of the MoEF&CC Notification dated 25.1.2016;

189. In response, the Petitioner vide affidavit dated 4.6.2021 has submitted the following:

i) A Memorandum of Understanding (MoU) was entered between NTPC and National Highways Authority of India (NHAI) on 29.6.2018 and 19.2.2019 for bearing cost of transportation cost of ash from NTPC Simhadri STPS for use in various road construction projects in Visakhapatnam Dist. in the State of Andhra Pradesh for its utilization in compliance of MoEF&CC gazette notification dated 03.11.2009 and its amendment dated 25.01.2016. The rate for transportation of fly ash will be as per the prevailing Schedule of Rates (SoR) of Andhra Pradesh (A.P.). A copy of applicable SoR of Andhra Pradesh (A.P.) has been attached.

ii) The Petitioner has already submitted the ash transportation expense that were charged to P&L over and above station ash fund, duly certified by the auditor. The same expense has been claimed by the Petitioner as the additional O&M expense on account of Transportation of Ash in terms of the MoEF&CC notification dated 25.1.2016. These net expenses charged to P&L has been arrived at by deducting the revenue earned from sale of fly ash/fly ash products after 25.1.2016.

(Rs. in lakh)

	Amount
Revenue from Sale of Fly Ash/Fly Ash Products (A)	173.68
Expenditure on Ash Transportation (B)	5081.07
Ash Transportation expense charged to P&L (B-A)	4907.39

**All figures above are corresponding to 2000 MW (Stage-I and Stage-II)*

iii) The details of the revenue generated from sale of ash from 25.1.2016 to 31.3.2019 have been attached.

iv) An auditor certificate in respect of year-wise Ash Transportation expenses met out of P&L has been attached.

v) Prior to the MoEF&CC notification dated 25.1.2016, there was no mandate on the Petitioner to transport the fly ash. The fly ash was being made available to the industries seeking the same at the generating station itself bearing the cost of transport the fly ash themselves.

190. The matter has been examined. As regards reimbursement of Ash transportation expenses, the Commission in its order dated 5.11.2018 in Petition No.172/MP/2016, while directing compliance of certain conditions by the Petitioner, had granted liberty to

the Petitioner to approach the Commission at the time of truing-up exercise for the 2014-19 tariff period along with all details/ information, duly certified by auditor.

191. The MoEF&CC notification dated 25.1.2016 provides as follows:

> *"10. The cost of transportation of ash for road construction projects or for manufacturing of ash based products or use as soil conditioner in agriculture activity within a radius of hundred kilometers from a coal or lignite based thermal power plant shall be borne by such coal or lignite based thermal power plant and the cost of transportation beyond the radius of hundred kilometers and up to three hundred kilometers shall be shared equally between the user and the coal or lignite based thermal power plant."*

192. However, it is noticed that the Petitioner has only furnished the Auditor Certificate and Conveyance charges of materials-common Schedule of Rates, 2017-18, but has not submitted the relevant information required in terms of the MoEF&CC notification dated 25.1.2016 (such as the quantum of ash transported, locations, the distance of the end user (in km), the applicable awarded rate in Rs./ton per kilometer, name of the transporters, etc.). From the details furnished by the Petitioner, it is not clear as to the (i) the quantum of ash, (ii) if ash transportation is beyond 100 km radius or less than 100 km radius, and (iii) if the sharing of 50% of ash transportation expenses to be shared between the ash (end) user and the Thermal Power plant as stipulated in MoEF&CC notification, were excluded from the claim or not. Therefore, in the absence of the above required information, we are not inclined to allow the said expenditure towards fly ash transportation. However, the Petitioner is granted liberty to file a separate petition with all the supporting documents and justification for the claim of expenditure towards fly ash transportation.

193. Based on the above discussions, the total annualized O&M expenses allowed for the 2014-19 tariff period in respect of the generating station is summarized below:

(Rs. in lakh)

		2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Installed Capacity (MW) (A)		1000.00	1000.00	1000.00	1000.00	1000.00

		2014-15	2015-16	2016-17	2017-18	2018-19
Normative O&M expenses under the Regulation 29(1) (a) of the 2014 Tariff Regulations (b) in Rs. lakh / MW (B)		14.40	15.31	16.27	17.30	18.39
Normative O&M Expenses under the Regulation 29(1) of the 2014 Tariff Regulations (b) (C) = (A)x(B)	Claimed	14400.00	15309.00	16272.00	17298.00	18387.00
	Approved	14400.00	15309.00	16272.00	17298.00	18387.00
Water Charges under the Regulation 29(2) of the 2014 Tariff Regulations (D)	Claimed	662.74	815.77	681.43	794.29	746.70
	Approved	662.74	815.77	681.43	794.29	746.70
Capital Spares Consumed under the Regulation 29(2) of the 2014 Tariff Regulations) (E)	Claimed	264.74	299.75	501.67	336.78	430.52
	Approved	0.00	15.28	127.65	7.22	39.46
Total O&M expenses as allowed as per Regulation 29(1)(a) of the 2014 Tariff Regulations (including water charges and capital spares (F) = (C+D+E)	Claimed	**15327.48**	**16424.52**	**17455.10**	**18429.07**	**19564.22**
	Approved	**15062.74**	**16140.05**	**17081.08**	**18099.51**	**19173.15**
Additional O&M expenses						
Impact of Wage Revision (in Rs. lakh) (G)	Claimed	0.00	52.00	1292.85	1692.82	2177.34
	Approved	0.00	52.00	1292.85	1570.19	1699.54
Impact of GST (H)	Claimed	0.00	0.00	0.00	177.02	256.58
	Approved	0.00	0.00	0.00	0.00	0.00
Ash Transportation expenses (I)	Claimed	0.00	0.00	0.00	0.00	2453.69
	Approved	0.00	0.00	0.00	0.00	0.00
Sub Total Additional O&M expenses (J) = (F+G+H+I)	Claimed	0.00	52.00	1292.85	1869.84	4887.61
	Approved	0.00	52.00	1292.85	1570.19	1699.54
Total O&M expenses (K) = (F+I)	Claimed	**15327.48**	**16476.52**	**18747.95**	**20298.91**	**24451.83**
	Approved	**15062.74**	**16192.05**	**18373.93**	**19669.69**	**20872.69**

Operational Norms

(a) Normative Annual Plant Availability Factor

194. The Normative Annual Plant Availability Factor of 83% for 2014-15 to 2016-17 and 85% for 2017-18 and 2018-19, in accordance with the provisions of Regulation 36(A) of the 2014 Tariff Regulations as approved by order dated 29.7.2016 in Petition No. 294/GT/2014 has been allowed.

(b) Auxiliary Energy Consumption

195. The Petitioner has submitted Auxiliary Energy Consumption (AEC) of 5.25% as per Regulation 36(E)(a)(ii) of the 2014 Tariff Regulations and in justification has submitted that CEA in its Recommendations on Operation Norms for Thermal Power Stations for Tariff Period 2014-19" had recommended reduction of AEC by 0.75% for 500 MW and higher size units installed after 1.4.2009. Therefore, AEC norms for the generating station got reduced to 5.25% from 6.0%. In the said recommendations, the actual average AEC indicated by CEA for the generating station for the period 2011-12 to 2012-13 is 5.7% and the project could never achieve AEC of 5.25% as per norms. The actual AEC of the project is as follows:

2014-15	2015-16	2016-17	2017-18	2018-19
5.49	5.61	5.55	5.99	5.95

196. The Petitioner has submitted that as the plant is located in the coastal region, sea water, instead of river water, is used for condenser cooling, auxiliary equipment cooling and ash handling system. As, the specific gravity of sea water (1.025) is higher than that of river water (1.00), the Cycle of Concentration (COC) is to be maintained below 1.5 instead of 3.0 as required in sweet water and, therefore, more blow down is required with sea water resulting in more pumping power than that required for sweet water. The Petitioner has further submitted that sea water has resulted in higher AEC

and, accordingly, prayed for relaxation in AEC norms for the generating station from 5.25 % to 5.38% under section 61 of Electricity Act, 2013 and Regulation of 54 of the 2014 Tariff Regulations.

197. The Respondent, TANGEDCO has submitted that AEC of 5.25% has been approved by order dated 29.7.2016 in Petition No.294/GT/2014. The Respondent has also submitted that as the Petitioner was unable to achieve and maintain AEC as per the norms, the issue of “pumping sea water” for cooling requirement has been raised as an excuse for the relaxation sought for AEC. The Respondent has submitted that inefficiency of the Petitioner in curtailing AEC should not be passed on to the beneficiaries. The Respondent, KSEBL has submitted that the claim of the Petitioner may be disallowed as the same is not in line with the 2014 Tariff Regulations as there are no provisions for stipulating separate AEC norms for coastal plants.

198. The submissions have been considered. As per Detailed Operating Procedure (DoP) of the Grid Code dated 5.5.2017 on compensation mechanism for ISGS, on account of degradation of SHR and increase in AEC due to part loading, a separate compensation is payable by the beneficiaries. As per data furnished by the Petitioner, it is observed that AEC has increased abruptly only during the years 2017-18 and 2018-19, which could also be due to lower loading factors in that period. Hence, the Petitioner’s claim for additional AEC, above the normative of 5.25%, cannot be accepted on account of utilisation of sea water. The detailed calculation of AEC, after compensation, has not been submitted by the Petitioner. Therefore, the prayer of the Petitioner to relax the provisions of AEC in exercise of the power under Regulation 54 power to relax of the 2014 Tariff Regulations is rejected. Accordingly, AEC of 5.25% as

approved by order dated 29.7.2016 in Petition No. 294/GT/2014, which is in accordance with the Regulation 36(E)(a) of the 2014 Tariff Regulations, is allowed.

(c) Station Heat Rate

199. The Gross Station Heat Rate of 2380.319 kCal/kWh which is in accordance with the provisions of Regulation 36(C) of the 2014 Tariff Regulations and approved by order dated 29.7.2016 in Petition No. 294/GT/2014 period has been allowed.

200. In view of the above, the operational norms for the generating station claimed by the Petitioner in terms of the Regulation 36 of the 2014 Tariff Regulations, is allowed as follows:

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Normative Annual Plant Availability Factor (NAPAF)	83%			85%	
Gross Station Heat Rate (kcal/kwh)	2380.319				
Auxiliary Power Consumption (%)	5.25%				

Interest on Working Capital

201. Sub-section (a) of clause (1) of Regulation 28 of the 2014 Tariff Regulations provides as follows:

> *"28. Interest on Working Capital:*
>
> *(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 later.

(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 in Working Capital

202. Regulation 28(2) of the 2014 Tariff Regulations provides that the computation of cost of fuel as a part of Interest on Working Capital (IWC) is to be based on the landed price and gross calorific value of the fuel as per actuals, for the three months preceding the first month for which the tariff is to be determined.

203. Regulation 30(6) of the 2014 Tariff Regulations provides as follows:

"30. Computation and Payment of Capacity Charge and Energy Charge for Thermal Generating Stations:

(6) 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 formula:

(a) For coal based and lignite fired stations

ECR = {(GHR – SFC x CVSF) x LPPF / CVPF+SFC x LPSFi + LC x LPL} x 100 / (100 – AUX)

(b) xxxxx

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*

*(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.

GHR =Gross station heat rate, in kCal per kWh.

LC = Normative limestone consumption in kg per kWh.

LPL = Weighted average landed price of limestone in Rupees per kg.

LPPF =Weighted average landed price 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 price 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 Price of Secondary Fuel in Rs./ml during the month

204. Therefore, in terms of the above regulation, for determination of the Energy Charges in working capital, the GCV on 'as received 'basis is to be considered.

205. Regulation 30(7) of the 2014 Tariff Regulations provides as follows:

"(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."

206. The Regulations for computation of energy charges was challenged by the Petitioner and other generating issue of 'as received' GCV specified in Regulation 30 of the 2014 Tariff companies through various writ petitions filed before the Hon'ble High Court of Delhi (W.P. No.1641/2014-NTPC v CERC). The Hon'ble Court directed the Commission to decide the place from where the sample of coal should be taken for measurement of GCV of coal on 'as received' basis on the request of Petitioners. In terms of the directions of the Hon'ble High Court, the Commission vide order dated 25.1.2016 in Petition No. 283/GT/2014 (approval of tariff of Kahalgaon STPS for the 2014-19 tariff period) decided as follows:

"58. In view of the above discussion, the issues referred by the Hon'ble High Court of Delhi are decided as under:

"(a) There is no basis in the Indian Standards and other documents relied upon by NTPC etc. to support their claim that GCV of coal on as received basis should be measured by taking samples after the crusher set up inside the generating station, in terms of Regulation 30(6) of the 2014 Tariff regulations.

(b)The samples for the purpose of measurement of coal on as received basis should be collected from the loaded wagons at the generating stations either manually or through the Hydraulic Auger in accordance with provisions of IS 436(Part1/Section1)-1964 before the coal is unloaded. While collecting the samples, the safety of personnel and equipment as discussed in this order should be ensured. After collection of samples, the sample preparation and testing shall be carried out in the laboratory in accordance with the procedure prescribed in IS 436(Part1/Section1)-1964 which has been elaborated in the CPRI Report to PSERC."

207. The Review Petition No.11/RP/2016 filed by the Petitioner against the aforesaid order dated 25.1.2016 in Petition No. 283/GT/2014 was rejected by the Commission vide order dated 30.6.2016. The Petitioner has also filed Petition No.244/MP/2016 before this Commission inter alia praying for removal of difficulties in view of the issues faced by it in implementing the Commission's orders dated 25.1.2016 and 30.6.2016 with regard to sampling of coal from loaded wagon top for measurement of GCV. The Commission by its order dated 19.9.2018 disposed of the preliminary objections of the respondents therein and held that the petition is maintainable. Against this order, some of the respondents have filed appeal before the APTEL in Appeal Nos. 291/2018 (GRIDCO v NTPC & ors) and the same is pending adjudication.

208. In Petition No. 268/GT/2014 filed by the Petitioner for determination of tariff of this generating station for the 2014-19 tariff period, the Petitioner had not furnished GCV of coal on 'as billed' and on 'as received' basis for the preceding 3 months i.e. for January 2014, February 2014 and March 2014 that were required for determination of Interest on Working Capital (IWC). Therefore, the Commission vide its order dated 8.11.2016 in Petition No.268/GT/2014 had considered GCV of coal on as 'billed basis'

and provisionally allowed adjustment for total moisture while allowing the cost of coal towards generation & stock and two months' energy charges in the working capital.

209. As per the Commission's order dated 25.1.2016 in Petition No. 283/GT/2014, the Petitioner in Form-13 F has considered the average GCV of coal on "as received basis" i.e., from wagon top for the period from October 2016 to March 2019 for the purpose of computation of working capital for the 2014-19 tariff period. The Petitioner has further submitted that CEA vide letter dated 17.10.2017 has opined that a margin of 85-100 kCal/kg for pit-head station and a margin of 105-120 kCal/kg for non-pit head station is required to be considered as loss of GCV of coal on "as received" and on "as fired basis respectively. Accordingly, the Petitioner has considered a margin of 120 kCal/kg on average GCV of coal for the period from October 2016 to March 2019 for computation of working capital of the generating station. Accordingly, the cost of fuel component in the working capital of the generating station based on (i) 'as received' GCV of coal for 30 months from October 2016 to March 2019 with adjustment of 120 kCal/kg towards storage loss, (ii) landed price of coal for preceding three months i.e. January 2014 to March 2014 and (iii) GCV and landed price of Secondary fuel oil procured for the preceding three months i.e. January 2014 to March 2014 for the generating station, the Petitioner has claimed the cost of fuel component in the working capital as follows:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Cost of Coal towards stock (30 days)	17765.46	17765.46	17765.46	18193.54	18193.54
Cost of Coal towards Generation (30 days)	17765.46	17765.46	17765.46	18193.54	18193.54
Cost of Secondary fuel oil 2 months	325.53	326.42	325.53	333.37	333.37

210. The Petitioner has claimed Energy Charge Rate (ECR) ex-bus of 316.587 paise/kWh for the generating station based on GCV and price of fuel (coal and secondary fuel oil) as indicated above.

211. Clarification was sought from the Petitioner on the details of GCV on 'as received' basis for the months of January 2014 to March 2014 which was uploaded in the website of the Petitioner and shared with the beneficiaries. The Petitioner vide affidavit dated 4.6.2021 has submitted that though the computation of energy charges moved from 'as fired' basis to 'as received' basis with effect from 1.4.2014 in terms of Regulation 30(6) of the 2014 Tariff Regulations, for calculation of IWC under Regulation 28(2) of the 2014 Tariff Regulations, the GCV should be as per 'actuals' for the three months preceding the first month for which tariff is to be determined. It has further submitted that for the 2014-19 tariff period, Regulation 28(2) of the 2014 Tariff Regulations unequivocally provide that the actual cost and GCV of the preceding three months shall be considered and for these preceding three months (January 2014 to March 2014) by virtue of it falling under the 2009 Tariff Regulations shall be computed on the basis of 'as fired' GCV. Referring to the judgment of the Hon'ble Supreme Court in PTC India v CERC (2010) 4 SCC 603 and the judgment of APTEL in NEEPCO v TERC (2006) APTEL 148, the Petitioner has submitted that the Commission is bound by the provisions of the tariff regulations and that purposive interpretation ought to be given to the 2014 Tariff Regulations and interest on working capital ought to be computed in terms of Regulation 28(2) of the 2014 Tariff Regulations on actual GCV i.e., 'as fired' GCV. The Petitioner has submitted that without prejudice to the above submissions, it has furnished the details of GCV on 'as received' basis for the months of January 2014 to March 2014 in compliance with the directions of the Commission as follows:

Sr. No.	Month	Wt. Avg. GCV of coal received (EM basis) (kcal/kg)	Total moisture (TM) (in %)	Equilibrated moisture (EM) (in %)	Wt. Avg. GCV of coal received (TM basis) (kcal/kg)
		(A)	(B)	(C)	(D)= (A)*(1-B%)/(1-C%)
1	January 2014	3992	16.15	6.90	3595
2	February 2014	4189	17.34	6.91	3719
3	March 2014	4267	16.08	6.62	3835
	Average				3716

212. The submissions have been considered. As stated in paragraph 209 above, the Petitioner in Form-13 F, has considered the average GCV of coal on “as received basis” i.e. from wagon top for the period from October 2016 to March 2019 for the purpose of computation of working capital for the 2014-19 tariff period. In addition to the average GCV, it has also considered a margin of 120 kCal/kg for computation of the working capital of the generating station.

213. The Respondent, TANGEDCO has submitted that contention of the Petitioner for computation of Interest on working Capital in accordance with the 2009 Tariff Regulations shall be rejected as there is no provision in either the 2009 Tariff Regulations or the amendment thereof to consider the GCV for IWC on ‘as fired’ basis. In justification, the Petitioner has clarified the Regulation 28(2) of the 2014 Tariff Regulations provides that GCV shall be as per actual for the three months preceding the first month for which tariff is to be determined and since the period as stipulated above fell in operation of the 2009 Tariff Regulations, the Regulation 18(2) read with Regulation 21(6) of the 2009 Tariff Regulations shall govern the filed which unequivocally mandates that the generating company shall consider the GCV on ‘as fired’ basis. The Petitioner also referred Commission’s order dated 28.4.2021 in Petition No. 335/MP/2020 wherein the Commission held that when a regime is changed inter-

se between two tariff periods, the generating company is expected to comply with the revised regime as and when the same becomes applicable.

214. Regulation 28(2) of the 2014 Tariff Regulations provides that the computation of cost of fuel as a part of IWC is to be based on the landed price and gross calorific value of the fuel, as per actuals, for the three months preceding the first month for which the tariff is to be determined. Thus, calculation of IWC for 2014-19 period is to be based on such values for months of January 2014, February 2014 and March 2014. The Petitioner has not been able to furnish these values at the time of determination of tariff for the 2014-19 tariff period in Petition No. 294/GT/2014. In the instant truing up petition, the Petitioner has proposed that instead of GCV for January 2014, February 2014 and March 2014, the Commission should consider the average values for months of October 2016 to March 2019 since the measurement of 'as received' GCV has been done in accordance with directions of the Commission vide order dated 25.1.2016 in Petition No. 283/GT/2014. In our view, the proposal of the Petitioner to consider the retrospective application of 30 months (October 2016 to March 2019) average of 'as received' GCV data in place of 'as received' GCV of the preceding three months (January 2014 to March 2014) is not acceptable, keeping in view that the average GCV for 30 months may not be commensurate to the landed cost of coal for the preceding three months to be considered for calculating IWC in terms of Regulation 28(2) of the 2014 Tariff Regulations and that due to efflux of time (gap of 30 month), the quality of coal extracted from the linked mines would have undergone considerable changes. Also, the consideration of loss of GCV of 120 kCal/kg cannot be considered, as the same is not as per provisions of the 2014 Tariff Regulations.

215. It is observed that though the Petitioner has furnished the details of 'as received' GCV for the three months of January 2014 to March 2014 as in table under paragraph 210 above, it has submitted that GCV of fuel is to be considered 'on actuals' for January 2014 to March 2014 and as such, GCV is required to be considered on an 'as fired' basis. In other words, the Petitioner has contended that since the period of January 2014 to March 2014 falls in the 2009-14 tariff period for measurement of GCV of coal, Regulation 18(2) read with Regulation 21(6) of the 2009 Tariff Regulations was applicable which mandates that generating company shall measure GCV on 'as fired' basis (and not on 'as received' basis). This submission of the Petitioner is also not acceptable in view of provisions of Regulation 21(6) of the 2009 Tariff Regulations that was amended on 31.12.2012, by addition of the following provisos.

> *"The following provisos shall be added under Clause (6) of Regulation 21 of the Principal Regulations as under, namely:*
>
> *Provided that 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 form 15 of the Part-I of Appendix I to these regulations:*
>
> *Provided further 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."*

216. Thus, in terms of the above amendment to the 2009 Tariff Regulations, the details regarding the weighted average GCV of the fuels on 'as received' basis was also required to be provided by the Petitioner along with bills of the respective month. Also, bills detailing the parameters of GCV and price of fuel were to be displayed by the Petitioner on its website, on monthly basis.

217. As per SOR to the 2014 Tariff Regulations, we note that the main consideration of the Commission while moving from 'as fired' GCV to 'as received' GCV for the purpose of energy charges under Regulation 30(6) of the 2014 Tariff Regulations for the 2014-19 tariff period was to ensure that GCV losses which might occur within the generating station after receipt of coal are not passed on to the beneficiaries on account of improper handling and storage of coal by the generating companies. As regards the allowable (normative) storage loss within the generating station, CEA had observed that there is negligible difference between 'as received' GCV and 'as fired' GCV. As such, for the purpose of calculating energy charges, the Commission moved from 'as fired' GCV to 'as received' GCV under Regulation 30(6) of the 2014 Tariff Regulations without allowing any margin between the two measurements of GCV. Thus, 'as received' GCV was made applicable for the purpose of calculating working capital requirements based on the actual GCV of coal for the preceding three months of the first month for which tariff is to be determined in terms of Regulation 28(2) of 2014 Tariff Regulations. In case the submission of the Petitioner that 'as fired' is to be considered 'at actuals' for the preceding three months for purpose of IWC, the same would mean allowing (and passing through) all storage losses which would have occurred during the preceding three months (January 2014 to March 2014) for the 2014-19 tariff period. This, according to us, defeats the very purpose of moving from 'as fired' GCV to 'as received' GCV in the 2014 Tariff Regulations. In this background and keeping in view that in terms of amended Regulation 21(6) of the 2009 Tariff Regulations, the Petitioner is required to share details of the weighted average GCV of the fuel on 'as received' basis, we consider the fuel component and energy charges for two months based on 'as received' GCV of the preceding three months (January 2014 to March 2014) for the purpose of computation of IWC in terms of Regulation 28(2) of the 2014 Tariff Regulations.

218. The Petitioner has calculated GCV of 3446.23 kcal/kg which represents the simple average of GCV of the preceding three months. The weighted average GCV for three months, based on the net coal quantities as per Form-15 of the petition and the monthly GCVs as submitted by the Petitioner in the table under paragraph 211 above, works out to 3716.65 kCal/kg.

219. Accordingly, the cost for fuel components in working capital has been computed considering the fuel details (price and GCV) as per Form-15 of the petition except for 'as received' GCV of coal, which is considered as 3716.65 kCal/kg as discussed above. All other operational norms such as Station Heat Rate Auxiliary Energy Consumption and Secondary Fuel Cost have been considered as per the 2014 Tariff Regulations for calculation of fuel components in working capital.

220. Based on the above discussion, the cost of fuel components in working capital is worked out and allowed as follows:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Cost of Coal towards stock (30 days)	15302.79	15302.79	15302.79	15671.53	15671.53
Cost of Coal towards Generation (30 days)	15302.79	15302.79	15302.79	15671.53	15671.53
Cost of Secondary fuel oil 2 months	325.26	326.15	325.26	333.10	333.10

221. The cost of coal towards stock and generation allowed for the 2014-19 tariff period is less than the cost claimed by the Petitioner for the following reasons:

a) The Petitioner has considered average GCV of coal for 30 months as 3326.23 kCal/kWh (including adjustment of GCV of 120 kCal/kg) and weighted average price of coal as 4162.71 Rs/MT while the Commission has considered the same as 3716.65 kCal/kg and 4006.54 Rs/MT respectively. Storage loss of 120 kCal/kg as considered by the Petitioner has not been considered as there is no such provision in 2014 Tariff Regulations; and

b) The Petitioner has considered 'Normative Transit & Handling losses of 0.8% as prescribed in Regulation 30(8) of the 2014 Tariff Regulations.

<u>Energy Charge Rate (ECR) for calculating working capital</u>

222. Regulation 30(6)(a) of the 2014 Tariff Regulations provides for computation and payment of Energy Charge for thermal generating stations as follows:

"6. Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal place in accordance with the following formula:
(a) For coal based and lignite fired stations
ECR = {(GHR – SFC x CVSF) x LPPF / CVPF+SFC x LPSFi + LC x LPL} x 100 / (100 – AUX)
Where,
AUX = Normative auxiliary energy consumption in percentage.
CVPF = Gross calorific value of primary fuel as received, in kCal per kg, per litre or per standard cubic metre, as applicable.
CVSF = Calorific value of secondary fuel, in kCal per ml.
ECR = Energy charge rate, in Rupees per kWh sent out.
GHR = Gross station heat rate, in kCal per kWh.
LC = Normative limestone consumption in kg per kWh.
LPL = Weighted average landed price of limestone in Rupees per kg.
LPPF = Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable during the month.
SFC= Normative specific fuel oil consumption, in ml/ kWh
LPSFi= Weighted average landed price of secondary fuel in Rs/ ml during the month

223. The Petitioner has claimed Energy Charge Rate (ECR) ex-bus of 316.587 paise/kWh for the generating station, based on the landed cost of coal during preceding three months, GCV of coal on 'as received' basis for average of 30 months along with the storage loss of 120 kCal/kg & GCV and price of Oil procured and burnt for the preceding three months of 2014-19 for the generating station. Since these claims of the Petitioner has not be allowed above, the allowable ECR, based on the operational norms specified under the 2014 Regulations and on weighted average of 'as received' GCV of 3716.650 kCal/kg, is worked out as follows:

	Unit	**2014-19**
Capacity	MW	1000
Gross Station Heat Rate	Kcal/kWh	2380.319
Aux. Energy Consumption	%	5.25

	Unit	2014-19
Weighted average GCV of oil	Kcal/lit	9784.00
Average GCV of Coal for Jan to March 2014	Kcal/kg	3716.65
Weighted average price of oil	Rs. /KL	53681.86
Weighted average price of Coal	Rs. /MT	4006.544
Rate of Energy Charge ex-bus	Rs. /kWh	2.731

224. Energy charges for 2 months as a part of working capital have been calculated on the following basis:

a) ECR of Rs.2.731/kWh as calculated above (rounded off to three places as per Regulation 30(6) of 2014 Regulations).

b) Two months ex-bus energy corresponding to installed capacity of 1000 MW, normative availability of 83% for 2014-15 to 2016-17 and 85% for 2017-18 and 2018-19, along with AEC of 5.25% which works out to:

i) 6889.08 MU {1000x0.83x24x365x0.9475/1000} for the years 2014-15, 2016-17.

ii) 6907.96 MU {1000x0.83x24x366x0.9475/1000} for the year 2015-16 (leap year)

iii) 7055.09 MU {1000x0.85x24x365x0.9475/1000} for the years 2017-18 and 2018-19.

Working Capital for Maintenance Spares

225. The Petitioner *vide* Form-13B has claimed maintenance spares in the working capital as follows:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
3065.50	3295.30	3749.59	4059.78	4890.37

226. Regulation 28(1)(a)(iv) of the 2014 Tariff Regulations provide for maintenance spares @20% of the operation & maintenance expenses. Accordingly, maintenance spares @20% of the operation & maintenance expenses (including water charges and capital spares), are allowed as follows:

(Rs in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
3012.55	3228.01	3416.22	3619.90	3834.63

Working Capital for Receivables

227. Receivables equivalent to two months of capacity charge and energy charge has been worked out duly taking into account mode of operation of the generating station on secondary fuel, as follows:

(Rs.in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Variable Charges - for two months (A)	31356.81	31442.72	31356.81	32112.40	32112.40
Fixed Charges – for two months (B)	18361.74	18715.52	18462.54	18215.26	18031.30
Total (C) = (A+B)	**49718.55**	**50158.24**	**49819.35**	**50327.66**	**50143.70**

Working capital for O & M Expenses (1 month)

228. The O&M expenses for one month claimed by the Petitioner in Form-13B for the purpose of working capital is as follows:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
1277.29	1373.04	1562.33	1691.58	2037.65

229. Regulation 28(a)(vi) of the 2014 Tariff Regulations provides for O&M expenses for one month for coal-based generating station as a part of working capital. The one month O&M expenses, as allowed for tariff purpose is as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
1255.23	1345.00	1423.42	1508.29	1597.76

230. The difference in the maintenance spares claimed and O&M expenses (for 1 month) (in the tables under paragraphs 225 and 228 above) and the cost of maintenance spares and O&M expenses (for 1 month) allowed (in the tables under paragraphs 226 and 0 of this order), is due to the fact that while the Petitioner's claim for O&M expenses is inclusive of the impact of GST and wage revision, these components have not been included in the calculations for working capital requirements

under these heads.

Interest on working capital

231. 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 follows:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Working Capital for Cost of Coal/Lignite for Stock (A)	15302.79	15302.79	15302.79	15671.53	15671.53
Working Capital for Cost of Coal/Lignite for Generation (B)	15302.79	15302.79	15302.79	15671.53	15671.53
Working Capital for Cost of oil for 2 months (C)	325.26	326.15	325.26	333.10	333.10
Working Capital for O & M expenses - 1 month (D)	1255.23	1345.00	1423.42	1508.29	1597.76
Working Capital for Maintenance Spares - 20% of O&M (E)	3012.55	3228.01	3416.22	3619.90	3834.63
Working Capital for Receivables - 2 months (F)	49718.55	50158.24	49819.35	50327.66	50143.70
Total Working Capital (G) = (A+B+C+D+E+F)	**84917.15**	**85662.97**	**85589.82**	**87132.00**	**87252.24**
Rate of Interest (H)	13.50%	13.50%	13.50%	13.50%	13.50%
Total Interest on Working capital (I) = (G)x(I)	**11463.82**	**11564.50**	**11554.63**	**11762.82**	**11779.05**

Annual Fixed Charges

232. Accordingly, the annual fixed charges approved for the 2014-19 tariff period in respect of the generating station is summarized as follows:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	26559.47	27374.71	27475.38	27539.68	27633.31
Interest on Loan	26521.69	25429.70	22683.19	19829.08	17345.22
Return on Equity	30562.71	31784.16	31980.97	32060.50	32257.08
Interest on Working Capital	11463.82	11564.50	11554.63	11762.82	11779.05
O&M Expenses	15062.74	16140.05	17081.08	18099.51	19173.15
Total annual fixed charges	**110170.42**	**112293.13**	**110775.25**	**109291.59**	**108187.81**

233. The Petitioner has also filed Petition No. 244/MP/2016 seeking appropriate reliefs claiming difficulty faced by it in implementing Regulation 30(6) of the 2014 Tariff

Regulations and the directions issued by the Commission in its order dated 25.1.2016 in Petition No. 283/GT/2014 and for consequential directions. The matter is presently pending adjudication of APTEL. In view of this, parameters of IWC and Energy charge allowed in this order are subject to the final decision of APTEL in the said appeal.

234. 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 13 of the 2014 Tariff Regulations.

Summary

235. The total expenses allowed on truing-up, in respect of the generating station for the 2014-19 tariff period are summarized as follows:

(Rs. in lakh)

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Annual Fixed Charges	110170.42	112293.13	110775.25	109291.59	108187.81
Wage revision impact	0.00	52.00	1292.85	1570.19	1699.54

236. Petition No. 293/GT/2020 stands disposed of in terms of the above.

Sd/-	***Sd/-***	***Sd/-***
(Pravas Kumar Singh)	**(I.S.Jha)**	**(P.K. Pujari)**
Member	**Member**	**Chairperson**

Annexure-I

Depreciation for the 2014-19 tariff period

(Rs. in lakh)

Sl. no.	Assets Name	Depreciation Rate (As per Appendix – II)	2014-15		2015-16		2016-17		2017-18		2018-19	
			Gross Block as on 01.04.2014	Depreciation Amount	Gross Block as on 01.04.2015	Depreciation Amount	Gross Block as on 01.04.2016	Depreciation Amount	Gross Block as on 01.04.2017	Depreciation Amount	Gross Block as on 01.04.2018	Depreciation Amount
1	Freehold Land	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Leasehold Land	3.34%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	Roads, bridges, culverts & helipad	3.34%	693.98	23.18	3269.21	109.19	4361.93	145.69	4647.97	155.24	4764.81	159.14
4	Main Plant Buildings	3.34%	45875.96	1532.26	51298.19	1713.36	59581.88	1990.03	60829.70	2031.71	61303.33	2047.53
5	Other Buildings	3.34%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	Temporary erection	100.00%	16.73	16.73	16.73	16.73	16.73	16.73	16.73	16.73	16.73	16.73
7	Water supply, drainage & sewerage system	5.28%	5.38	0.28	323.20	17.06	342.07	18.06	342.07	18.06	354.17	18.70
8	MGR track and signalling system	5.28%	1.85	0.10	3.42	0.18	147.62	7.79	294.77	15.56	294.77	15.56
9	Railway siding	5.28%	7157.11	377.90	8828.78	466.16	10183.91	537.71	10684.40	564.14	11193.95	591.04
10	Earth dam reservoir	5.28%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	Plant and machinery	5.28%	464854.68	24544.33	484860.19	25600.62	492095.30	25982.63	494153.89	26091.33	495681.52	26171.98
12	Furniture and fixtures	6.33%	271.11	17.16	394.36	24.96	551.25	34.89	555.71	35.18	708.06	44.82
13	Other Office Equipments	6.33%	287.24	18.18	372.92	23.61	462.65	29.29	484.39	30.66	530.06	33.55
14	EDP, WP machines & SATCOM equipment	15.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	Vehicles including speedboats	9.50%	7.26	0.69	7.84	0.74	7.84	0.74	7.84	0.74	7.84	0.74
16	Construction equipment	5.28%	306.73	16.20	309.98	16.37	309.98	16.37	309.98	16.37	309.98	16.37
17	Electrical installations	6.33%	357.45	22.63	359.36	22.75	359.36	22.75	359.36	22.75	384.10	24.31
18	Communication equipment	6.33%	73.50	4.65	90.06	5.70	96.66	6.12	100.91	6.39	147.51	9.34
19	Hospital equipment	5.28%	9.76	0.52	9.76	0.52	10.60	0.56	10.56	0.56	36.66	1.94
20	Laboratory and workshop equipment	5.28%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	Leased assets - Vehicles	9.50%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	Software	15.00%	529.04	79.36	617.22	92.58	681.00	102.15	824.57	123.69	832.41	124.86
23	Assets Not Owned By company	5.28%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	Unserviceable/Obsolete assets	6.33%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total		**520447.79**	**26654.15**	**550761.22**	**28110.53**	**569208.77**	**28911.52**	**573622.85**	**29129.10**	**576565.92**	**29276.63**
	Weighted Average Rate of Depreciation		**5.1124%**		**5.091%**		**5.079%**		**5.078%**		**5.078%**	