

**ODISHA ELECTRICITY REGULATORY COMMISSION
BIDYUT NIYAMAK BHAWAN
PLOT NO. 4, CHUNOKOLI, SHAILASHREE VIHAR,
BHUBANESWAR-751021**

Present : Shri G. Mohapatra, Officiating Chairperson
Shri S. K. Ray Mohapatra, Member

Case No. 20/2020

M/s Vedanta Limited Petitioner
Vrs.
M/s GRIDCO LimitedRespondent

In the matter of: Application under Sections 61, 62 & 86(1)(a) of the Electricity Act, 2003 read with Section 21 of the Orissa Electricity Reform Act, 1995 along with OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014 extended up to 31.03.2020 & OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 and other enabling provisions seeking approval of Multi-Year Tariff for supply of power for FY 2019-20 to FY 2023-24 in terms of the consolidated Power Purchase Agreement (PPA) dated 19.12.2012 executed between the Petitioner and GRIDCO Ltd.

For Petitioner: Shri Buddy Ranganadhan, Sr. Counsel, Sri Hemanta Singh, Advocate, Shri Biswajit Sahoo, Associate Manager of M/s. Vedanta Ltd.

For Respondent: Shri R.K. Mehta, Sr. Counsel, Ms. Himanshi Andley, Advocate, Sri Eshan Sahoo, A.M (Electrical) and Ms. Susmita Mohanty, DGM (Electrical) of GRIDCO Ltd.

Date of Hearing: 16.11.2023

Date of Order:26.12.2023

ORDER

The Petitioner, M/s. Vedanta Limited has filed the present application before this Commission under Sections 61, 62 and 86(1)(a) of the Electricity Act, 2003 and other enabling provisions for determination of Multi-Year Tariff for supply of power from the 600 MW IPP (Unit-2) of its thermal generating station at Jharsuguda for the control period of five years from FY 2019-20 to FY 2023-24 as per PPA executed with GRIDCO ltd. The Petitioner has also included the truing up proposal for FY 2014-15 to 2018-19 in this application.

2. The Petitioner, M/s. Vedanta Limited is an Independent Power Producer (IPP) and has set up a thermal power plant of capacity 2400 MW (4x600 MW) located at Brundamal, Jharsuguda and the said units were declared under commercial operation on 10.11.2010, 30.03.2011, 19.08.2011 and 26.04.2012 respectively. This Commission, vide its Order dated 12.06.2013 passed in Case Nos. 117/2009, 31/2010 and 56/2012, had determined the

tariff for supply of power to GRIDCO/ Respondent from the said 2400 MW (4x600 MW) Thermal Power Generation Station for the financial year up to 2013-14 starting from the COD of the generating station. Subsequently, the Petitioner had filed a petition, vide Case No. 21/2015, before this Commission for conversion of its 4x600 MW Thermal generating station as a Captive Generating Plant (CGP) and this Commission, vide its Order dated 27.01.2016, had declared that Units I, III & IV out of Four (4) units (each of 600 MW) was converted as CGP units with effect from 01.04.2015 and Unit-II (600 MW) would remain as IPP and continue to supply power to the State.

3. The OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014 came into force with effect from 10.10.2014 for the control period from FY 2014-15 to FY 2018-19. The Commission, vide its Order dated 29.06.2018 passed in Case No. 95 of 2013, determined the generation tariff for supply of power to GRIDCO from the thermal power plant of the Petitioner for the said control period i.e. from FY 2014-15 to FY 2018-19.
4. Thereafter, the Commission, vide its Notification No.OERC/RA/Amend.REG-14/2013 /233 dated 04.02.2020, had extended the applicability OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014 for a period of one year i.e. upto FY 2019-20 and the parameters fixed in the Regulations for FY 2018-19 shall also be applicable for FY 2019-20. The Petitioner, basing on draft OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020, had filed a tariff application on 02.06.2020 before this Commission under Sections 61, 62 and 86(1)(a) of the Electricity Act, 2003 and other enabling provisions for determination of Multi-Year Tariff for supply of power from the 600 MW IPP (Unit-II) of its thermal generating station for a period of five years from FY 2019-20 to FY 2023-24.
5. Meanwhile, the Commission, vide Notification dated 15.07.2020, had notified the final OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020. Accordingly, the Petitioner has filed its amended petition on 21.12.2020 for determination of Multi-Year Tariff for supply of power from its 600 MW IPP (Unit-II) of the thermal generating station for a period of five years from FY 2019-20 to FY 2023-24 basing on the operational parameters as per the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014 applicable upto the FY 2019-20 and operational parameters as per the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 notified on 15.07.2020 and applicable for the tariff period from FY 2020-21 to FY 2023-24.

PETITIONER'S TARIFF PROPOSAL FOR THE CONTROL PERIOD FROM FY 2019-20 TO FY 2023-24:

6. The petitioner has submitted that, while approving the tariff for FY 2014-15 to FY 2018-19, the Commission, vide its order dated 29.06.2018 in Case No 95/2013, had approved the capital cost of Rs.8100.69 Cr. as on 01.04.2014 and Additional Capital cost of 14.00 Cr. for FY 2014-15 for the generating station with installed capacity of 2400 MW (4x600 MW). Further, the petitioner has stated that since the supply of power to the Respondent-GRIDCO, being from the Unit-II (IPP) only as per order dated 27.01.2016 of the Commission passed in Case No. 21/2015, it is required to determine the tariff for Unit-II only as per Regulation 2.2 of the OERC Generation Tariff Regulations, 2014 valid upto FY 2019-20 and Regulation 5(2) of the OERC Generation Tariff Regulations, 2020.
7. The Petitioner has submitted that, the Capital cost of Unit-II for the purpose of determination of tariff for FY 2019-20 to FY 2023-24 has been considered basing on the capital cost verified by the Independent Auditor M/s. Bal & Co., Chartered Accountants as per direction of the Commission in Case Nos. 95/2013 & 38/2016. The Petitioner stated that, basing on the M/s Bal & Co. report, the total capital cost was Rs.2767.27 Cr. till the date of Commercial operation (CoD) of first unit (i.e., Unit-II: 600 MW) on 10.11.2010 out of four units (4x600 MW). Further including additional capitalisation of Rs.35.31Cr during FY 2013-14, Rs.3.95 Cr. during FY 2014-15 and Rs.13.24 Cr. & Rs.2.26 Cr. incurred during FY 2015-16 & FY 2018-19 respectively for Unit-II only, the total capital cost has been considered at Rs.2822.01 Cr. (i.e., Rs.2767.27 Cr. + Rs.35.31 Cr. + Rs.3.95 Cr. + Rs.13.24 Cr. + Rs.2.26 Cr.) as opening capital cost as on 01.04.2019 for Multi Year Tariff period for FY 2019-20 to 2023-24.
8. Further, the Petitioner has proposed for additional capitalisation of Rs.253.50 Cr. towards installation of Flue Gas Desulphurisation (FGD) System as per the Ministry of Environment, Forest & Climate Change (MoEFCC), Govt. of India (GoI), Notification No. S.O. 3305(E) dated 07.12.2015 and Rs.510.00 Cr. towards use of MGR/Conveyor Belt for its unit -II power plant in compliance to letter dated 23.07.2018 of the Ministry of Power, GoI. It has submitted that the above additional capitalisation has been incurred during FY 2020-21 & FY 2021-22 in equal proportion (i.e., 50% in each year). Accordingly, the Petitioner has proposed the capital cost and equity capital & debt capital for the Unit-II as given in table below:

Table-1
Petitioner's Proposed Capital Cost for Unit -II only for the Period FY 2020-24
(Rs. Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	OERC Tariff Regulation, 2014	OERC Tariff Regulation, 2020			
Op. Capital Cost	2,822.01	2,822.01	3,203.76	3,585.51	3,585.51
Capital Cost to be Added	-	381.75	381.75	-	-
Cl. Capital Cost	2,822.01	3,203.76	3,585.51	3,585.51	3,585.51
Average Capital Cost (ACS)	2,822.01	3,012.89	3,394.64	3,585.51	3,585.51
Equity 30% of ACS	846.60	903.87	1,018.39	1,075.65	1,075.65
Debt @70% of ACS	1,975.41	2,109.02	2,376.25	2,509.86	2,509.86
Cum. Depreciation upto PY	1,169.88	1,307.81	1,455.82	1,623.98	1,802.22
Op. Debt Capital	805.53	801.21	920.43	885.88	707.64
Depreciation of CY	137.93	148.01	168.16	178.24	178.24
Cl. Debt Capital	667.60	653.20	752.27	707.64	529.40
Avg. Debt Capital	736.57	727.21	836.35	796.76	618.52

9. Considering the above capital cost and in accordance with the provisions of OERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2014, applicable upto the FY 2019-20 and OERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2020, applicable for the Period FY 2020-21 to 2023-24, the Petitioner has proposed the following annual fixed cost for 600 MW (Unit-II), IPP for the period FY 2020-24:

Table-2
Petitioner's Proposed Annual Fixed Cost for the Period FY 2020-24
(Rs. Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	OERC Tariff Regulation, 2014	OERC Tariff Regulation, 2020			
Return on Equity	159.36	148.87	167.74	177.17	177.17
Interest on term loan	74.00	73.00	84.00	80.00	62.00
Depreciation (SLM)	137.93	148.01	168.16	178.24	178.24
O&M Expenses	116.90	125.82	130.26	134.82	139.54
Interest on Working capital	36.30	41.00	42.47	43.51	44.23
Tariff Petition Fees	0.25	-	-	-	-
Total Cost	524.74	536.70	592.63	613.74	601.18

10. Further, the Petitioner has proposed the following operational parameters for calculation of energy charges for the control period FY 2020-24 in accordance with the provisions of OERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2014 applicable for the FY 2019-20 and OERC (Terms and Conditions for determination of Generation Tariff) Regulations 2020 applicable for the Period FY 2020-21 to 2023-24.

Table -3
Petitioner's Proposed Operational Parameters for the Period FY 2020-24

Particulars	Unit	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
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		OERC Tariff Regulation, 2014	OERC Tariff Regulation, 2020			
Normative Plant Availability Factor	%	85.00	85.00	85.00	85.00	85.00
Normative Gross Generation based on 85 % NAPF	MUs	4479.84	4467.60	4467.60	4467.60	4479.84
Gross Station Heat Rate	Kcal/kWh	2489.72	2504.72	2504.72	2504.72	2504.72
Auxiliary Energy Consumption	%	6.80	6.55	7.55	7.55	7.55
Secondary Fuel Oil Consumption	ml/kWh	1.00	1.00	1.00	1.00	1.00
GCV of Coal	Kcal/Kg.	2,986.33	2,862.03	2,862.03	2,862.03	2,862.41
GCV of Secondary Fuel (Oil)	Kcal/Lt.	9,850.00	9,850.00	9,850.00	9,850.00	9,850.00
Price of Coal	Rs. /MT	2,485.72	2,153.63	2,196.70	2,240.64	2,289.44
Price of Secondary Fuel (Oil)	Rs. /MT	50,614.31	51,626.59	52,659.12	53,712.31	54,786.55

11. Apart from the above, under the Non-Tariff Income head, the petitioner has proposed to incur transportation charges Rs. 690.61 Cr for disposal of ash as per direction of the Ministry of Environment and Forests (MoEF), Govt. of India vide their notification dated 25.01.2016. Further the petitioner has prayed before the Commission to allow the reimbursement of statutory and other charges such as Electricity Duty, Water Charges, SOC & MoC Charges of SLDC, Energy Bill paid to WESCO for water pump house at Pitapalli, Energy Compensation Charges, Contribution towards Water Conservation Fund, Security expenses of Generating Station, Charges paid to third party coal sampling expenses, application fee & other expenses as per OERC(Terms & Conditions of Generation Tariff) Regulation, 2014 & 2020 and other taxes, levies, duties, Royalty, Cess etc. as per Clause 6.2.2 of consolidated PPA dated 20.12.2012.
12. Response to the above petition, the Respondent, GRIDCO has pointed out that, as per Regulation 2.12 of the OERC generation Tariff Regulations, 2014, in absence of Truing-up the tariff period from FY 2024-15 to FY 208-19, the present tariff petition for FY 2019-20 to FY 2023-24 is not maintainable. Accordingly, as directed by the Commission vide their Interim Order dated 28.09.2021 in this Case no. 20/2020, the Petitioner has filed its truing-up application on 02.06.2022 for the control period FY 2014-15 to FY 2018-19.

PETITIONER'S TRUING-UP PROPOSAL FOR THE CONTROL PERIOD FROM FY 2014-15 TO FY 2018-19:

13. The Petitioner has submitted that, as per Regulation 2.12 of the OERC Generation Tariff Regulation, 2014, it is mandated that:

“2.12 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 Mar 2019, as admitted by the Commission after prudence check at the time of truing up.”

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The generating company, shall submit for the purpose of truing up, details of capital expenditure and additional capital expenditure incurred for the period from 01.04.2014 to 31.03.2019, duly audited and certified by the auditors:

Xxxxxxxxxx”

Accordingly, the Petitioner has submitted the truing -up proposal for the FY 2014-15 to FY 2018-19.

14. The Petitioner has submitted that, while approving the tariff for the period from FY 2014-15 to FY 2018-19, the Commission, vide its order dated 29.06.2018 in Case No 95/2013 has approved the capital cost of Rs.8100.69 Cr. as on 01.04.2014 and Additional Capital cost of 14.00 Cr. for FY 2014-15 for its generating station with installed capacity of 2400MW (4*600MW). Considering the additional Capitalisation during the FY 2015-16 to FY 2018-19, the petitioner has proposed the capital expenditure including additional capital expenditure incurred for the said generating station up to 31 Mar 2019 as given in table below:

Table-4
Petitioner's Proposed Capital Cost for the Period FY 2015-19

(Rs. Crore)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	8,100.69	8,114.69	8,159.83	8,194.18	8,160.02
Add: Additional capitalisation	14.00	45.14	34.35	(34.16)	30.49
Closing Capital Cost	8,114.69	8,159.83	8,194.18	8,160.02	8,190.51

15. Considering the aforesaid capital cost of said generating station and basing on the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014, the Petitioner has proposed truing-up of the Annual Fixed Cost (AFC) as against the Commission's approval for the tariff period from FY 2024-15 to FY 2018-19 as given in the table below:

Table-5
Petitioner's Proposed Annual Fixed Cost for Truing-up for the Period FY 2015-19
(Rs. Crore)

Sl No	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A.	AFC Approved by OERC					
	O&M Expenses	345.60	367.44	390.48	415.20	441.12
	Depreciation	404.57	404.92	404.92	404.92	404.92
	Interest on Loan Capital	439.13	391.67	352.28	311.70	271.13
	Interest on Working Capital	111.78	88.82	89.50	90.25	91.05
	Return on Equity	435.37	389.51	389.51	389.51	389.51
	Total (A)	1,736.45	1,642.36	1,626.69	1,611.58	1,597.73
B	AFC Proposed for Truing-up					
	O&M Expenses	345.60	367.44	390.48	415.20	441.12
	Depreciation	386.50	389.12	391.27	392.79	397.64
	Interest on Loan Capital	447.11	396.56	361.44	322.16	274.26
	Interest on Working Capital	126.59	107.50	119.50	119.59	118.36
	Return on Equity	435.36	390.59	392.50	392.50	392.41
	Total (B)	1,741.16	1,651.21	1,655.19	1,642.24	1,623.79
C	Deviation in AFC Proposed					
	O&M Expenses	-	-	-	-	-
	Depreciation	-18.07	-15.80	-13.65	-12.13	-7.28
	Interest on Loan Capital	7.98	4.89	9.16	10.46	3.13
	Interest on Working Capital	14.81	18.68	30.00	29.34	27.31
	Return on Equity	-0.01	1.08	2.99	2.99	2.90
	Total (C=B-A)	4.71	8.85	28.50	30.66	26.06

16. Accordingly, the petitioner has prayed before the Commission to approve the above truing-up proposal for additional Annual Fixed Cost of **Rs.98.78 Cr.** (i.e., Rs.4.71 Cr. for FY 2014-15, Rs.8.85 Cr. for FY 2015-16, Rs.28.50 Cr. for FY 2016-17, Rs.30.66 Cr. for FY 2017-18 and Rs.26.06 Cr. for FY 2018-19) for the generating station and allow recovery of Rs.26.69 Cr. (25% of Rs. 98.78 Cr.) from GRIDCO considering the Power Purchase Agreement (PPA) signed with GRIDCO for supply of power of from its 600 MW (Unit-II) IPP thermal generating station.
17. Apart from the above truing-up proposal, the petitioner has requested the Commission issue appropriate directions to GRIDCO for payment of late payment surcharge in line with orders dated 29.06.2018 and 22.06.2018 in Case Nos. 95/213 and 68/2018 respectively.

VIEWS OF THE RESPONDENT (GRIDCO) AND RESPONSE OF THE PETITIONER ON TRUING-UP FOR FY 2015-19 AND TARIFF APPLICATION FOR FY 2020-24:

18. In response to the multi-year tariff application for the period FY 2020-24 and Truing-up for the period FY 2015-19 of the Petitioner, the Respondent-GRIDCO has submitted its views. Said views of the Respondent-GRIDCO on various issues and replies of the Petitioner thereon are as under:

➤ **Capital Cost and Additional Capitalization:**

GRIDCO's Views: As per report of independent auditor M/s. SCP & Co. dated 12.05.2023, the Petitioner has not prepared and maintained separate Books of Account for Thermal Power Projects, therefore, addition of Capital Assets verified from SAP records requires prudence check. Further, so long as an asset is under capital works in progress (CWIP), the same is not required to be considered for Interest on Loan and RoE. The Capital Cost was Rs.8114.69 Crores as on FY 2018-19, vide OERC order dated 29.06.2018, which requires to be re-determined on account of Truing-up exercise. The capital cost of Unit 2 comes to Rs. 2028.67 Crore as 25% of Rs. 8114.69 Crore of the generating station. But Vedanta had considered Capital Cost of Rs.2767.27 Crore in respect of Unit II only. This contention is untenable and contrary to Vedanta's own stand in Case No. 38 of 2016 vide Para (6) and (9) of Affidavit dated 25.05.2017 for determining Capital Cost for the entire project. Therefore, as per the principle adopted for previous two Block Periods, the Capital Cost for entire project may be determined and tariff so determined shall be applicable corresponding to the Capacity Contracted for supply to GRIDCO i.e. AFC for 600MW at Two Part Tariff. Further, during the inception of power plant, there were common facilities for all units. Vedanta cannot be allowed to take a contradictory stand as far as principle of determination of Capital Cost is concerned. Therefore, Commission may consider redetermination of the Capital Cost on the same principle for the Block Period 2019-24 as considered in Case No. 34 of 2010, Case No. 38 of 2016 and Case No. 95 of 2013. Capital Cost of the entire Power Plant is to be determined and subsequently the AFC shall be determined accordingly. AFC for GRIDCO shall be 25% of the total AFC derived by Commission for each FY of the Block Period.

Additional Capitalization as verified by Third Party may be allowed for block period FY 2015-19. From FY 2019-20 onwards, no Additional Capitalization may be considered as the same has not been verified by Third Party in absence of documents. In respect of Add. Capitalization towards Cost of Installation of FGD System, Vedanta may be directed to file a separate Petition for in-principle approval of FGD installation with complete details of status of progress in this regard as per Regulation 14 of Tariff Regulations, 2020. Further, Vedanta has never informed GRIDCO regarding the Ministry of Power Notification and expenses thereof towards Installation of MGR/ Conveyor Belt from Samaleswari Mines. Vedanta should be directed to file a detailed Submission with full justification of the necessity of Installation of Conveyor Belt from Samaleswari Mines to Plant location (3 km) and detailed Break-up of Cost Estimate etc. for further consideration by the Commission.

The Commission may determine the Capital Cost and Annual Fixed Charges for the Block Period 2014-19 prudently, since that will form the basis for determining the Tariff for subsequent Block Period 2019-24. Further Capital Cost of the Entire Project is to be considered as per the principle adopted by Commission in earlier Block Periods.

Petitioner's Replies: In response to the above queries of GRIDCO, the Petitioner has not submitted any specific reply over and above the submissions made in respect of capital cost in the original petition.

➤ **Interest on Capital Loan:**

GRIDCO's View: The opening debt considered by the petitioner is not correct as the base Capital Cost considered is an inflated figure. Debt may be considered at 70% of opening Capital Cost (base) for FY 2019-20 arrived after prudent verification and truing up exercise. M/s. Vedanta has not submitted any information regarding de-capitalization of Assets pertaining to Block Period FY 2019-24. The Petitioner may be directed to provide actual Audited Accounts for the period from 2019-20 to 2022-23 for prudent check by the Commission. Further, Petitioner has paid interest on loans in FY 2015-19 at the approved rate by the Commission, however, no proactive steps were taken by it to refinance the existing loans as provided under Clause 4.15 of OERC Generation Tariff Regulations, 2014. Further, the discrepancies in the report by M/s SCP & Co. regarding loan status and Weighted Average Rate of Interest for FY 2014-15 to FY 2016-17 need scrutiny and re-computation due to inclusion of extra loan items.

Petitioner's Response: In response to the above queries of GRIDCO, the Petitioner has submitted that the Commission has appointed an independent auditor M/s. SCP & Co for prudent check of capital cost, additional capital cost including the status of actual loan and interest rate. The Commission can consider the audit report submitted by the auditor.

➤ **Recovery of Annual Fixed Cost (AFC):**

GRIDCO's View: GRIDCO strongly disputes the generation of 324 MW only by the petitioner. It is stated that part load operation does not arise at all in view of the availability of 99.2% of Linkage Coal under FSA for IPP Unit-II. Part load operation due to insufficient Linkage Coal is a completely misleading argument by the petitioner. Moreover, as per the OERC Generation Tariff Regulations, 2020, recovery of the AFC shall be based on certified PAFM% issued by the SLDC in respect of the IPP Unit of M/s.Vedanta Ltd.

Petitioner's Response: In response to the above queries of GRIDCO, the Petitioner has not submitted any specific reply.

➤ **Linkage coal:**

GRIDCO's Views: The actual facts pertaining to Linkage Coal had been duly investigated by the Commission in Case No. 62 of 2019 and the same may be considered. Direction to supply power to the extent of Linkage Coal available was given by the Commission with the intent to utilize entire Linkage Coal procured under FSA from MCL and to prevent any kind of mis-utilization of such concessional Coal. Such observation was made by the Commission in its Order dated 22.06.2020 in Case No.68 of 2018, since M/s.Vedanta had lifted Linkage Coal every month, but did not supply power during the period from July, 2017 to March, 2018. Due to shortage of linkage coal, generation of 324 MW only is a completely misleading argument of the Petitioner. Part load operation does not arise at all in view of availability of 99.2% of Linkage Coal under FSA for the IPP Unit-II. Linkage Coal is sufficient to generate Ex-bus Capacity from IPP Unit. As far as Grade Slippage is concerned, the same is addressed in the FSA which provides that Credit/Debit notes shall be issued by the MCL.

Petitioner's Replies: In response to the above queries of GRIDCO, the Petitioner has submitted that as per the Order dated 26.03.2021 passed in Case No.72 of 2020 for FY 2021-22, the Commission considered AEC as 5.75 % and additional 0.8% on account of tube type coal mill. In addition to above, inspite of availing 99% of ACQ of linkage coal from MCL as mentioned, the quantity of linkage coal is not sufficient for generation of total entitlement of State power on account of receiving low grade of linkage coal from MCL, which has resulted in operation of Unit-II in part load condition. Further, the Petitioner has considered exclusive auction coal which is not justified as it is not commercially cheaper than linkage coal. The Petitioner is able to generate only 320 to 350 MW power and the deficit of 244 to 214 MW can only be fulfilled by procuring coal from open market/ e-auction source.

➤ **Plant Availability Factor (PAF)**

GRIDCO's Views: The reasons of operating at low PLF% and non-supply of power to GRIDCO is best known to M/s. Vedanta despite lifting of Linkage Coal from MCL as per the ACQ of Fuel Supply Agreement. M/s. Vedanta raised the issue of Grade Slippage in GCV of Linkage Coal procured under FSA first time in March 2020 in Case No. 62 of 2019 and stated that it can supply only 320 MW to 350 MW of power from the Linkage Coal procured under the FSA for Unit # 2 in terms of the PPA. Vedanta did not raise any plea with regard to shortage of Linkage Coal for supply of power on the ground of GCV of Linkage Coal till March 2020 and was submitting Day Ahead Declared Capacity to SLDC

to the tune of 564 MW i.e. more than 400 MW consistently. The explanation of Vedanta to justify low Plant Availability Factor during FY 2014-15, FY 2015-16 and FY 2016-17 taking shelter of Grade Slippage in GCV of Linkage Coal is purely an after-thought in order to defeat the right of GRIDCO to the full supply of power under the PPA. As a consequence of low PAF %, the State Consumers were deprived of one of the cheap sources of Thermal Power.

Petitioner's Replies: Response to the above objections of GRIDCO, The Petitioner has submitted that Under Schedule III of the FSA dated 27.08.2013, the Petitioner was allocated GCV range of G8-G13 coal. However, it has been receiving linkage coal with weighted GCV range of G13-G14 grade. The petitioner has submitted that the shortage of linkage coal is not the issue of grade slippage, but the main issue is receipt of lower grade of linkage coal (G13, G14) as against the committed grade (G9, G10) of linkage coal as per FSA. Further, based on the CEA norms to achieve 85% plant availability (Gross 564 MW) considering 3300 GCV petitioner requires 3.40 MMT linkage coal as against the existing coal allocation of 2.57 MMT. Hence low PLF arises for Unit-2.

➤ **Energy Charge Rate (ECR):**

GRIDCO's Views: ECR in the range of Rs. 2.098/kWh to Rs. 2.254/kWh considered by Vedanta is very high. The following reasons have contributed to high ECR:

- a) To derive the ECR, Vedanta has considered PLF% as 60% citing shortage of Linkage Coal which is unjustified and untenable.
- b) Consideration of as high as 32 % to 8% of exclusive Auction Coal along with Linkage Coal,
- c) Landed Cost & GCV of Exclusive Auction Coal are not commercially cheaper vis-a-vis Linkage Coal,
- d) Instead of actual operational Parameters stipulated in the Regulations, higher values of AEC%, SHR etc. have been considered,
- e) Without any authenticated supporting documents, GCV of Linkage Coal has been considered within the range of 2862 kCal/kg to 3000 kCal/kg,

Petitioner's Replies: In response to the above queries of GRIDCO, the Petitioner has not submitted any specific reply.

➤ **Non-tariff Income and Fly Ash Transportation Charges.**

GRIDCO's Views: GRIDCO has stated that the petitioner is allowed O&M expenses on normative basis, any such statutory expenses may be met out of O&M expenses instead of loading it on the State Consumers. The petitioner, for the first time, seeks separate

recognition of statutory expenses, attributing the change to the Tariff Regulations of 2020. However, there is lack of provisions in the OERC Tariff Regulations of 2014 which is applicable for FY 2019-20. The petitioner has also referred the order of the CERC, emphasizing conditions for admitting additional O&M expenses related to Fly Ash transportation costs subject to certain conditions, including transparent bidding for the transportation contract, certification of additional expenditure by auditors, and providing details of revenue and expenditure related to Fly Ash. However, the petitioner has not provided such information or any data on year-wise actual O&M expenses for Truing Up.

Petitioner's Replies: In response to the above views of GRIDCO, the Petitioner has submitted that the expenses towards ash disposal are not part of the normative O&M expenses and has been allowed by the CERC as an additional O&M expenditure. The additional cost towards fly ash transportation imposed by Ministry of Environment Forest and Climate Change, Govt. of India Notification dated 25.01.2016 is on account of amendment to the Fly Ash Notification 1999 issued by the MoEF & CC and the said notification dated 25.01.2016 amounts to change in law and thus, the expenditure is admissible under change in law in principle. The amendments notified are mandatory in nature and are to be complied with within a stipulated timeframe. The relief under Change in Law is provided under additional capital expenditure in terms of Regulation 14 of the 2014 Tariff Regulations. However, the expenditure towards transportation of fly ash from the generating station to the place of users is an expenditure of revenue nature. There is no corresponding provision under the Tariff Regulations, 2014 for allowing the revenue expenses/O&M expenses under "Change in Law". The cost of the ash disposal expenditure is legitimate expense which must be allowed to the petitioner as a pass through under the existing Tariff Regulations.

➤ **Reimbursement of Statutory and Other Charges:**

a) ED & Water Charges:

GRIDCO's Views: GRIDCO has stated that it shall have to reimburse Statutory Charges such as Electricity Duty (ED) as per Clause 6.2.2 of consolidated PPA dated 19.12.2012 and Regulation 36 of 2020 Regulation. It follows principle of Actual or Normative whichever is lower corresponding to the Contracted Capacity. Further, Reimbursement of water charges shall be based on percentage of power declared by the Petitioner to GRIDCO against the normative availability of power at which the petitioner is entitled to get full Fixed Charges. The claim of additional electricity charges in respect of Pump House at Pitapalli is to be meted out from O&M Expense as the expense pertains to common facility of entire Power Plant and accordingly allowed in Normative basis.

Petitioner's Replies: In response to the above queries of GRIDCO, The Petitioner has submitted that, it has entered into an Agreement with Department of Water Resources, Government of Odisha for availing of 72 Cuses of water from Hirakud reservoir. The water utilization by Unit-II of the generating plant is 18 Cusec. However Water Resources Department is claiming charges irrespective of actual drawl of water. The petitioner had received an invoice of Rs. 3,97,54,313 for FY 2019-20 for the entire plant. It is to be divided in to four parts to determine Unit #2's share (Rs. 99,38,578.25). Further it faces challenges sourcing water 35 km away due to topographical constraints, requiring a pump house in Pitapalli. This pump house incurs additional electricity charges (6 MVA Contract Demand with TPWODL), and therefore, expenditure in this regard may be approved.

b) Energy Compensation Charges:

GRIDCO's View: The petitioner is yet to make any payment on account of contribution towards Energy Compensation Charges (ECC) raised by OHPC on water allocation quota. Further, the methodology of computation of ECC is challenged before Hon'ble High Court of Odisha accordingly, ECC may not be considered for pass through in Tariff.

Petitioner's Replies: In response to the above queries of GRIDCO, the Petitioner has requested to pass through the ECC upto GRIDCO's share of power, subject to the outcome of the judgement of the Hon'ble High Court of Odisha.

c) Contribution towards Water Conservation Fund (WCF):

GRIDCO's View: The petitioner is yet to make any payment on account of contribution towards WCF. Further, the matter is sub-judice before Hon'ble High Court of Odisha, therefore it may not be considered for pass through in tariff.

Petitioner's Replies: In response to the above queries of GRIDCO, the petitioner has requested to pass through the WCF up to GRIDCO's share of power subject to outcome of the said matter in High Court and payment made by the petitioner.

d) Security expense towards Generating Station:

GRIDCO's View: The petitioner has not submitted the assessment of security requirement and estimated expense as per Regulation 25(1)(d) of OERC Generation Tariff Regulations, 2020 and OERC Generation Tariff Regulations, 2014 do not have provision of any such reimbursement to the Generator by the beneficiary. Accordingly, the claim for Security Expense by the petitioner may be rejected.

Petitioner's Replies: Response to the above queries of GRIDCO, the Petitioner has submitted that, Security measures in power plants are vital to prevent unauthorized access, protect equipment, and safeguard confidential information from theft or sabotage. They ensure the safety of critical assets, employees, and installations while preventing

unauthorized entry into restricted areas, contributing to operational integrity and continuity. M/s. G4S Security has been awarded the security contract for the Jharsuguda Complex, including the 4x600 MW TPP. The selection was made through a standard commercial process, involving the issuance of an RFQ to 23 security agencies via Expression of Interest (EOI).

e) **Charges paid to Third Party for Coal sampling of Generating Station:**

GRIDCO's View: GRIDCO, the primary beneficiary, was kept unaware of the Tripartite Agreement made by the Petitioner with MCL and CIMFR since November 2016. M/s.Vedanta disclosed this information in Case No. 62 of 2019 on 09.04.2021, after a period of almost five years. GRIDCO claims legitimate rights to key reports and information related to coal procurement. Reimbursement of charges is tied to GRIDCO's Contracted Capacity and is conditional upon the timely submission of required data, including reports and energy bills.

Petitioner Response: Response to the above queries of GRIDCO, the Petitioner has submitted that, it has already furnished a copy of the tripartite agreement and CIMFER reports to the respondent in the petitioner's rejoinder dated 09.09.2021 Furthermore, the petitioner asserts that Regulation 27(15) proviso 4 of Generation Tariff Regulation, 2020 permits the Generating Station to claim expenses related to third-party sampling facilities, which should be reimbursed by the beneficiaries. Therefore, the petitioner requests the OERC to allow the pass-through of third-party coal sampling expenses

OBSERVATIONS & ORDERS OF THE COMMISSION:

19. Heard the Petitioner and Respondent through hybrid mode (virtual/physical). We now examine and analyse the claim of the Petitioner for truing-up for the period FY 2015-19 & Tariff application for the period FY 2020-24, the views of GRIDCO and reply submitted by the Petitioner in response to various queries raised along with supporting documents available on record. The observations and order of the Commission are as follows:

TRUING-UP FOR THE PERIOD FY 2014-15 TO FY 2018-19:

20. The OERC (Terms and Conditions for determination of Generation tariff) Regulations, 2014 was published in the Odisha Gazette on 10.10.2014. Prior to above publication, the Commission had determined the tariff of the present IPP upto 09-10-2014 basing on the CERC Tariff Regulations, 2009. Accordingly, the Commission in its Order dated 29.06.2018 in Case No. 95 of 2013, had determined the generation tariff for the supply of

power to GRIDCO from the thermal power plant of the Petitioner for the control period from FY 2014-15 to FY 2018-19 as per the principles laid down in the CERC (Terms & Conditions of Tariff) Regulations, 2009 upto 09.10.2014 and from 10.10.2014 to 31.03.2019, following the norms of OERC (Terms and Conditions for determination of Generation tariff) Regulations, 2014, Tariff Policy and other statutory provisions.

21. Regulation 2.12 of the OERC (Terms and Conditions for determination of Generation tariff) Regulations, 2014, mandates that 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 upto 31st March, 2019 as admitted by the Commission after prudent check at the time of truing up and the generating company shall submit details of capital expenditure and additional capital expenditure incurred for the period from 01.04.2014 to 31.03.2019 for the purpose of truing up, duly audited and certified by the auditors.
22. Accordingly, the Commission in its Order dated 29.06.2018 passed in Case No 95 of 2013, while determining the tariff for the said generating station, had mentioned that the annual fixed charges approved for the period 2015-19 are subject to truing-up in terms of Regulation 2.12 of the Generation Tariff Regulations, 2014. The detail analysis of truing up exercise for the period FY 2015-19 is made in the following paragraphs.

Capital Cost and Debt -Equity:

23. The Petitioner submits that the Commission has considered the opening capital cost of FY 2014-15 as Rs.8100.69 Crore in the tariff order dated 29.06.2018 in Case No. 95/2013. As per the Petitioner, it has incurred additional capitalisation of Rs.14.00 Cr., Rs.45.14 Cr., Rs.34.35 Cr., (-) Rs.34.16 cr. and Rs.30.49 Cr. during FY 2014-15, FY 2015-16, FY 2016-17, FY 2017-18 and FY 2018-19 respectively. Considering the above opening capital cost and additional capitalisation during FY 2014-15 to FY 2018-19, the petitioner has proposed the year wise average capital cost of its generating stations. Further, the Petitioner has submitted that, as per norms stipulated in Regulations 3.6 to 3.8 of OERC Generation Tariff Regulations, 2014, it has considered normative Debt-Equity ratio (70%:30%) of capital cost including additional capitalization and the loan repayment has been considered equal to the depreciation of each year in line with tariff order dated 29.06.2018 passed by the Commission in Case No. 95/2013. Accordingly, the Petitioner has prayed before the Commission to consider the year wise average capital cost and debt & equity components for the period FY 2014-15 to FY 2018-19 as shown in the table below:

Table-6
Petitioner's Proposed Capital Cost & Debt-Equity Mix for the Period FY 2015-19
(Rs Crore)

Particulars	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Op. Capital Cost	8,101	8,115	8,160	8,194	8,160
Net Addition	14	45	34	(34)	30
Cl. Capital Cost	8,115	8,160	8,194	8,160	8,191
Average Capital Cost (ACS)	8,108	8,137	8,177	8,177	8,175
<i>Equity 30% of ACS</i>	<i>2,432</i>	<i>2,441</i>	<i>2,453</i>	<i>2,453</i>	<i>2,453</i>
<i>Debt @70% of ACS</i>	<i>5,675</i>	<i>5,696</i>	<i>5,724</i>	<i>5,724</i>	<i>5,723</i>
Cum. Depreciation upto PY	1145	1,532	1,921	2,312	2,705
Op. Debt Capital	4,530	4,164	3,803	3,412	3,018
Depreciation of CY	387	389	391	393	398
Cl. Debt Capital	4,143	3,775	3,412	3,019	2,620
Avg. Debt Capital	4,337	3,970	3,607	3,215	2,819

24. The Commission had appointed M/s SCP and Co., Chartered Accountant in line with the provision under Regulations 6(2) & 9(3) of the OERC Generation Tariff Regulation, 2020 to verify the capital cost and additional capitalisation of the said 2400 MW generating station of the petitioner for tariff determination for the period FY 2019-20 to FY 2023-24 in the present case. M/s. SCP and Co. has submitted their verification report to the Commission on 12.05.2023 on the year wise total capital cost including additional capitalisation of the generating station (2400 MW) and weighted average rate of interest on loan portfolio for the period FY 2014-15 to FY 2018-19. The details are summarised as under:

Table-7
Capital Cost Verified by the Independent Auditor for the Period FY 2015-19
(Rs. in Crore)

Particulars	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Total Capital Cost including CWIP	8,114.69	8,159.83	8,194.18	8,160.02	8,190.51
Less: CWIP	310.78	306.10	293.13	241.98	95.97
Capital Cost (Including Additional Capitalisation)	7,803.91	7,853.73	7,901.05	7,918.04	8,094.54
Weighted average Rate of Interest on Loan (%)	10.29	9.64	9.58	9.44	9.18

25. After analysing the truing-up petition submitted by the petitioner, the Commission observes that while calculating the depreciation, the petitioner has considered the actual capital cost excluding CWIP, whereas for evaluation of debt-equity mix, it has included CWIP which is not permissible as per OERC Generation Tariff Regulations, 2014. It be mentioned here that, for tariff determination for the period FY 2014-15 to FY 2018-19, the Commission had considered the Capital cost (including CWIP of Rs.365.21 Cr.) as on 01.04.2014 basing on the report submitted by the independent auditor M/s. Bal & Company (Now M/s. SCP & Co.), Chartered Accountant to the Commission vide its letter

dated 28.05.2015. But after scrutinising the present audit report dated 12.05.2023 submitted by the independent auditor M/s. SCP & Co., considering the views of GRIDCO on capital cost and additional capitalisation during the period FY 2014-19, the Commission has not taken into consideration CWIP to derive the actual capital cost, debt and equity for truing up purpose. In line with the normative debt and equity approved in tariff order dated 29.06.2018, the Commission evaluates and approves the year wise actual average capital cost, debt & equity components for the period FY 2014-15 to FY 2018-19 which are shown in the table below:

Table-8
Commission's Approved Capital Cost & Debt-Equity Mix for the Period FY 2015-19
(Rs Crore)

Particulars	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Op. Capital Cost	7,735.47	7,803.91	7,853.73	7,901.05	7,918.09
Net Addition	68.44	49.82	47.32	17.04	176.45
Cl. Capital Cost	7,803.91	7,853.73	7,901.05	7,918.09	8,094.54
Avg. Capital Cost (ACS)	7,769.69	7,828.82	7,877.39	7,909.57	8,006.32
Equity 30% of ACS	2,330.91	2,348.65	2,363.22	2,372.87	2,401.90
Debt @70% of ACS	5,438.78	5,480.17	5,514.17	5,536.70	5,604.42
Cum. Depreciation up to PY	1152.58	1,539.31	1,928.66	2,320.16	2,713.19
Op. Debt Capital	4,286.20	3,940.86	3,585.51	3,216.54	2,891.23
Depreciation of CY	386.73	389.35	391.5	393.03	397.88
Cl. Debt Capital	3,899.47	3,551.51	3,194.01	2,823.51	2,493.35
Avg. Debt Capital	4,092.84	3,746.19	3,389.76	3,020.03	2,692.29

Interest on Loan Capital:

26. As explained above, basing on its average loan balance estimated by the Petitioner in its truing-up petition and considering the weighted average rate of interest which was approved by the Commission in tariff order dated 29.06.2018 for the period FY 2014-15 to FY 2018-19, the Petitioner has claimed interest on loan capital for truing-up for the period FY 2015-19. But, Regulation 4.13 of OERC Generation Tariff Regulation, 2014, stipulates in following words: *"The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project"*. Instead of considering the weighted average rate of interest as per the norms of the regulation, the petitioner has taken the weighted average rate of interest which was also considered by the Commission in tariff order dated 29-06-2018. The Commission has examined the objection raised by GRIDCO and reply of the petitioner regarding interest on loan capital and also took into consideration the audit report submitted by M/s. SCP & Co. and in line with the norms of Regulation 3.14 of OERC Generation Tariff Regulation 2014, the actual weighted average rate of interest has

been considered by taking the *actual loan portfolio at the beginning of each year* as reported by M/s. SCP & Co. for the period FY 2015-19.

Now, considering the normative average loan capital calculated by the Commission for the period FY 2015-19 based on actual audited capital cost including additional capitalisation as reported by M/s. SCP & Co. and taking the actual weighted average rate of interest calculated by Commission, the interest on loan capital is arrived at and approved by the Commission for truing up purpose. The summary of interest on loan capital proposed by the Petitioner and now approved by the Commission for the period FY 2015-19 is given in the table below:

Table-9
Interest on Loan Capital for FY 2015-19 (Rs Crore)

Particulars	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
(A) Approved in Tariff Order dated 29.06.2018 by the Commission					
Average loan Capital	4,320.51	3,920.66	3,515.74	3,110.82	2,705.90
Weighted average Interest rate (%)	10.16	9.99	10.02	10.02	10.02
Interest on Loan Capital	439.14	391.67	352.28	311.70	271.13
(B) Proposed for Truing-up by Petitioner					
Average loan Capital	4,337.63	3,979.52	3,607.15	3,215.19	2,818.69
Weighted average Interest rate (%)	10.31	9.99	10.02	10.02	10.02
Interest on Loan Capital	447.11	396.56	361.44	322.16	274.26
(C) Approved for Truing-up by the Commission					
Average loan Capital	4,092.84	3,746.19	3,389.76	3,020.03	2,692.29
Weighted average Interest rate (%)	10.24	9.50	9.47	9.44	9.18
Interest on Loan Capital	419.11	355.89	321.01	285.09	247.15
Deviation claimed by Petitioner (B- A)	7.98	4.89	9.16	10.46	11.30
Deviation approved by the Commission (C-A)	(20.03)	(35.78)	(31.27)	(26.61)	(23.98)

Return on Equity (RoE):

27. The Commission, vide their order dated 29.06.2018 in Case No. 95/2013, had considered RoE as per Regulations 24 & 25 of CERC Tariff Regulations, 2009 for the period 01.04.2014 to 09.10.2014 and as per OERC Generation Tariff Regulations, 2014 for the period 10.10.2014 to 31.03.2019. Accordingly, the Commission had approved RoE (including MAT) @ 19.61% (i.e., Base RoE @ 15.50% + 20.96% MAT on RoE) for the period 01.04.2014 to 09.10.2014 and RoE @ 16.00% for the period 10.10.2014 to 31.03.2019 as per Regulations 4.5 & 4.6 of OERC Generation Tariff Regulations, 2014 and the income tax is to be reimbursed by GRIDCO after prudent check in accordance with the Regulation 4.7 & 4.8 of OERC Generation Tariff Regulations, 2014.

The Commission has examined the submission made by the petitioner and views of GRIDCO on equity capital. As explained earlier, considering the normative average equity

capital calculated by the Commission for the period FY 2015-19 basing on actual audited capital cost including additional capitalisation reported by M/s. SCP & Co. and in line with rate of RoE considered in tariff order dated 29.06.2018, the Commission approves, RoE on Equity capital for truing -up purpose. The summary of Return on Equity proposed by the Petitioner and now approved by the Commission for the period FY 2015-19 is given in the table below:

Table-10
Return on Equity for FY 2015-19 (Rs Crore)

Particulars	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
(A) Approved in Tariff Order dated 29.06.2018 by the Commission					
Average Equity Capital	2,432.31	2,434.41	2,434.41	2,434.41	2,434.41
Rate or RoE (%)	17.90*	16.00	16.00	16.00	16.00
Amount of RoE	435.37	389.51	389.51	389.51	389.51
(B) Proposed for Truing -up by Petitioner					
Average Equity Capital	2,432.30	2,447.95	2,458.25	2,448.01	2,457.15
Rate or RoE (%)	17.90*	16.00	16.00	16.00	16.00
Amount of RoE	435.36	390.59	392.50	392.50	392.41
(C) Approved for Truing -up by the Commission					
Average Equity Capital	2,330.91	2,348.65	2,363.22	2,372.87	2,401.90
Rate or RoE (%)	17.90*	16.00	16.00	16.00	16.00
Amount of RoE	417.21	375.78	378.12	379.66	384.30
Deviation claimed by Petitioner (B- A)	(0.01)	1.08	2.99	2.99	2.9
Deviation approved by the Commission (C-A)	(18.16)	(13.73)	(11.39)	(9.85)	(5.21)

** Consolidated (considering the relevant provisions of OERC & CERC Regulations for the FY 2014-15)*

Depreciation:

28. In the tariff order dated 29.06.2018 for the Period FY 2015-19, the Commission had considered capital cost including CWIP as on 31.03.2014 and in accordance with OERC Generation Tariff Regulations, 2014, the Commission had allowed depreciation @4.99% for the generating station of the petitioner. In its truing up petition, the Petitioner has stated that, it has not charged depreciation on the CWIP as these assets are yet to be capitalized. Accordingly, Petitioner has computed depreciation for truing-up purpose.

After analysing the above submission of the petitioner, views of GRIDCO, category wise actual capital cost of the generating station verified & reported by the M/s SCP & Co. and considering the rate of depreciation specified in the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014, the Commission has computed the depreciation on actual capital cost including additional capitalisation admitted for truing up

purpose The summary of depreciation proposed by the Petitioner and now approved by the Commission for the period FY 2015-19 is given in the table below:

Table-11
Depreciation for FY 2015-19 (Rs Crore)

Particulars	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
(A) Approved in Tariff Order dated 29.06.2018 by the Commission	405.57	404.92	404.92	404.92	404.92
(B) Proposed for Truing -up by Petitioner	386.50	389.12	391.27	392.79	397.64
(C) Approved for Truing -up by the Commission	386.73	389.35	391.5	393.03	397.88
Deviation claimed by Petitioner (B- A)	(18.07)	(15.80)	(13.65)	(12.13)	(7.28)
Deviation approved by the Commission (C-A)	(17.84)	(15.57)	(13.42)	(11.89)	(7.04)

Operation and Maintenance (O&M) Expenses:

29. Regulation 4.28(a) of the OERC Generation Tariff Regulations, 2014 provides the following O & M expenses norms for 600MW and above coal based generating stations as shown below:

Financial Year	2014-15	2015-16	2016-17	2017-18	2018-19
<i>O & M Expenses Rs. in Lakh / MW for 600MW and above sets</i>	<i>14.40</i>	<i>15.31</i>	<i>16.27</i>	<i>17.30</i>	<i>18.38</i>

In the tariff order dated 29.06.2018 for the Period FY 2015-19, the Commission had approved O & M Expenses accordingly. The Petitioner has submitted that it has managed the O&M expenses within the normative O&M expenses and same amounts have been claimed for truing-up purpose. Further, the Petitioner has requested that as per Section 61(e) of the Electricity Act, 2003 the Commission may in exercise of its power to make Regulations and its effective implementation, reward the Petitioner for its efficient performance in regard to O&M Expenses and accordingly, allows 2/3rd of the reduced cost to be retained by it and pass the remaining to the Consumers.

After analysing the above submissions, the Commission observes that the petitioner has claimed O&M Expenses normative basis as per Regulation 4.28(a) of the OERC Generation Tariff Regulations, 2014. Therefore, the Commission accepts the same for truing-up purpose. But the reward claimed by the Petitioner for performance efficiency has not considered by the Commission as there is no such provision in the Regulations. The O&M Expenses proposed by the Petitioner and now approved by the Commission for the period FY 2015-19 is given in the table below:

Table-12
O & M Expenses for FY 2015-19 (Rs Crore)

Particulars	FY 2014-15*	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
(A) Approved in Tariff Order dated 29.06.2018 by the Commission	345.60	367.44	390.48	415.20	441.12
(B) Proposed for Truing - up by Petitioner	345.60	367.44	390.48	415.20	441.12
(C) Approved for Truing - up by the Commission	345.60	367.44	390.48	415.20	441.12
Deviation claimed by Petitioner (B- A)	-	-	-	-	-
Deviation approved by the Commission (C-A)	-	-	-	-	-

**Consolidated (considering the relevant provisions of OERC & CERC Regulations for the FY 2014-15)*

Interest on Working Capital:

30. The Regulation 4.24(a) and 4.25 to 4.27 of the OERC Generation Tariff Regulations, 2014 has enunciated the norms for computation of working capital requirement and interest on working capital for coal based generating stations as depicted below:

“4.24(a)

- (i) Cost of coal, if applicable, for 1 month for pit-head generating stations and two months for non-pit-head generating stations, for generation corresponding to the normative annual plant availability factor;*
- (ii) Cost of secondary fuel oil for one month 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;*
- (iii) Maintenance spares @ 20% of operation and maintenance expenses specified in Regulation 4.28;*
- (iv) Receivables equivalent to one month of capacity charges and energy charges for sale of electricity calculated on the normative annual plant availability factor; and*
- (v) Operation and maintenance expenses for one month.*

4.25: The cost of fuel in cases covered under sub-regulation(a) of Regulation 4.24 shall be based on the landed cost incurred (taking in to account normative transit and handling losses) by the generating company and gross calorific value of the fuel as per actual of the preceding three months and no fuel price escalation shall be provided during the tariff period.

4.26: Rate of interest on working capital shall be on normative basis and shall be equal to the SBI Base Rate plus 300 basis points as on 1 Apr 2014 or on 1 Apr of the year in which the generating station or a unit thereof, is declared under commercial operation, whichever is later.

4.27: Interest on working capital shall be payable on normative basis notwithstanding that the generating company has not taken loan for working capital from any outside agency.”

31. The Petitioner has submitted that in line with the stipulated norms of the Regulations 4.24, 4.26 and 4.27, it has proposed interest on working capital for truing-up purpose. The Commission scrutinised the submissions of the Petitioner and views of GRIDCO in this regard. The Commission observes that, for calculation of fuel cost components under working capital requirement, the petitioner has ignored the norms of Regulation 4.25 i.e. *no fuel price escalation shall be provided during the tariff period*. Further for calculation of receivable component under working capital requirement, the petitioner has considered depreciation, RoE and interest on loan capital under capacity charges which are estimated by the Petitioner for truing-up purpose by considering capital cost including CWIP.

After reviewing the above points, as per norms of Regulation 2.12 of OERC Generation Tariff Regulation, 2014 for truing-up of capital cost including additional capitalisation, the Commission has computed the annual fixed cost component for truing-up purpose. By considering these fixed cost components of capacity charges and normative energy charges which was approved in tariff order dated 29.06.2018, the Commission has estimated the working capital requirements as per norms of Regulation 4.24(a) and 4.25. The Commission has considered the rate of interest on working capital as per Regulation 4.26 and accordingly computed interest on working capital for truing up purpose. The summary of working capital requirement and interest on working capital proposed by the Petitioner and now approved by the Commission for the period FY 2015-19 are given in the table below:

Table-13
Interest on Working Capital for FY 2015-19 (Rs Crore)

Particulars	FY 2014-15 *	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
(A) Approved in Tariff Order dated 29.06.2018 by the Commission					
Cost of coal	284.66	284.34	284.34	284.34	284.34
Cost of secondary fuel oil	7.89	7.89	7.89	7.89	7.89
O&M Expenses	28.80	30.62	32.54	34.60	36.76
Maintenance Spares (@ 20% of O&M Expenses)	69.12	73.49	78.10	83.04	88.22
Receivables	449.45	286.92	285.61	284.36	283.20
Working Capital Requirement	839.92	683.26	688.48	694.23	700.41
Rate of Interest (%)	13.31	13.00	13.00	13.00	13.00
Interest on Working Capital	111.78	88.82	89.50	90.25	91.05
(B) Proposed for Truing -up by Petitioner					
Cost of coal	344.47	382.42	439.01	435.17	423.45
Cost of secondary fuel oil	13.40	5.82	6.08	6.35	7.49
O&M Expenses	28.80	30.62	32.54	34.60	36.76
Maintenance Spares (@ 20% of O&M Expenses)	69.12	73.49	78.10	83.04	88.22
Receivables	498.92	334.64	363.52	360.79	354.53
Working Capital Requirement	954.71	826.99	919.25	919.95	910.45

Particulars	FY 2014-15 *	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Rate of Interest (%)	13.26	13.00	13.00	13.00	13.00
Interest on Working Capital	126.59	107.51	119.50	119.59	118.36
(C) Approved for Truing -up by the Commission					
Cost of coal	284.66	284.34	284.34	284.34	284.34
Cost of secondary fuel oil	7.89	7.89	7.89	7.89	7.89
O&M Expenses	28.80	30.62	32.54	34.60	36.76
Maintenance Spares (@ 20% of O&M Expenses)	69.12	73.49	78.10	83.04	88.22
Receivables	441.79	281.43	280.88	280.27	280.14
Working Capital Requirement	832.26	677.77	683.75	690.14	697.35
Rate of Interest (%)	13.31	13.00	13.00	13.00	13.00
Interest on Working Capital	110.76	88.11	88.89	89.72	90.66
Deviation claimed by Petitioner (B- A)	14.81	18.69	30.00	29.34	27.31
Deviation approved by the Commission (C-A)	(1.02)	(0.71)	(0.61)	(0.53)	(0.39)

**Consolidated (considering the relevant provisions of OERC & CERC Regulations for the FY 2014-15)*

Truing-up of Annual Capacity Charges:

32. As stated earlier, Petitioner has claimed an amount of Rs. 98.78 Cr (Rs.4.70 Cr. for FY 2014-15, Rs.8.86 Cr. for FY 2015-16, Rs.28.50 Cr. for FY 2016-17, Rs.30.66 Cr. for FY 2017-18 and Rs.26.06 Cr. for FY 2018-19) for truing-up additional capacity charges for its 2400MW generating station for the period FY 2015-19. Accordingly, it has prayed before the Commission to allow recovery of true-up amount of Rs.24.69 Cr. (25% for 600MW) from GRIDCO.

In accordance with Regulation 2.12 of OERC Generation Tariff Regulations, 2014 and the principles as mentioned in the above paragraphs, the Commission has considered and calculated the annual capacity charge for truing -up purpose for the generating station (2400MW) of the petitioner.

As against the additional claims of annual capacity charges of Rs.98.78 crore by the Petitioner, the Commission has found that the annual capacity charges have been reduced by Rs.265.03 Cr. (Rs.57.05 Cr. for FY 2014-15, Rs.65.79 Cr. for FY 2015-16, Rs.56.69 Cr. for FY 2016-17, Rs.48.88 Cr. for FY 2017-18 and Rs.36.62 Cr for FY 2018-19) from the approved amount in the Tariff order dated 29.06.2018 in Case No.95 of 2013 of this Commission for the period FY 2015-19 in respect of the 2400 MW generating station of the Petitioner. The summary of annual capacity charges proposed by the Petitioner and now approved by the Commission for the period FY 2015-19 for truing-up purpose are given in the table below:

Table-14

Truing-up of Annual Capacity Charges for FY 2015-19 (Rs. Crore)

Particulars	FY 2014-15 *	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
(A) Approved in Tariff Order dated 29.06.2018 by the Commission					
Return on Equity	435.37	389.51	389.51	389.51	389.51
Interest on term loan	439.14	391.67	352.28	311.70	271.13
Depreciation (SLM)	404.57	404.92	404.92	404.92	404.92
O&M Expenses	345.60	367.44	390.48	415.20	441.12
Interest on Working capital	111.78	88.82	89.50	90.25	91.05
Total Cost	1,736.46	1,642.36	1,626.69	1,611.58	1,597.73
(B) Proposed for Truing -up by Petitioner					
Return on Equity	435.36	390.59	392.50	392.50	392.41
Interest on term loan	447.11	396.56	361.44	322.16	274.26
Depreciation (SLM)	386.50	389.12	391.27	392.79	397.64
O&M Expenses	345.60	367.44	390.48	415.20	441.12
Interest on Working capital	126.59	107.51	119.50	119.59	118.36
Total Cost	1,741.16	1,651.22	1,655.19	1,642.24	1,623.79
(C) Approved for Truing -up by the Commission					
Return on Equity	417.21	375.78	378.12	379.66	384.30
Interest on term loan	419.11	355.89	321.01	285.09	247.15
Depreciation (SLM)	386.73	389.35	391.50	393.03	397.88
O&M Expenses	345.60	367.44	390.48	415.20	441.12
Interest on Working capital	110.76	88.11	88.89	89.72	90.66
Total Cost	1,679.41	1,576.57	1,570.00	1,562.70	1,561.11
Deviation claimed by Petitioner (B- A)	4.70	8.86	28.50	30.66	26.06
Deviation approved by the Commission (C-A)	(57.05)	(65.79)	(56.69)	(48.88)	(36.62)

**Consolidated (considering the relevant provisions of OERC & CERC Regulations for the FY 2014-15)*

It is observed that annual capacity charges approved for the period FY 2015-19 is more than computed figures after truing up exercise. Accordingly, in accordance with Regulation 2.12 of OERC Generation Tariff Regulation, 2014, the Commission directs the Petitioner to refund the excess amount recovered over and above the annual capacity charges now approved for FY 2014-15 to FY 2018-19 to GRIDCO basing on their share in the power station through adjustment in the bill.

33. Further, the Petitioner has submitted the revised energy charges for the period FY 2015-19. Since the Commission has already given approval in the tariff order dated 29.06.2018 for recovery of energy charges as per norms of Regulations 4.32 to 4.34 of the OERC Generation Tariff Regulations, 2014, there is no scope as per OERC Generation Tariff Regulations, 2014 for its truing up.
34. Further, the petitioner has prayed before the Commission to give direction to GRIDCO for payment of late payment surcharge for payments made beyond the due date as per tariff order dated 29.06.2018 in Case No. 95/2013. After analysing the above prayer of the

Petitioner, the Commission directs that in accordance with Regulation 6.6 of OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014, any delay in payment of the bill shall attract surcharge as per the said Regulation and payment shall be made accordingly by GRIDCO.

GENERATION TARIFF FOR THE CONTROL PERIOD FY 2020-24:

35. The petitioner has submitted that it has filed its generation tariff application for the control period FY 2019-20 to FY 2023-24 basing on the operational parameters as per the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014 applicable upto the FY 2019-20 and OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 applicable for the tariff period from FY 2020-21 to FY 2023-24. Further, the Petitioner has submitted that power is being supplied to the Respondent-GRIDCO from Unit-II (600 MW) only of its generating station (with installed capacity of 2400 MW) as per order dated 27.01.2016 passed in Case No. 21/2015 of the Commission and relying on the Regulation 2.2 of OERC Generation Tariff Regulations, 2014 (applicable the FY 2019-20) and Regulation 5(2) of the OERC Generation Tariff Regulations, 2020 applicable for the tariff period from FY 2020-21 to FY 2023-24, it has proposed to determine the generation tariff for the 600 MW Unit-II (IPP) only.

Accordingly, the Petitioner has submitted that the total capital cost was Rs. 2767.27 Cr. till the date of Commercial operation (CoD) i.e., 10.11.2010 of its first unit (600MW Unit-II IPP) out of four units (4x600MW) of its generating station as per the report of Independent Auditor M/s. Bal &Co., Chartered Accountant appointed by the Commission in Case No. 95/2013 & 38/2016. Further, considering additional capitalisation of Rs.35.31Cr during FY 2013-14, Rs.3.95 Cr. during FY 2014-15, Rs.13.24 Cr. during FY 2015-16 & Rs.2.26 Cr. during FY 2018-19 for Unit-II only, it has considered Rs.2822.01 Cr. (i.e., Rs.2767.27 Cr. + Rs.35.31 Cr. + Rs.3.95 Cr. + Rs.13.24 Cr. + Rs2.26 Cr.) as opening capital cost as on 01.04.2019 for Unit-II only for the purpose of determination of generation tariff for the period from FY 2019-20 to FY 2023-24.

Regulation 2.2 of the OERC Generation Tariff Regulations, 2014 (applicable upto the FY 2019-20) and Regulation 5(2) of the OERC Generation Tariff Regulations, 2020, have clarified as follows:

“where only a part of the generation capacity of a generating station is tied up for supplying power to the beneficiaries through long term power purchase agreement and balance part of the generation capacity has not been tied up for supplying power to the beneficiaries, the units for such part capacity shall be clearly identified and in such cases, the tariff shall be determined for such identified

capacity. Where the unit(s) corresponding to such part capacity cannot be identified, the tariff of the generating station shall be determined with reference to the Capital Cost of the entire project but the tariff so determined shall be applicable corresponding to the capacity contracted for supply to the beneficiaries.”

We find that the independent auditor, M/s. Bal & Co. was appointed by the Commission for verification of capital cost of entire 2400 MW generating station of the Petitioner. Accordingly, the independent auditor has submitted his verification report considering the cumulative capital cost of entire generating station upto the date of commercial operation (COD) of each unit. Since out of the four Units (4 X 600 MW) of the generating station, Unit-II was commissioned first, by considering total capital cost of Rs.2767.27 Cr. upto the date of Commercial operation (i.e., on 01.11.2020) of first unit (Unit-II), the petitioner has claimed as capital cost of Unit-II without clarifying anything about capital cost towards common facilities of the entire generating station. Considering the above facts, the Commission had passed the generation tariff order upto the control period FY 2014-19 by considering the capital cost as verified by the independent auditor for the entire 2400 MW (4 X 600 MW) thermal generating station instead of that for any specific unit.

36. Therefore, in line with earlier generation tariff orders passed in Case No. 95/2013 & 38/2016, we proceed to determine the generation tariff of the entire generating station instead of the proposed unit II only for the tariff period FY 2020-24 basing on the parameters as per the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014 (applicable upto FY 2019-20) and operational parameters as per the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 applicable for the tariff period from FY 2020-21 to FY 2023-24. Further, the Commission has taken into record the relevant objections and views of the Respondent and the corresponding replies of the Petitioner.

Determination of Capital Cost and Debt -Equity:

37. Since the Commission has decided to consider the capital cost of the entire generating station for determination of generation tariff for the control period from FY 2019-20 to FY 2023-24, the proposal of the petitioner regarding capital cost for unit -II only has not been taken into consideration. For disposal of truing-up of accounts for the period FY 2015-19, as explained above, the Commission had appointed M/s. SCP and Co., Chartered Accountant in line with Regulations 6(2) & 9(3) of the OERC Generation Tariff Regulation, 2020 in the present Case to verify the capital cost and additional capitalisation of the said 2400 MW generating station of the petitioner for determination of tariff for the period FY 2019-20 to FY 2023-24. M/s. SCP and Co. has submitted the verification report

to the Commission on 12.05.2023 regarding year wise total capital cost including additional capitalisation of the entire generating station and weighted average rate of interest on loan portfolio for the period FY 2014-15 to FY 2018-19. The details are summarised as under:

Table-15
Summary of Independent Auditor Report

<i>(Rs. in Crore)</i>					
Particulars	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Total Capital Cost including CWIP	8,114.69	8,159.83	8,194.18	8,160.02	8,190.51
Less: CWIP	310.78	306.10	293.13	241.98	95.97
Capital Cost (Including Additional Capitalisation)	7,803.91	7,853.73	7,901.05	7,918.04	8,094.54
Weighted average Rate of Interest on Loan (%)	10.29	9.64	9.58	9.44	9.18

From the above verified capital cost including additional capitalisation upto 31.03.2019, the Commission has considered the capital cost of Rs.8094.54 Cr. as opening capital cost for the tariff period FY 2020-24. Regarding the CWIP of Rs.95.97 Cr. as on 31.03.2019, the Commission has provisionally considered it to be capitalised during FY 2019-20 for determination of tariff only and it is subject to truing-up at end of tariff period FY 2020-24 on actual basis basing on the audit by an independent auditor.

Further, regarding additional capitalisation of Rs.253.50 Cr. proposed by the Petitioner towards installation of Flue Gas Desulphurisation (FGD) System as per the Ministry of Environment Forest & Climate Change (MOEF & CC), Govt. of India (GoI), Notification No. S.O. 3305(E) dated 7.12.2015 and Rs.510.00 Cr. towards installation of MGR/Conveyor Belt in compliance to letter dated 23.07.2018 of the Ministry of Power, GoI for its unit -II power plant only, the Commission had asked the petitioner to provide documentary evidence to justify the proposed additional capitalisation. But the Petitioner was unable to provide relevant supporting document to this effect for consideration of the Commission. Therefore, we do not consider the same at present for determination of generation tariff for the control period FY 2020-24. However, in compliance to the Regulation 2.12 of the OERC Generation Tariff Regulation 2014 (application upto FY 2019-20) & Regulation 8 of OERC Generation Tariff Regulation 2020, after prudent check, the Commission will appropriately consider same at the time of truing-up subject to audit by an independent auditor of the actual capital expenditure including additional capitalisation during the tariff period FY 2020-24.

In accordance with norms stipulated in Regulations 3.6 to 3.8 of OERC Generation Tariff Regulations-2014 and Regulations16 of OERC Generation Tariff Regulations-2020, the Commission has considered normative Debt-Equity ratio (70%:30%) of the capital cost and the loan repayment has been considered equal to the depreciation of each year as per Regulation 4.11 and Regulation 22(3) respectively of aforesaid OERC Generation Tariff Regulations. Accordingly, the Commission has considered the following year wise average capital cost and debt & equity components for the period FY 2019-20 to FY 2023-24 of the entire generating station of the Petitioner, which are given in the table below:

Table-16
Capital Cost & Debt-Equity Mix approved by the Commission for FY 2020-24 (Rs Crore)
(Rs. in Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	OERC Tariff Regulation, 2014	OERC Tariff Regulation, 2020			
Calculation Capital Cost					
Op. Capital Cost	8,094.54	8,190.51	8,190.51	8,190.51	8,190.51
Addition	95.97	-	-	-	-
Cl. Capital Cost	8,190.51	8,190.51	8,190.51	8,190.51	8,190.51
Average Capital Cost (ACS)	8,142.53	8,190.51	8,190.51	8,190.51	8,190.51
<i>Equity 30% of ACS</i>	<i>2442.76</i>	<i>2457.15</i>	<i>2457.15</i>	<i>2457.15</i>	<i>2457.15</i>
<i>Debt @70% of ACS</i>	<i>5699.77</i>	<i>5733.36</i>	<i>5733.36</i>	<i>5733.36</i>	<i>5733.36</i>
Cum. Depreciation upto Previous Year	3,111.07	3,515.84	3,922.85	4,329.86	4,736.87
Op. Debt Capital	2,588.70	2,217.52	1,810.51	1,403.50	996.49
Depreciation of Current Year	404.77	407.01	407.01	407.01	407.01
Cl. Debt Capital	2,183.93	1,810.51	1,403.50	996.49	589.48
Avg. Debt Capital	2,386.32	2,014.02	1,607.01	1,200.00	792.99

Interest on Loan Capital:

38. The Petitioner has submitted that, interest on Loan capital for the control period FY 2019-20 to FY 2023-24 have been considered in accordance with the OERC Generation Tariff Regulation, 2014 (applicable upto the FY 2019-20) and the OERC Generation Tariff Regulation, 2020 applicable for the period FY 2021-24. The Petitioner has considered its own estimated normative average loan capital for the generating Unit-II (600 MW) only and the weighted average rate of interest @10.02% has been considered in line with the rate of interest as approved by the Commission for the previous FY 2018-19 vide its Order dated 29.06.2018 issued in Case No. 95 of 2013. The interest on loan capital for Unit -II of the generating station only as proposed by the Petitioner are shown in the table below:

Table-17
Interest on Loan Capital proposed by Petitioner for FY 2020-24 (Rs Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
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	OERC Tariff Regulation, 2014	OERC Tariff Regulation, 2020			
Average Loan Capital for Unit-II proposed	736.57	727.21	836.35	796.76	618.52
Rate or Interest (%)	10.02	10.02	10.02	10.02	10.02
Interest on Loan Capital	73.80	72.87	83.80	79.84	61.98

Since the Commission has decided to determine the generation tariff of the entire generating station, the interest on loan capital of Unit -II only proposed by the Petitioner has not been taken into consideration by the Commission.

Regulation 4.13 of OERC Generation Tariff Regulations, 2014, stipulates that, *“the rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project”* and

Regulation 22(5) of OERC Generation Tariff Regulations, 2020 stipulates that, *“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 at the beginning of each year applicable to the project;*

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, does not have actual loan, then the weighted average rate of interest of the generating company as a whole shall be considered.”

Further, as per Regulation 4.14 of the OERC Generation Tariff Regulation, 2014 and Regulation 22(6) of OERC Generation Tariff Regulation, 2020, the interest on loan shall be calculated on the normative average loan of the respective years by applying the weighted average rate of interest.

Considering the above provisions of OERC Generation tariff Regulations regarding interest on loan capital, the Commission has considered the last available weighted average rate of interest of 9.18% which was considered for FY 2018-19 in the aforesaid truing up order for FY 2015-19. The Commission basing on the normative average loan balance of the respective year has estimated the interest on loan capital for the tariff period from FY 2019-20 to FY 2023-24 for the generating station. The summary of interest on loan capital approved by the Commission for generating station for the period FY 2020-24 are given in the table below:

Table-18
Interest on Loan Capital approved by the Commission for the period FY 2020-24
(Rs Crore)

	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Particulars	OERC Tariff Regulation, 2014	OERC Tariff Regulation, 2020			
Average Loan Capital	2,386.32	2,014.02	1,607.01	1,200.00	792.99
Rate or Interest (%)	9.18	9.18	9.18	9.18	9.18
Interest on Loan Capital	219.06	184.89	147.52	110.16	72.80

Return on Equity Capital (RoE):

39. The Petitioner has submitted that, RoE for the control period FY 2019-20 to FY 2023-24 has been considered in accordance with the norms of the OERC Generation Tariff Regulations, 2014 (applicable upto the FY 2019-20) and the OERC Generation Tariff Regulations, 2020 applicable for the period FY 2021-24. The Petitioner has claimed the pre-tax rate of RoE including tax on income (i.e., MAT @ 15%) over the base rate of RoE (16% / 14%) as stipulated in the respective OERC Generation Tariff Regulations. By considering its own estimated normative average equity capital for Unit-II (600MW) of the generating station only, the petitioner has claimed RoE for the tariff period FY 2020-24. The summary of the RoE for Unit -II of the generating station only as proposed by the Petitioner are shown in the table below:

Table-19
Return on Equity Capital proposed by the Petitioner for FY 2020-24
(Rs. Crore)

	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Particulars	OERC Tariff Regulation, 2014	OERC Tariff Regulation, 2020			
Average Equity Capital for Unit-II proposed	846.60	903.87	1,018.39	1,075.65	1,075.65
Base Rate of RoE (%)	16.00	14.00	14.00	14.00	14.00
MAT (%)	15.00	15.00	15.00	15.00	15.00
Rate of RoE Including MAT (%)	18.82	16.47	16.47	16.47	16.47
Return on Equity Capital	159.36	148.87	167.74	177.16	177.16

40. Since the Commission has decided to determine the generation tariff of the generating station, the return on equity capital of Unit -II generating station only as proposed by the Petitioner has not been taken into consideration by the Commission. For calculation of RoE, the Commission has considered the rate of return on equity capital @ 16% as per Regulation 4.6 of the extended OERC Generation Tariff Regulations, 2014 (applicable

upto FY 2019-20) and @14% as per Regulation 20(2) of OERC Generation Tariff Regulations, 2020 applicable for the period FY 2021-24. According to Regulation 4.7 & 4.8 of the OERC Generation Tariff Regulations, 2014 & Regulation 21 of the OERC Generation Tariff Regulations, 2020, after prudent check, tax on income shall be paid by the GRIDCO directly to the petitioner as per their share.

Considering the above provisions of OERC Generation tariff Regulations, in respect of normative Return on Equity capital of the respective years, the Commission has estimated the Return on Equity capital for the generating station for the tariff period from FY 2019-20 to FY 2023-24. The summary of return on equity capital approved by the Commission for different years are given in the table below:

Table-20
Return on Equity Capital approved by the Commission for FY 2020-24 (Rs Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	OERC Tariff Regulation, 2014	OERC Tariff Regulation, 2020			
Average Equity Capital	2442.76	2457.15	2457.15	2457.15	2457.15
Rate or RoE (%)	16.00	14.00	14.00	14.00	14.00
Return on Equity Capital approved	390.84	344.00	344.00	344.00	344.00

Depreciation:

41. The Petitioner has submitted that by considering the projected capital cost including additional capitalisation proposed for Unit-II (600 MW) of the generating station, it has claimed depreciation in accordance with the Regulation 4.18 to 4.23 of the OERC Generation Tariff Regulations, 2014 (applicable upto the FY 2019-20) and Regulation 23 of the OERC Generation Tariff Regulations, 2020 applicable for the period FY 2021-24. The summary of the year-wise Depreciation for Unit -II of the generating station proposed by the Petitioner are shown in the table below:

Table-21
Depreciation Proposed by the Petitioner for FY 2020-24 (Rs Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	OERC Tariff Regulation, 2014	OERC Tariff Regulation, 2020			
Average Capital Cost	2,822.01	3,012.89	3,394.64	3,585.51	3,585.51

Depreciation Claimed	137.93	148.01	168.16	178.24	178.24
Avg. Rate of Depreciation (%)	4.89	4.91	4.95	4.97	4.97

Since the Commission has decided to determine the generation tariff of the generating station, the Depreciation for Unit -II of the generating station only as proposed by the Petitioner has not been taken into consideration by the Commission.

For calculation of depreciation, the Commission is guided by the principle of Regulation 4.18 to 4.23 of the OERC Generation Tariff Regulations, 2014 (applicable upto the FY 2019-20) & Regulation 23 of the OERC Generation Tariff Regulations, 2020 applicable for the period FY 2021-24.

Considering the rate of depreciation as per OERC Generation Tariff Regulations and basing on the average capital cost (Gross Fixed Assets) of the respective years estimated by the Commission, depreciation for the tariff period from FY 2019-20 to FY 2023-24 has been estimated for the generating station of the Petitioner. The year wise depreciations now approved by the Commission are given in the table below:

Table-22
Depreciation Approved by the Commission for FY 2020-24 (Rs Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	OERC Tariff Regulation, 2014	OERC Tariff Regulation, 2020			
Average Capital Cost	8,142.53	8,190.51	8,190.51	8,190.51	8,190.51
Depreciation approved	404.77	407.01	407.01	407.01	407.01
Avg. Rate of Depreciation (%)	4.97	4.97	4.97	4.97	4.97

Operation and Maintenance (O&M) Expenses:

42. The Petitioner has submitted that, the Commission, vide their Notification No: OERC/RA/ Amend. REG-14/2013 /233 dated 04.02.2020, had extended the OERC Generation Tariff regulation, 2014 for a period of one-year i.e., up to 31.03. 2020. The petitioner has further submitted that, Regulation 4.28 of the OERC Generation Tariff Regulations, 2014, specifies the normative O&M expenses in Rs. Lakh/per MW for each year of the control period FY 2015-19 for Unit size of 600 MW and above and the average escalation per year is 6.29%. Therefore, considering 6% escalation over the normative O&M expenses of FY 2018-19, it has proposed O&M Expenses @ Rs.19.48 lakh/MW for the FY 2019-20 and for each year of the period FY 2021-24, it has considered the normative O&M Expenses as specified in the Regulation 25(1)(a) of the OERC Generation Tariff Regulations, 2020.

Accordingly, the Petitioner has proposed the year wise O& M Expenses for Unit -II of the generating station for the tariff period FY 2020-24 are shown in the table below:

Table-23
O & M Expenses Proposed by Petitioner for the Period FY 2020-24

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	OERC Tariff Regulation, 2014	OERC Tariff Regulation, 2020			
O & M Expenses Rs. in Lakh / MW for 600MW and above sets	19.48	20.97	21.71	22.47	23.26
O& M Expenses Proposed for Unit II (600MW) only (Rs. Cr.)	116.90	125.82	130.26	134.82	139.54

As per Regulation 4.28(a) of the OERC Generation Tariff Regulations, 2014 (applicable upto FY 2019-20) and Regulation 25(1)(a) of the OERC Generation Tariff Regulations, 2020 applicable for FY 2021-24, the following O & M expenses norms for 600 MW and above coal based generating stations are provided which is shown below:

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	OERC Tariff Regulation, 2014	OERC Tariff Regulation, 2020			
<i>O & M Expenses Rs. in Lakh / MW for 600MW and above sets</i>	<i>18.38</i>	<i>20.97</i>	<i>21.71</i>	<i>22.47</i>	<i>23.26</i>

Considering the above normative O&M Expenses of the OERC Generation tariff Regulations, the Commission has computed the year wise O&M expenses for the generating station of the Petitioner. The year wise O& M Expenses approved by the Commission for the tariff period FY 2020-24 are given in the table below:

Table-24
O& M Expenses approved by the Commission for FY 2020-24

(Rs Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	OERC Tariff Regulation, 2014	OERC Tariff Regulation, 2020			

O & M Expenses Rs. in Lakh / MW for 600MW and above sets	18.38	20.97	21.71	22.47	23.26
O& M Expenses Approved (Rs. Cr.)	441.12	503.28	521.04	539.28	558.24

Interest on Working Capital:

43. The Petitioner has submitted that the working capital requirement has been estimated as per norms of Regulation 4.24 to 4.27 of the OERC Tariff Regulations, 2014 (applicable upto the FY 2019-20) and Regulation 24 of the OERC Generation Tariff Regulations, 2020 applicable for the period FY 2021-24. Further, the Petitioner has considered the rate of interest @ 12.05% for the FY 2019-20 (basing on the SBI Base Rate of 9.05% as on 01.04.2019 plus 300 basis points) as per OERC Generation Tariff Regulations, 2014 & 10.75% for the period FY 2021-24 (basing on the SBI One-year MCLR rate of 7.75% as on 10.03.2020 plus 300 basis points) as per OERC Generation Tariff Regulations, 2020. Accordingly, the Petitioner has proposed interest on working capital only for Unit-II of its generating station only for the tariff period FY 2020-24 as shown in the table below:

Table-25

Interest on Working Capital proposed by the Petitioner for FY 2020-24

(Rs Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	OERC Tariff Regulation, 2014	OERC Tariff Regulation, 2020			
Cost of Coal	148.17	157.96	161.12	164.34	168.25
Cost of Secondary Fuel Oil	1.89	1.92	1.96	2.00	2.05
O & M Expenses	9.74	10.49	10.86	11.24	11.63
Maintenance Spare @20% of O&M Expenses	23.38	25.16	26.05	26.96	27.91
Receivable	119.68	185.84	195.12	200.17	201.60
Working Capital Requirements	302.86	381.37	395.11	404.71	411.44
Rate of Interest (%)	12.05	10.75	10.75	10.75	10.75
Interest on Working Capital	36.49	41.00	42.47	43.51	44.23

Since the Commission has decided to determine the generation tariff of the generating station, the interest on working capital for Unit -II of generating station only as proposed by the Petitioner has not been taken into consideration by the Commission.

Regulation 4.24(a) of the OERC Generation Tariff Regulations, 2014 applicable for the FY 2019-20 provides that the working capital requirements for coal based generating stations shall cover:

- i. *Cost of coal, if applicable, for 1 month for pit-head generating stations and two months for non-pit-head generating stations, for generation corresponding to the normative annual plant availability factor;*
- ii. *Cost of secondary fuel oil for one month 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;*
- iii. *Maintenance spares @ 20% of operation and maintenance expenses specified in Regulation 4.28;*
- iv. *Receivables equivalent to one month of capacity charges and energy charges for sale of electricity calculated on the normative annual plant availability factor; and*
- v. *Operation and maintenance expenses for one month.*

Regulation 24 of the OERC Generation Tariff Regulations, 2020 applicable for the period FY 2021-24 provides that the working capital requirements for coal based generating stations shall cover:

- i. *Cost of coal, if applicable, for fifteen (15) days for pit-head generating stations and thirty (30) days for non-pit-head generating stations, for generation corresponding to the normative annual plant availability factor;*
- ii. *Advance payment for thirty (30) days towards cost of coal for generation corresponding to the normative annual plant availability factor;*
- iii. *Cost of secondary fuel oil for one (1) month 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 25(1);*
- v. *Receivables equivalent to forty-five (45) days 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 (1) month including water charges and security expenses.*

Further, Regulation 4.26 of the OERC Generation Tariff Regulations, 2014 provides that *Rate of interest on working capital shall be on normative basis and shall be equal to the SBI Base Rate plus 300 basis points as on 01.04.2014 or on 1st April of the year in which the generating station or a unit thereof, is declared under commercial operation, whichever is later, and*

Regulation 24(3) of the OERC Generation Tariff Regulations, 2020 provides that *Rate of interest on working capital shall be on normative basis and shall be equal to the Bank Rate*

as on 01.04.2020 or on 1st April of the year in which the generating station or a unit thereof, is declared under commercial operation, whichever is later.

Considering the above provisions of the OERC Generation Tariff Regulations, the Commission has computed the working capital requirements and interest on working capital for the entire generating station of the petitioner for the tariff period FY 2020-24. The year wise interest on working capital now approved by the Commission are given in the table below:

Table-26
Interest on Working Capital approved by the Commission for FY 2020-24

(Rs Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	OERC Tariff Regulation, 2014	OERC Tariff Regulation, 2020			
Cost of Coal	413.26	415.88	415.88	415.88	415.88
Cost of Secondary Fuel Oil	7.69	7.69	7.69	7.69	7.69
O & M Expenses	36.76	41.94	43.42	44.94	46.52
Maintenance Spare @20% of O&M Expenses	88.22	100.66	104.21	107.86	111.65
Receivable	345.29	517.91	515.49	513.14	510.88
Working Capital Requirements	891.22	1,084.08	1,086.69	1,089.51	1,092.62
Rate of Interest (%)	13.00	10.75	10.75	10.75	10.75
Interest on Working Capital	115.86	116.54	116.82	117.12	117.46

Annual Capacity Charges:

44. The Commission has calculated capacity charges of each year of the tariff period FY 2020-24 of the 2400 MW (4x600 MW) generating station of the Petitioner and accordingly approves the capacity charges for different years which are given in the table below:

Table-27
Annual Capacity Charges approved by the Commission for FY 2020-24

(Rs Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	OERC Tariff Regulation, 2014	OERC Tariff Regulation, 2020			
Return on Equity	390.84	344.00	344.00	344.00	344.00
Interest on term loan	219.06	184.89	147.52	110.16	72.80
Depreciation (SLM)	404.77	407.01	407.01	407.01	407.01
O&M Expenses	441.12	503.28	521.04	539.28	558.24
Interest on Working capital	115.86	116.54	116.82	117.12	117.46
Annual Capacity Charges	1,571.65	1,555.72	1,536.39	1,517.57	1,499.51

45. **The Respondent-M/s.GRIDCO Ltd. shall pay the capacity charges to the Petitioner-M/s. Vedanta Ltd. in proportion to their share from the 2400 MW generating station as per approved PPA/orders of the Commission issued from time to time. Further, as per Regulation 27(6) of the OERC Generation Tariff Regulations, 2020, the capacity charges for a calendar month of FY 2019-20 & FY 2020-21 in the form of monthly fixed charge shall be calculated in accordance with the norms and formula given in the Regulations 4.29 to 4.31 & 6.9 of the OERC Generation Tariff Regulations, 2014 and for the period FY 2021-22 to FY 2023-24 in accordance with the norms and formula given in the Regulations 27(1) to 27(5) of the OERC Generation Tariff Regulations, 2020.**

Operational Parameters:

Normative Annual Plant Availability Factor (NAPAF):

46. The Petitioner has considered the Normative Annual Plant Availability Factor (NAPAF) at 85% both as per Regulation 5.3(a)(i) of the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014 (applicable upto the FY 2019-20) and Regulation 32(a)(i) of the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 applicable for the period FY 2021-24. The Commission, accordingly approves the NAPAF of 85% for the entire thermal generating station from FY 2019-20 to 2023-24..

Auxiliary Energy Consumption (AEC):

47. The Petitioner has submitted that Regulation 5.3(e)(i) of the OERC Generation Tariff Regulations, 2014 specifies the Auxiliary Energy Consumption (AEC) @ 6.00% for coal based Generating Station with Unit size of 500 MW and above with steam driven boiler feed pump and Regulation 32(e)(i) of the OERC Generation Tariff Regulations, 2020 specifies the AEC @ 5.75% for coal based Generating Station with Unit size of 300 MW and above with steam driven boiler feed pump. The Petitioner has submitted that, due to shortage in availability of linkage coal, it can generate power from Unit-II (600 MW) at low PLF (~63%) and therefore, additional 0.80 percent AEC is required as per CERC notification dated 06.04.2016. Therefore, the Petitioner has claimed 0.80% additional AEC due to less PLF. Further, the Petitioner has claimed additional 1% AEC on provisional basis from FY 2021-22 to FY 2023-27 on account of installation of FGD in accordance with the recommendation of CEA and notification of the Ministry of Environment &

Forest (MoEF). Accordingly, the Petitioner has claimed the Auxiliary Consumption for the tariff period FY 2019-20 to FY 2023-24.

The Commission does not agree with the contention of the Petitioner that due to shortage of linkage coal, the generation has reduced resulting in less PLF. The Petitioner is obligated to meet the share of power of GRIDCO from the other generating units if there is a shortfall in the generation from Unit 2. Therefore, the Commission accept the auxiliary consumption @ 6% as per Regulation 5.3(e)(i) of the OERC Generation Tariff Regulations, 2014 (applicable upto the FY 2019-20) and 5.75% as per Regulation 32(e)(i) of the OERC Generation Tariff Regulations, 2020 applicable for the period FY 2020-21 to FY 2023-24. The percentage of AEC proposed by Petitioner and approved by the Commission is given in the table below:

Table-28
Auxiliary Energy Consumption for the Period FY 2019-24 (in %)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	OERC Tariff Regulation, 2014	OERC Tariff Regulation, 2020			
Proposed by the Petitioner	6.80	6.55	7.55	7.55	7.55
Approved by the Commission	6.00	5.75	5.75	5.75	5.75

Station Heat Rate (SHR):

48. The Petitioner has submitted that as per Regulation 5.3(c)(i) of the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014 (applicable upto the FY 2019-20) and as per Regulation 32(c)(i) of the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 applicable for the period FY 2020-24, the Gross Station Heat rate for the existing coal based thermal generating units of capacity 500 MW and above has been specified as 2375 kCal/kWh and 2390 kCal/kWh respectively. However, due to shortage in availability of linkage coal for the Unit-II, it would be underloaded and therefore, 4.8% additional SHR is claimed basing on the letter issued by CEA for the operational norms of thermal power plant. Accordingly, the Petitioner has claimed the SHR for the tariff period FY 2019-20 to FY 2023-24.

The Commission does not agree with the contention of the Petitioner regarding shortage in availability of linkage coal, for which, it has claimed additional SHR for the reasons discussed as above in the foregoing paragraph. Therefore, the Commission accept the normative SHR @ 2375 kCal/kWh as per Regulation 5.3(e)(i) of the OERC Generation

Tariff Regulations, 2014 (applicable upto to the FY 2019-20) and 2390 kCal/kWh as per Regulation 32(e)(i) of the OERC Generation Tariff Regulations, 2020 applicable for the period FY 2020-21 to FY 2023-24. The SHR proposed by Petitioner and approved by the Commission are given in the table below:

Table-29
Station Heat Rate for the Period FY 2020-24 (in kCal/kWh)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	OERC Tariff Regulation, 2014	OERC Tariff Regulation, 2020			
Proposed by the Petitioner	2489.72	2504.72	2504.72	2504.72	2504.72
Approved by the Commission	2375.00	2390.00	2390.00	2390.00	2390.00

Specific Secondary fuel oil Consumption:

49. As per Regulation 5.3(d)(i) of the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014 (applicable upto the FY 2019-20) and as per Regulation 32(d)(i) of the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 applicable for the period FY 2020-24, the secondary fuel oil consumption is 1 ml/kWh for all existing coal based thermal generating stations which have achieved COD before 01.04.2014. In accordance with the above norms, the Petitioner has considered secondary fuel oil consumption @ 1 ml/kWh for the tariff period FY 2019-20 to FY 2023-24 and accordingly the Commission approves the same.

Energy Charge Rate (ECR):

50. The Petitioner has submitted that, the Commission in their Order dated 12.06.2013 in Case No. 117/2009, Case No. 31/2010 and Case No. 56/2012, has not allowed the impact of actual usage of blended coal for supply of power to GRIDCO and has considered only the landed price of linkage coal for determining the Energy Charge Rate for FY 2013-14. Further, while determining the tariff for the control period FY 2014-15 to FY 2018-19, similar approach was adopted by the Commission in their order dated 29.06.2018 in Case No. 95/2013. The Petitioner submits that coal is mainly procured from MCL under linkage from Talcher and e-auction from IB Valley to meet the total coal requirement. Since the Petitioner's Generating Station is not a Pit Head Power Plant, as per OERC Generation Tariff Regulations, 2014 and Regulation 27(16) of the OERC Generation Tariff Regulations, 2020, transit loss @ 0.8% is to be considered for all types of domestic coal. The petitioner further submits that, since the linkage coal is not sufficient to meet the full share of power of the Respondent, it is required to procure imported/ e-auction coal to

meet the short fall in supply of power. The Petitioner further submits that, the Commission, vide order dated 22.06.2020 in Case No. 68 of 2018, has recognised the fact of limited availability of linkage coal against the power supply obligation as per consolidated PPA dated 19.12.2012 read with Order dated 27.01.2016 in Case No. 21 of 2015.

The Petitioner has submitted that, MCL, vide Letter No.CIL/ S&M/ CMO/ 47252 (new POI)/ 626 dated 08.08.2013, has modified the Fuel Supply Agreement (FSA) with 100% of Annual Contract Quantity (ACQ) which was signed between petitioner and MCL on 27.08.2013. But, 100% of ACQ includes 5% share from imported coal which was never supplied by MCL and including transit loss @ 0.8%, the effective coal supply would be about 94.24% of ACQ. Further as per FSA dated 27.08.2013, the quality of coal that is to be supplied by MCL is G8 (5200-4901 Kcal/Kg) to G13(3700-3400 Kcal/kg) grade, whereas it has been receiving linkage coal of G14 (3400 to 3101 Kcal/kg) to G15(3100 - 2801 Kcal/kg) grade. The Petitioner has submitted that, considering annual average GCV@ 3000 Kcal/Kg based on the “As received Basis” at Plant site, it has estimated annual average power generation of about 2,840.30 MU from the Unit-II of the Generating Plant.

From the above submissions of the petitioner and views of GRIDCO regarding linkage coal, the Commission observes that, the Petitioner has estimated lower power generation from the Unit-II. The Commission does not agree with the contention of the petitioner since if there is any grade slippage in coal which is attributed to MCL then it would be duly compensated by MCL through issuance of credit notes as per FSA. Further, in the tariff order dated 29.06.2018 in Case No. 95/2013, the Commission had clarified that:

“47. If linkage coal availability is higher than the requirement as per GRIDCO’s share of power, the cost and GCV of linkage coal will be taken into consideration for tariff purpose. In the event it falls short, only for the balance coal for meeting the GRIDCO requirement, the weighted average cost of coal and GCV would be considered”.

Further, the Petitioner has not submitted anything on the quantum of linkage coal available with corresponding price and GCV for the preceding three months as per Regulation 4.25 of OERC Generation Tariff Regulation, 2014 (applicable upto the FY 2019-20) and third quarter of preceding financial year as per Regulation 24(2) of OERC Generation Tariff Regulation 2020 applicable for the period FY 2021-24 though it is mandatory to furnish the required information. Therefore, the Commission decides to compute the fuel components for calculating energy charges in the working capital requirement by taking the GCV @ 3099 Kcal/Kg & cost of coal @ Rs.1818.00/MT and cost of Secondary Fuel

oil @ Rs.51,603.00/KL on provisional basis for the tariff period FY 2020-24 basing on actual available information regarding GCV and price of the coal and secondary fuel oil.

51. Regulations 4.32 to 4.34 of the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014 (applicable upto the FY 2019-20) and Regulations 27(8) to 27(18) of the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 applicable for the period FY 2021-24 have specified the norms and formulas to determine Energy charge rate (ECR). The Petitioner has submitted that, it has also utilised the same formulas for calculation of ECR. Considering the provisions of the aforesaid Generation Tariff Regulations and approved operational norms, the Commission has computed provisionally the Energy charges Rate for the tariff period FY 2020-24 as shown in the table below:

Table-30
Energy Charge Rate Provisionally approved for the Period FY 2020-24
(Paise/ kWh)

Particulars	Unit	FY 2019-20 (As per OERC Generation Tariff Regulations,2014)	FY 2020-21 to FY 2023-24 (As per OERC Generation Tariff Regulations,2020)
Gross Station Heat Rate	Kcal/kWh	2375.00	2390
Aux. Energy Consumption	%	6.00	5.75
Secondary Oil Consumption	ml/kWh	1.00	1.00
Weighted Avg. GCV of Oil	kCal/ltr	9,850.00	9,850.00
Weighted Avg. GCV of Coal	kCal/kg	3,099.00	3,099.00
Weighted Avg. Cost of Oil	Rs/KL	51,603.00	51,603.00
Weighted Avg. Cost of coal	Rs/MT	1,818.00	1,818.00
Rate of Energy Charge (ECR)	Paise/kWh	153.10	153.63

52. The Petitioner is required to compute the monthly energy charges in accordance with the Regulation 4.32 to 4.34 of the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014 (applicable upto the FY 2019-20) and as per Regulations 27(8) to 27(18) of the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 applicable for the period FY 2021-24 basing on approved operational norms and actual GCV & cost of coal and cost of secondary fuel oil.
53. The Petitioner shall raise bills for energy charge to GRIDCO on monthly basis with the details of actual coal/oil used for generation for scrutiny and payment. In addition to the above, the Petitioner is entitled to recover other taxes / duty etc. levied by the Government or any statutory authority for the GRIDCO share of drawl of power.

GRIDCO shall examine or engage a third party for examination of the coal and oil parameters periodically as per specification of coal used.

54. **The Annual Fixed Charges approved for the period 2020-24 as above are subject to truing-up in line with Regulation 2.12 of the OERC Generation Tariff Regulation, 2014 and Regulation 8 of the OERC Generation Tariff Regulation 2020.**

Non-Tariff Income & Fly Ash Transportation:

55. The Petitioner has proposed that expenditure of Rs.690.61 Cr. (Rs.123.26 Cr. in FY 2019-20, Rs.131.58 Cr. in FY 2020-21, Rs.138.16 Cr. in FY 2021-22, Rs.145.07 Cr. in FY 2022-23 and Rs.152.54 Cr. in FY 2023-24) for transportation of fly ash during the period the FY 2020-24 as per direction of the Ministry of Environment Forest (MoEF), Govt. of India vide their Notification dated 25.01.2016. In response to above claim, GRIDCO has submitted that the Petitioner has not taken any proactive action to comply the MoEF guidelines for disposal of 100% fly ash utilisation.

Considering the above claim of the Petitioner regarding transportation of fly ash, the Commission, vide its interim order dated 16.11.2023, had asked the petitioner to provide information regarding transportation plan and audited expenditure, if any, in respect of Unit-II. The Commission observes that the Petitioner has failed to provide supporting documents against the claims of additional capitalization of Rs.253.50 Cr. for installation FGD system and Rs.510.00 Cr. for installation of MGR/conveyor belt for Unit-II (600 MW) of the generating station in line with Notification of MoP, Government of India.

Therefore, the Commission feels that it would not be proper to take any decision in absence of adequate documentary evidence for proposed expenditure and consider the same for determination of generation tariff. However, after prudent check, the Commission will appropriately consider to pass through the above expenditure at the time of truing up exercise for the period FY 2020-24 subject to audit by an independent auditor.

56. Apart from the above, the Petitioner has prayed before the Commission to allow the reimbursement of statutory and other charges such as Electricity Duty, Water Charges, SOC & MoC Charges of SLDC, Energy Bill paid to TPWODL for water pump house at Pitapalli, Energy Compensation Charges, Contribution towards Water Conservation Fund, Security expenses of Generating Station, Charges paid to third party coal sampling expenses, application fee & other expenses as per OERC (Terms & Conditions of Generation Tariff) Regulations, 2014 & 2020 and other taxes, levies, duties, royalty, cess etc as per Clause 6.2.2 of the consolidated PPA dated 20.12.2012.

Regarding above claims of the Petitioner, GRIDCO has following observation:

- It will reimburse the Statutory Charges such as Electricity Duty (ED) as per Clause 6.2.2 of Consolidated PPA dated 19.12.2012 and Regulation 36 of the OERC Generation Tariff Regulations, 2020,
 - Water charges as per Regulation 25(1)(d) of the OERC Generation Tariff Regulations, 2020,
 - Re-imbursement of SOC and MOC charges of SLDC on actual basic,
 - The Petitioner has been claiming reimbursement of Electricity Charges in respect of Pump House at Pitapalli along with Invoice for Water Charges. However, GRIDCO has not made any payment to Vedanta till date as such Expenses pertain to common facility for the entire Power Plant (4 X600 MW) and is to be meted out from O & M Expenses which is being allowed on Normative basis. Therefore, it should be disallowed as the claim is covered under Normative O & M expenses,
 - The Petitioner has not made any payment on account of contribution towards Energy Compensation Charges (ECC) & Water Conservation Fund (WCF) as the matter is sub-judice before Hon'ble High Court of Orissa,
 - The Petitioner, has not filed/submitted the assessment of security requirement and estimated expenses as per Regulation 25 (1) (d) of the OERC Generation Tariff Regulation, 2020. Therefore, the Claim of the Petitioner for reimbursement Security Expenses may be rejected.
 - Filing Fees, Charges and Expenses subject to submission of Documentary Evidence by the petitioner.
57. The Commission analysed the above views of GRIDCO in respect of the Petitioner's claims for reimbursement of statutory and other charges such as Electricity Duty, Water Charges, SOC & MoC Charges of SLDC, Energy Bill paid to WESCO for water pump house at Pitapalli, Energy Compensation Charges, Contribution towards Water Conservation Fund, Security expenses of Generating Station, Charges paid to third party coal sampling expenses, application fee & other expenses as per OERC(Terms & Conditions of Generation Tariff) Regulation, 2014 & 2020 and other taxes, levies , duties, Royalty, Cess etc as per Clause 6.2.2 of consolidated PPA dated 20.12.2012. Accordingly, the Commission directs the Petitioner-M/s.Vedanta Ltd. and the Respondent-GRIDCO Ltd. as follows:

- (a) M/s. Vedanta Ltd. will submit the revised monthly bill basing on Annual Fixed Charges and Energy Charge approved in this Order.
- (b) The tariff of the Petitioner's Generating Plant, so determined in this Order is valid from 01.04.2019 to 31.03.2024.
- (c) In accordance with Regulation 2.12 of OERC Generation Tariff Regulations, 2014, the Commission directs the Petitioner to refund the excess amount, if any, recovered over and above the annual capacity charges now approved in this order after truing up exercise for the past tariff period from FY 2014-15 to FY 2018-19.
- (d) The differential amount on account of these revised charges (Annual Fixed Charges and Energy Charges, if any,) for the past period shall be recovered from GRIDCO in six half-yearly instalments without any interest. The first instalment shall be due on 30th day of presenting the bill in accordance with Regulation 6.6 of OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014 (applicable upto to the FY 2019-20) and Regulation 37 of OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 applicable for the Period FY 2021-24. Any delay in payment of the bill shall attract surcharge as per the said Regulations.
- (e) The Petitioner is required to submit its claims with supporting documentary evidence for reimbursement of statutory and other charges in compliance with the provisions of respective Generation Tariff Regulations and/or in compliance to statutory obligation as per law and/or as per the provisions of consolidated PPA dated 20.12.2012. After proper scrutiny, GRIDCO is to reimburse the dues in proportion to its share in generation for the tariff period FY 2020-24.

58. Accordingly, the case is disposed of.

Sd/-
(S. K. Ray Mohapatra)
Member

Sd/-
(G. Mohapatra)
Officiating Chairperson