BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION,

NEW DELHI

PETITION NO. _______GT/2020

IN THE MATTER OF: Petition under Section 62 and Section 79(1)(b) of the Electricity Act, 2003 read with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for determination of Generation Tariff for the period 01.04.2019 to 31.03.2024 and Truing-Up of Generation Tariff from 01.04.2014 to 31.03.2019 in respect of 262.5 MW gross capacity sale from 3 x 350 MW Kamalanga Thermal Power Plant of GMR-Kamalanga Energy Limited (GKEL) to GRIDCO acting as nominee of Government of Odisha for procuring power for the Odisha Distribution Companies.

IN THE MATTER OF

GMR Kamalanga Energy Limited …Petitioner

Versus

GRIDCO Limited & Ors. …Respondents

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	Generation Tariff for the period 01.04.2019 to 31.03.2024 and Truing-Up of Generation Tariff from 01.04.2014 to 31.03.2019 in respect of 262.5 MW gross capacity sale from 3 x 350 MW Kamalanga Thermal Power Plant of GMR-Kamalanga Energy Limited (GKEL) to GRIDCO acting as nominee of Government of Odisha for procuring power for the Odisha Distribution Companies with Affidavit.	
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Place: New Delhi
Dated:

BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION,

NEW DELHI

PETITION NO. _______GT/2020

MEMO OF PARTIES

IN THE MATTER OF: Petition under Section 62 and Section 79(1)(b) of the Electricity Act, 2003 read with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for determination of Generation Tariff for the period 01.04.2019 to 31.03.2024 and Truing-Up of Generation Tariff from 01.04.2014 to 31.03.2019 in respect of 262.5 MW gross capacity sale from 3 x 350 MW Kamalanga Thermal Power Plant of GMR-Kamalanga Energy Limited (GKEL) to GRIDCO acting as nominee of Government of Odisha for procuring power for the Odisha Distribution Companies.

AND IN THE MATTER OF

GMR-Kamalanga Energy Limited,
Through its Authorized Representative
Having its registered office at:
Skip House, 25/1 Museum Road
Bangalore – 5600025 …Petitioner

Versus

1. GRIDCO Limited
Janpath, Bhubaneswar- 751022
Orissa

2. Central Electricity Supply Utility of Orissa
2nd Floor, Ideo Tower
Janpath, Bhubaneswar -751022, Orjssa

3. North Eastern Electricity Supply Company of Orissa Limited
Januganj, Balasore, 756019, Orissa

4. Western Electricity Supply Company of Orissa Limited
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5. Southern Electricity Supply Company of Orissa,
Courtpeta, Berhampur, Ganjam- 760 004, Orissa ....Respondents

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Place: New Delhi
Date: January, 2020

BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION,
NEW DELHI
PETITION NO. _______GT/2020

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Courtpeta, Berhampur, Ganjam- 760 004, Orissa

….Respondents

The Petitioner most respectfully submits as under:

I. BRIEF CONSPECTUS

1. The Petitioner, GMR Kamalanga Energy Limited ("**GKEL**") is a generating company set up by GMR Energy Limited ("**GEL**") to develop a coal-fired 1400 MW power project at village Kamalanga, District Dhenkanal in Odisha ("**Project**"). The Project comprises two stages, viz.:-
   (a) The first stage comprising 3 units of 350 MW each (Stage-1 Gross Plant Capacity - 1050 MW). First stage of the Project achieved Commercial Operation Date ("**COD**") on 24.03.2014.
   (b) The second stage comprising 1 unit of 350 MW. The work on this Stage is yet to be commenced.

2. The Project has been granted Mega Power Project ("**MPP**") status in terms of the following: -
   (a) On 16.03.2009, the Project was granted in-principle MPP status.
   (b) The provisional Mega Power Project Status was granted on 19.08.2011.

(c) The Project was awarded Mega Power Project Status for Stage 1 by the Ministry of Power on 01.02.2012.

3. The Project has the following long term PPAs executed for sale to of power to multiple states being: -

(a) Supply of 350 MW gross power (stage-1 262.5 MW & stage-2 87.5 MW) to GRIDCO in terms of the bilateral PPA dated 28.09.2006, amended on 04.01.2011 with delivery point being Orissa STU interconnection point ("**GRIDCO PPA**"). Supply of power in terms of the GRIDCO PPA commenced on 30.04.2013. A copy of the GRIDCO PPA is annexed hereto and marked as **ANNEXURE P/1.**

(b) Sale of 350 MW gross power (300 MW net of transmission losses and auxiliary consumption) to Haryana Distribution Companies Discoms) based on competitive bidding through back-to-back arrangements:

i. PTC agreements with Haryana Distribution Companies dated 07.08.2008, delivery point being Haryana STU bus-bar; and

ii. Back to Back PPA dated 12.3.2009 between GEL (as the parent company of GKEL and PTC (collectively "**Haryana PPA**")

Supply of power in terms of the Haryana PPA commenced on 07.02.2014.

(c) Supply of 282 MW gross power (260 MW net of auxiliary consumption) to Bihar SEB in terms of the PPA dated 09.11.2011, with delivery point being Bihar STU bus-bar interconnection point ("**Bihar PPA**"). Supply of power commenced from 01.09.2014.

4. The present petition is being filed for:

   (a) Truing-Up of Generation Tariff from 01.04.2014 to 31.03.2019; and

   (b) Generation Tariff for the period 2019-2024 in respect of supply of 262.5 MW power to GRIDCO from Stage I of the Kamalanga Thermal Power Plant (i.e. 25% of 1050 MW) for the consumption by the Odisha Distribution Companies, Central Electricity Supply Utility of Orissa, North Eastern Electricity Supply Company of Orissa Limited, Western Electricity Supply Company of Orissa Limited and Southern Electricity Supply Company of Orissa Limited (collectively "**Odisha Discoms**").

5. It is submitted that since the Petitioner is a generating company as defined under Section 2(28) of the Electricity Act 2003, ("**Act**") having a composite scheme for supply of power to three States (Orissa, Haryana and Bihar as detailed above), this Hon'ble Commission has jurisdiction to determine tariff in terms of:

   (a) Section 62 read with Section 79(1)(b)of the Act;

   (b) Regulations 6 and 7 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 ("**2014 Tariff Regulations**"); and

(c) Regulation 8 and 9 of the Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2019 ("**2019 Tariff Regulations**")

II. **DESCRIPTION OF THE PARTIES**

6. The Petitioner is a company incorporated under the provisions of the Companies Act, 1956 on 28.12.2007. The Petitioner is a project company which was set up by GMR Energy Limited ("**GEL**") to undertake the construction and operation of the Kamalanga Power Plant. The registered office of the Petitioner is Skip House, 25/1 Museum Road, Bangalore 560025.

7. Respondent No. 1 is GRIDCO Limited, a Government of Orissa undertaking which carried on the Transmission and Residuary Undertaking in terms of the Orissa Electricity Reforms (Transfer of Assets, Liabilities, Proceedings and Personnel of GRIDCO to Distribution Companies) Scheme, 1998.By virtue of Orissa Electricity Reforms (Transfer of Transmission and Related Activities) Scheme, 2005, GRIDCO is carrying on the business of bulk purchase and supply of electricity to four distribution companies in the State of Orissa w.e.f. 01.04.2005.

8. Respondent Nos. 2-5, namely Central Electricity Supply Utility of Orissa ("**CESU*")***, North Eastern Electricity Supply Company of Orissa Limited ("**NESCO**"), Western Electricity Supply Company of Orissa Limited ("**WESCO**") and Southern Electricity Supply Company of Orissa Limited

("**SOUTHCO**") are the distribution licensees in the State Odisha being the beneficiaries of the power procurement by GRIDCO.

9. It is submitted that GRIDCO has entered into the PPA dated 28.09.2006 with the Petitioner as the designated entity of State of Odisha under the MOU dated 09.06.2006. Further, the power is being procured by GRIDCO on behalf of and for supply to Odisha Discoms. The Distribution Licensees are the real beneficiaries of power purchased by GRIDCO and are necessary and proper parties for the purposes of the present Petition.

III. BRIEF BACKGROUND

10. It is submitted that the Petitioner had filed a Petition being Petition No. 77/GT/2013 for approval of provisional tariff in respect of 262.5 MW gross capacity sale from the Project to GRIDCO from the date of COD of Unit-I to 31.03.2014.

11. This Hon'ble Commission vide its Order dated 12.11.2015 in Petition No. 77/GT/2013 ("**2013 Tariff Order**") approved the tariff for the Project from the COD of Unit-I to 31.03.2014 in accordance with the 2009 Tariff Regulations.

12. This Hon'ble Commission in its 2013 Tariff Order, issued certain directions to the Petitioner regarding submission of additional information in relation to Capital Cost of the Project. This Hon'ble Commission in its Tariff Order also specified that the fixed charges approved for the period from COD of Unit-I to 31.03.2014 are subject to

Truing-Up in terms of Regulation 6(1) of the 2009 Tariff Regulations. Regulation 6(1) of the of the 2009 Tariff Regulations states as follows:

> *"The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up."*

13. The Petitioner filed a Review Petition being Review Petition No. 03/RP/2016 before this Hon'ble Commission on 18.01.2016 seeking review of the Tariff Order dated 12.11.2015 in Petition No. 77/GT/2013. It is further submitted that the Petitioner had also filed an Appeal being Appeal No. 35 of 2016 before the Hon'ble Appellate Tribunal for Electricity ("***APTEL***") against the Tariff Order.

14. Thereafter, the Commission by order dated 17.3.2017 disposed of the Review Petition 3/RP/2016 filed by the petitioner with the following observations:

> *"13. The matter has been examined. The issues on which review has been sought by the petitioner has been indicated in Para 2 of this order. However, on a careful perusal of the appeal filed by the petitioner before the Tribunal, it is noticed that the petitioner has challenged the Commission's order dated 12.11.2015 on various grounds, including the disallowance of time over-run in the completion of the project on the ground that same is not attributable to the petitioner. It has also prayed for granting consequential increase in capital cost, IDC and Financing cost. Since the decision of the Tribunal on the issue of time over-run would necessarily have an impact on the computation of IDC, we are of the considered view that*

the correction of errors in the order, if any, as stated by the petitioner, in the review petition could be undertaken only after a final decision of the Tribunal in the said appeal. We are therefore not inclined to consider the relief prayed for by the petitioner at this stage."

15. On the issue of correction of errors in the computation of Non- EPC cost, preoperative expenses and computation of IDC in the review petition, the Hon'ble Commission in the said order dated 17.3.2017 observed as under:

"15. It has been given to understand that the appeal filed by the petitioner spending before the Tribunal. In line with the above provision of CPC, the errors, If any, in the order dated 12.11.2015 would be undertaken after the final decision of the Tribunal in the said appeal filed by the petitioner. Alternatively, the petitioner will be at liberty to approach the Commission for rectification of the errors pursuant to the judgment of the Tribunal in the said appeal"

16. Subsequently, the Tribunal in its judgment dated 1.8.2017 also dismissed the Appeal No. 35/2016 filed by the petitioner, except on the issue of time overrun from 27.7.2009 to 9.2.2010 on account of the delay in the possession of land by the petitioner, GKEL. The relevant portions of the judgment of the Hon'ble Tribunal dated 1.8.2017 in Appeal No. 35/2016 are extracted hereunder:

"10. After having a careful examination of all the arguments and submissions of the rival parties on various issues raised in the present Appeal, our observations are as follows: -

xxxxx

xi. In view of our discussions at 10 b) A. ii to x above we hold that the initial delay in possession of land to the Appellant was due to reason beyond the control of the Appellant and the impugned findings of the

Central Commission denying time overrun in initial delay of handing over possession of land to the Appellant by GoO/IDCO is set aside. The Central Commission is hereby directed to rework and grant consequential reliefs to the Appellant by considering time overrun from 27.7.2009 to 9.2.2010 i.e. initial delay in handing over possession of land to the Appellant for all the three units of the Station."

17. Based on the above, the Tribunal in the said judgment ordered the following:

"We are of the considered opinion that the issues raised in the present Appeal are devoid of merit except on one issue related to time overrun due to initial delay in handing over possession of land to the Appellant by GoO/IDCO which needs fresh consideration by the Central Commission in line with our decision taken above and accordingly the Appeal and I.A. are hereby partially allowed. The Impugned Order dated 12.11.2015 passed by the Central Commission is confirmed except to the extent above. Matter is hereby remanded to the Central Commission only to the extent to grant consequential reliefs to the Appellant on account of our decision of allowing initial delay in handing over possession of land to the Appellant as ordered above."

18. The Respondent, GRIDCO had filed Civil Appeal challenging the judgment of the Hon'ble Tribunal dated 1.8.2017 in Appeal Nos. 35/2016 and the same is pending. However, in compliance with the directions of the Hon'ble Tribunal in its judgment dated 1.8.2017 as extracted above and in view of the directions of the Commission in Order dated 17.3.2017, the Capital Cost as on COD of the units of the project has been revised by Commission's order dated 11.10.2017 in Petition No.77/GT/2013, considering the time overrun of 6.5 months (from 27.7.2009 to 9.2.2010). Also, considering the fact that the petition for revision of tariff based on

truing–up exercise in Petition No. 61/GT/2016 was pending for consideration, the Commission in the said order directed that consequential reliefs, based on the revised Capital Cost would be carried out at the time of disposal of the tariff petition (Petition No. 61/GT/2016). Relevant portion of the order dated 11.10.2017 are extracted as under:

> *"6. In compliance with the above directions of the Tribunal and the Commission's order dated 17.3.2017, the tariff of the generating station determined vide order dated 12.11.2015 in Petition No. 77/GT/2013 is required to be revised. It is noticed that Petition No. 61/GT/2016 filed by the Petitioner for revision of tariff for the period from COD to 31.3.2014 after truing exercise and approval of tariff for the period 2014-19 in respect of this generating station is pending and the hearing is yet to be completed. In this background, we, in line with the directions of the Tribunal, allow the time overrun of 6.5 months (from 27.7.2009 to 9.2.2010) and revise the capital cost as on COD of units of the generating station, by this order. However, consequential reliefs, based on the revised capital cost, shall be carried out at the time of disposal of Petition No. 61/GT/2016. We proceed accordingly.*
>
> *7. The Commission in order dated 12.11.2015 had allowed/disallowed the time overrun for Units I, II and III as under:*

Units	***Schedule COD as per LOA***	***Revised scheduled COD***	***Time overrun allowed(in months)***	***Time overrun disallowed (in months)***
I	*27.11.2011*	*15.9.2012*	*3*	*14*
II	*27.1.2012*	*26.2.2013*	*6.5*	*15*
III	*27.3.2012*	*11.05.2013*	*7*	*17*

8. Considering the time overrun of 6.5 months (from 27.7.2009 to 9.2.2010) allowed for initial delay in handing over possession of land to the Petitioner for all three units, the time overrun allowed (against the actual time overrun) for Units-I, II & III and the schedule COD (reset) for the purpose of computation of IDC in the table under paragraph 41 of the order dated 12.11.2015 shall stand revised as under:

Units	***Schedule COD as per LOA***	***Revised scheduled COD***	***Time overrun allowed (in months)***	***Time overrun disallowed (in months)***
I	*27.11.2011*	*15.9.2012*	*9.5*	*7.5*
II	*27.1.2012*	*26.2.2013*	*13*	*8.5*
III	*27.3.2012*	*11.05.2013*	*13.5*	*10.5*

9. The pro-rata reduction in overhead expenses based on the time overrun disallowed for the units as allowed in the table under paragraph 52 of the order dated 12.11.2015 is revised as under:

Units	***Total period taken from zero date to actual COD (in months)***	***Time overrun disallowed (in months)***	***Overhead Expenses (` in Crore)***	***Pro-rata reduction = (col.4x col.3) /col.2 (`in Crore)***
(1)	***(2)***	***(3)***	***(4)***	***(5)***
Unit-I	*47*	*7.5*	*157.16*	*25.08*
Unit-II	*47.5*	*8.5*	*258.28*	*46.22*
Unit-III	*51*	*10.5*	*367.74*	*75.71*

10. Based on the above, the capital cost as on COD of Units-I, Unit-II and Unit-III of the generating as approved in the table under paragraph 54 of order dated 12.11.2015is revised as under:

Description	***Actual capital expenditure as on COD of Unit-I (30.4.2013)***	***Actual capital expenditure as on COD of Unit-II (12.11.2013)***	***Actual capital expenditure as on COD of Unit-III/ Station (25.3.2014)***
Land cost	*4399.00*	*4399.00*	*10136.00*
EPC cost with taxes and duties	*195662.00*	*310768.00*	*412966.00*
Non- EPC Costs	*7446.00*	*21236.00*	*26012.00*
Pre-operating costs (after pro-rata deduction due to time overrun)	*17497.00 (20005.00-2508.00)*	*30482.00 (35104.00-4622.00)*	*44146.00 (51717.00-7571.00)*
IDC & FC	*30567.00*	*57620.00*	*82732.00*
Capital Cost including IDC &FC	***255571.00***	***424505.00***	***575992.00***

11. The capital cost as on COD of the units till 31.3.2014 along with other components of tariff as approved in order dated 12.11.2015 shall be revised at the time of truing up/approval of tariff of the generating station in Petition No. 61/GT/2016. With this, the directions contained in the judgment of the Tribunal dated 1.8.2017 in Appeal No. 35/2016 stands implemented."

19. It is further submitted that the Petitioner while seeking Truing up of Annual Fixed Charges for the period from COD of Unit-I to 31.03.2014 had claimed the actual Capital Cost and Additional Capital Expenditure and

has provided all the information with supporting documents relating to Capital Cost as sought by this Hon'ble Commission in the Tariff Order.

20. The Petitioner had filed a Petition being Petition No. 61/GT/2016 on 01.04.2016 in accordance with the provisions of Regulation 6(1) of the of the 2009 Tariff Regulations and the 2014 Tariff Regulations, for approval of Truing-Up of Generation Tariff from date of COD to 31.03.2014 based on actual Capital Cost and Additional Capitalization till FY 2013-14 and Generation Tariff for the tariff period 2014-19 in respect of supply of 262.6 MW power to GRIDCO from Stage I of the Project.

21. This Hon'ble Commission vide its Order dated 29.06.2018 in Petition No. 61/GT/2016 ("**2018 Tariff Order**") has revised the Tariff for the period from COD to 31.03.2014 based on the truing up exercise and approved the tariff for the Period from FY 2014-15 to FY 2018-19 in respect of 262.5 MW gross capacity sale from Kamalanga Thermal Power Plant of GMR-Kamalanga Energy Limited (1050 MW) to GRIDCO. This Hon'ble Commission in its order dated 29.06.2018 has also consider the Review Petition filed by the Petitioner and the decision of Hon'ble Tribunal in the appeal filed by the Petitioner. Based on the above, the Hon'ble Commission has approved tariff for GKEL.

IV. COMMERCIAL OPERATION DATE

22. The COD of the 3 units of the Project is set out below:

Table A- Commercial Operation Date

UNIT	COD

Unit-I	30.04.2013
Unit-II	12.11.2013
Unit-III	25.03.2014

V. TARIFF PROPOSAL

23. In light of the abovementioned background, the Petition has been divided in to two sections viz.:

A. **Section 1**: Truing up of Annual Fixed Charges for the period from 01.04.2014 to 31.03.2019 as per the 2014 Tariff Regulations.

B. **Section 2**: Determination of Tariff for the period FY 2019-20 to FY 2023-24 as per the 2019 Tariff Regulations.

SECTION 1: Truing up of Annual Fixed Charges for the period from 01.04.2014 to 31.03.2019 as per the 2014 Tariff Regulations.

24. It is submitted that the Hon'ble Commission vide its Order dated 29.06.2018 in Petition No. 61/GT/2016 has approved the trued-up Capital cost in respect of 262.5 MW gross capacity sale from Kamalanga Thermal Power Plant of GMR-Kamalanga Energy Limited (1050 MW).

25. The Hon'ble Commission while approving the Capital cost of the Kamalanga power plant of GKEL has considered the final decision of the Tribunal in the appeal No. 35 of 2016. Further, this Hon'ble Commission has considered the issue raised by the Petitioner vide its Review Petition No. 03/RP/2016. The relevant extract from the Commission's order dated 29.06.2018 vide Petition No. 61/GT/2016 is stated below:

"Error in dis-allowance of Non-EPC Cost

19. The petitioner in this petition has claimed an amount of Rs 101.05 Crore in the capital cost as on COD of Unit-III (25.3.2014) towards "Error in the dis-allowance of Non-EPC cost". This issue was raised by the petitioner in Review Petition No 03/RP/2016 wherein the Commission in order dated 17.3.2017 observed that correction of errors in the order, if any, as stated by the petitioner, could be undertaken only after a final decision of the Tribunal in the appeal. The Tribunal having disposed of the said appeals, we now examine the submissions of the petitioner with regard to the correction of errors in Commission's order dated 12.11.2015 in Petition No. 77/GT/2013. It is observed that the Commission in paras 53 & 54 of its order dated 12.11.2015 had examined each item of capital cost, including Non-EPC cost & Pre-operative expenses and had given sufficient justification for allowing/disallowing the increase in audited capital cost as compared to original project cost. As per original estimate, the Non-EPC cost was `99.00 crore and the same had increased by `261.93 crore (i.e `360.93 crore) as per the audited capital cost. However, the Commission after prudence check, had allowed the total increase of `161.12 crore (as against `261.93 crore) in Non-EPC cost on account of increase in (i) MGR cost (ii) new scope of work of Wagon Tippler which has been required due to introduction of New Coal Distribution Policy (NCDP), and increase in the transmission line cost of the project at various stages from bidding stage to final revised estimate stage. However, an amount of `73.34 crore under Non-EPC due to change of evacuation point Angul instead of Meramandli was not considered as the same was neither claimed as on COD or as on 31.3.2014. Thus, a total capitalisation of Non-EPC cost of `260.12 crore (99.00 +161.12) was allowed as on COD of Unit-III/station (24.3.2014) by order dated 12.11.2015. It is observed that the full amount of Non-EPC cost claimed as on COD of Unit-I (`74.46 crore) and COD of Unit-II (`212.36 crore) was allowed *by the Commission. Therefore, the capitalisation of the Non-EPC cost as on COD of Unit-III/Station was restricted to `260.12 crore as stated above by a conscious decision. The increase in non-EPC cost of `73.34 crore due to change in evacuation point which was not considered in the said order on account of not being claimed as on COD, shall be considered as and when the same is capitalized."*

26. In view of the above, the Commission stated that the disallowance of Rs 101 Crore as increase in Non-EPC cost was in order and that there was no computational error.

27. The Petitioner respectfully submits that the Petitioner on this issue of Non-EPC Cost has filed an Appeal before Hon'ble Appellate Tribunal for Electricity (Appeal No. 3398 of 2018) and Hon'ble APTEL Judgment on the matter is still awaited.

28. Further the Respondent GRIDCO has also raised certain issues for the consideration by the Commission. According to the Respondent, these issues were originally raised in Appeal No.45/2016 (filed by GRIDCO) but were not entertained by the Tribunal in its judgment dated 1.8.2017 on the ground that the same were not raised before this Commission.

- Refund of excess amount earned through sale of infirm power as per ECR derived considering price and GCV of Linkage Coal only:
- Sharing of cost by GKEL incurred towards high start-up fuel cost due to reduced availability of linkage coal along with other establishment expenses;

- Excess Cost incurred by GKEL on 400 kV S/C GMR -Meramundali dedicated transmission line based on single quotation from L&T and Alstom;
- Sharing of cost of GKEL-Meramundali 400 kV S/C dedicated Transmission line by GKEL on the ground that the same is used for evacuation of power outside the State of Odisha;
- High rate of Interest on Loans contracted by GKEL and consequential increase in Interest During Construction (IDC);
- Increase in Pre-operating expenses because of time overrun & Reduction in Infirm Power generation due to coal shortage;
- Consideration of ECR based on Linkage coal for determination of Working capital;
- Grant of time overrun of 3.5 months and 4 months for Unit-II & Unit-III of the station on account of grid restrictions allegedly imposed by OPTCL;

29. This Commission after going through issues raised by the Respondent has approved the Capital Cost of the generating station as under:

Table B- Capital Cost as approved by the Commission vide order dated 29.06.2018 (Rs in Lakh)

Particulars	30.4.2013 to 11.11.2013	12.11.2013 to 24.3.2014	25.3.2014 to 31.3.2014
1. Land cost claimed/ allowed	**4398.91**	**4398.91**	**10135.54**
2. EPC Cost			
EPC Cost claimed excluding FERV	188662.56	289695.69	430089.83
Less: Cost pertaining to unit-IV	0.00	0.00	41072.00

Particulars	30.4.2013 to 11.11.2013	12.11.2013 to 24.3.2014	25.3.2014 to 31.3.2014
EPC Cost allowed w.r.t. unit 1,2 & and excluding FERV	188662.56	289695.69	389017.83
Add: FERV Claimed/ allowed	6999.27	21072.16	23948.59
EPC Cost allowed including FERV	**195661.83**	**310767.85**	**412966.42**
3. Non-EPC Cost			
Non-EPC Cost claimed	7446.43	21235.86	36093.04
Less: Non-EPC cost disallowed 77/GT/2013	0.00	0.00	10105.00
Non-EPC Cost allowed	**7446.43**	**21235.86**	**25988.04**
4. Pre-operative Expenses			
Pre-operative Expenses claimed	20004.66	35103.55	51716.84
Less: Pre-operative expenses disallowed	2507.66	4621.55	7570.84
Pre-operative Expenses allowed	**17497.00**	**30482.00**	**44146.00**
5. IDC & Hedging			
IDC & Hedging claimed	26223.33	50424.43	70317.64
less: IDC disallowed	8844.98	13934.15	15096.83
IDC and Hedging Cost allowed	**17378.35**	**36490.28**	**55220.82**
6. Financing Charges			
Financing Charges allowed	4344.17	7196.91	12444.89
7. Capital cost before adjustment undischarged liabilities and liquidated damages (1+2+3+4+5+6)	**246726.69**	**410571.81**	**560901.70**
Less: Un-discharged liabilities	59641.63	46818.08	51006.23
Less: Liquidated damages	0.00	0.00	13367.62
8. Capital cost allowed on cash basis	**187085.06**	**363753.73**	**496527.85**
Add: Additional Capitalization	0.00	0.00	6712.00
9. Closing Capital cost	**187085.06**	**363753.73**	**503239.85**

30. It is submitted that the Tariff forms duly filled and certified by auditor as per CERC Tariff Regulations, 2014 are annexed herewith and marked as **ANNEXURE P/2.**

31. **Annual Fixed Charges:** It is submitted that based on the Hon'ble Commission's order dated 29.06.2018, the Petitioner at this stage has

considered the Capital Cost same as that approved by the Commission in its True up order dated 29.06.2018 in Petition No. 61/GT/2016 without prejudice to its contentions and rights under the Appeal filed before Hon'ble APTEL on the issue of dis-allowance of Non-EPC Costs. In case the Appeal filed by the Petitioner before Hon'ble ATPEL is allowed, the impact of the same will have to be allowed separately Further, the various components of Annual Fixed Charges for the period 2014-19 to 2018-19 have been computed in accordance with the provisions the 2014 Tariff Regulations as follows:

32. **Capital Cost**: As stated above, without prejudice to its contentions and rights under the Appeal filed before Hon'ble APTEL on the issue of dis-allowance of Non-EPC Costs, the Petitioner has considered the closing Capital cost as on 31.03.2014 as approved by the Commission vide its Order dated 29.06.2018 in Petition No. 61/GT/2016 as the opening Capital cost as on 01.04.2014. The Petitioner has considered the opening Capital cost of Rs. 503239.85 Lakh for truing up purpose.

33. **Additional Capitalization**: The Petitioner has claimed the additional Capital Expenditure as per the actual expenses incurred within the Control Period towards additional Capitalization. The details of additional Capitalization for the Period from FY 2014-15 to FY 2018-19 as allowed by the Commission vide its Order dated 29.06.2018 in Petition No. 61/GT/2016 is shown as under:

Table C-Additional Capitalization as allowed by the Commission vide order dated 29.06.2018

Actual/ Projected Additional Capitalization allowed by the Commission during FY 2014-19 Period vide Order dated 29.06.2018 in Petition No. 61/GT/2018 (Rs. in Lakh)					
Particulars	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Additional Capitalization	28907.00	7944.00	5685.00	0.00	0.00
Retention money paid and liabilities discharged	9172.00	2579.00	26239.00	0.00	0.00
Total	**38079.00**	**10523.00**	**31924.00**	**0.00**	**0.00**

The additional Capitalization as claimed by the Petitioner for the Period from FY 2014-15 to FY 2018-19 based on actuals is shown as under:

Table D-Additional Capitalization as Claimed by Petitioner

Additional Capitalization claimed by GKEL in True up Petition (Rs. in Lakh)					
Particulars	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Additional Capitalization	28977.83	8127.16	1723.70	99.77	1639.78
De-Capitalization Claimed by GKEL	72.99	183.74	35.38	461.44	563.30
Retention money paid and liabilities discharged	9174.60	2578.81	3197.60	1178.47	323.19
Total	**38079.83**	**10522.23**	**4885.92**	**816.80**	**1399.67**

34. The Petitioner has incurred additional Capitalization as per Regulation 14 (1)(ii) of the Tariff Regulations, 2014 till 31.03.2017 i.e. upto the cutoff date of the Generating station. Further, the Petitioner has claimed additional Capitalization as per Regulation 14(3)(iv) after the cut-off date of the Generating station. The details of Additional Capital expenditure claimed by the Petitioner are attached as **ANNEXURE P/3.**

The details of the Additional Capitalization claimed by the Petitioner along with the relevant details is shown under:

Table E- Additional Capitalization as Claimed by Petitioner

Particulars	Additional Capitalization claimed by the Petitioner (Rs in Lakh)	Regulation under which claimed	Brief Detail of Add-Cap
2014-15	28977.83	Regulation 14(1)(ii)	Plant and equipment (Transmission Line)
2015-16	8127.16	Regulation 14(1)(ii)	Plant and equipment (Project Spares)
2016-17	1723.70	Regulation 14(1)(ii)	Plant and equipment (Project Spares)
2017-18	99.77	Regulation 14(3)	Building-Internal Road
2018-19	1639.78	Regulation 14(3)(iv)	Building-Ash Dyke Raising & Ash recovery tank

35. The Commission vide its Order dated 29.06.2018, had directed the Petitioner to submit the details of equipment's Capitalized under EPC works duly certified by Auditor, at the time of Truing up of Tariff in terms of Regulation 8 of the 2014, Tariff Regulations. The relevant extract of the Commission's direction vide order dated 29.06.2018 is shown under:

"108. The matter has been examined. It is observed that the expenditure of Rs. 4362.00 lakh (Rs. 2232.00 lakh in 2014-15 and Rs. 2130.00 lakh in 2015-16) is in respect of EPC works which falls within the original scope of work and is within the cut-off date of the generating station. Accordingly, the said claim of the petitioner is allowed under Regulation 14(1)(iii) of the 2014 Tariff Regulations. The petitioner is however directed to furnish the details of the equipment's capitalized under EPC

works duly certified by auditor, at the time of truing-up of tariff in terms of Regulation 8 of the 2014 Tariff Regulations."

36. The Petitioner in compliance to the direction issued by the Commission submits the details of equipment's Capitalized under EPC works duly certified by Auditor in terms of Regulation 8 of the 2014, Tariff Regulations is annexed hereto and marked as **ANNEXURE P/4.**

37. **Debt Equity Ratio**: As regards Debt: Equity Ratio, Regulation 19 of CERC Tariff Regulations, 2014 stipulates as follows:

"(1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:
Provided that:
Where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:"

38. The Petitioner has considered the opening Debt: Equity ratio as on 01.04.2014 as considered by the Commission vide order dated 29.06.2018 in Petition No. 61/GT/2016. Further, the Petitioner has considered debt: Equity ratio as 70:30 as per Regulation 19 of the CERC Tariff Regulations, 2014 for additional capitalization for the rest of the Control Period.

Table F- Debt Equity Ratio for the Tariff Period FY 2014-19

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Debt (%)	70.83	70.00	70.00	70.00	70.00
Equity (%)	29.17	30.00	30.00	30.00	30.00

39. **Interest on Loan ("IOL")**: Regulation 26 (5) & (6) of the 2014 Tariff Regulations states as follows:

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

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

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

40. The weighted average rate of IOL has been considered on the basis of prevailing rates during the year. The IOL for FY 2014-15 to FY 2018-19 has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of actual weighted average rate of interest are given in Form 13 and the brief workings in Interest on Loan are given in Table below:

Table G- Interest on Loan (In Rs Lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	3,56,447.79	3,78,923.49	3,86,289.06	3,89,709.20	3,90,280.96
Cumulative Repayment up to Previous Year	12,307.60	38,846.12	66,624.33	94,801.09	1,23,128.52
Net Loan-Opening	3,44,140.19	3,40,077.37	3,19,664.73	2,94,908.12	2,67,152.45
Additions	26,971.84	7,365.56	3,420.15	571.76	979.77

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Repayment during the year	26,538.52	27,778.20	28,176.76	28,327.43	28,410.65
Net Loan-Closing	3,44,573.50	3,19,664.73	2,94,908.12	2,67,152.45	2,39,721.56
Average Loan	3,44,356.85	3,29,871.05	3,07,286.42	2,81,030.28	2,53,437.00
Weighted Average Rate of Interest on Loan (%)	12.73%	12.31%	12.52%	11.89%	12.48%
Interest	**43822.**74	**40600.**80	38471.83	33423.83	31641.10

41. **Return on Equity**: Regulation 24 (1) & (2) and Regulation 25 (2) of the 2014 Tariff Regulations states as follows:

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

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

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

……"

"25. ***Tax on Return on Equity****:*

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

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

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

42. The RoE for FY 2014-15 to FY 2018-19 has been worked out in accordance with Regulation 24 of the 2014 Tariff Regulations. It is submitted that the ROE has been computed at the rate of 15.50% as per the 2014 Tariff Regulation as there is no actual tax paid by the Petitioner during the period FY 2014-15 to FY 2018-19 as shown in Table below:

Table H- Return on Equity (In Rs Lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	146792.06	162395.79	165552.46	167018.24	167263.28
Additions due to increase during the year	8452.66	2438.15	517.11	29.93	491.93
Deletions due to de-capitalization	21.29	55.12	10.62	138.43	168.99
Additions due to discharges during the year	2676.18	773.64	959.28	353.54	96.96

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Closing Equity	157899.60	165552.46	167018.24	167263.28	167683.18
Average Equity	152345.83	163974.13	166285.35	167140.76	167473.23
Return on Equity (Base Rate) (%)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax Rate	0.000%	0.000%	0.000%	0.000%	0.000%
Rate of Return on Equity (%)	15.50%	15.50%	15.50%	15.50%	15.50%
Return on Equity (Pre Tax)	**23613.60**	**25415.99**	**25774.23**	**25906.82**	**25958.35**

43. **Depreciation**: It is submitted that Regulation 27 (2), (5) and (6) of the 2014 Tariff Regulations provide as follows:

"27. Depreciation:

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

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

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

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

44. The Depreciation for FY 2014-15 to FY 2018-19 has been worked out in accordance with Regulation 27 of the 2014 Tariff Regulations as shown in Table below:

Table I- Depreciation (In Rs Lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	503,239.85	541,319.68	551,841.52	556,727.44	557,544.24
Gross block at the end of the year	541,319.28	551,841.52	556,727.44	557,544.24	558,943.91
Average Gross Block	522,279.57	546,580.40	554,284.48	557,135.84	558,244.07
Freehold land	13.36	360.60	360.60	360.60	360.60
Rate of Depreciation (%)	5.08%	5.09%	5.09%	5.09%	5.09%
Depreciable Value	522,266.21	546,219.80	553,923.87	556,775.24	557,883.47
Balance Useful life of the assets (in Years)	25.00	24.00	23.00	22.00	21.00
Depreciation (for the period)	26538.52	27778.20	28176.76	28327.43	28410.65

45. **Operation & Maintenance Expenses ("O&M Expenses"):** The O&M Expenses for FY 2014-15 to FY 2018-19 have been computed considering the norm specified in Regulation 29 (1) of the 2014 Tariff Regulations. Further, Regulation 29 (2) of the CERC Tariff Regulations 2014 states as under:

"The Water Charges and capital spares for thermal generating stations shall be allowed separately,

Provided that water charges shall be allowed based on water consumption which depends on the type of plant, type of cooling water system etc. subject to prudence check. The details regarding the same shall be furnished along with the petition:

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

46. The Petitioner has accordingly claimed water Charges based on the actual water consumption. The details regarding water charges such as water consumption, type of cooling water system etc., is attached as **ANNEXURE P/ 5.**

47. Additional O&M Expenses: The Petitioner has claimed an amount of Rs.15.00 Crore towards ash transportation cost as additional O&M Expenses.

(a) The Petitioner respectfully submits that the Hon'ble Commission vide order dated 19.11.2014 in Petition No 274/2010 in case of Maithon Power Limited had allowed Additional O&M for Ash Disposal Expenses as under:

"78. We have examined the submissions of the petitioner. Considering the fact that the capacity of ash pond is limited and require frequent disposal as per the statutory provision of the MOEF and since the normative O&M allowed under the 2009 Tariff Regulations does not include such expenses, we are inclined to

consider the claim of the petitioner on this count. It is also observed that the Commission in respect of the generating stations of DVC had approved ash evacuation expenses as additional O&M vide order dated 8.5.2013 in Petition No. 272/2010 on similar grounds. In view of this, the Ash disposal expenses as claimed by the petitioner have been allowed as additional O&M expenses. It has been observed from the balance sheet furnished by the petitioner vide affidavit dated 16.8.2013 that the petitioner has earned revenue amounting to Rs.11.03 lakh and Rs.49.48 lakh from the sale of ash for the years 2011-12 and 2012-13 respectively. Therefore, the revenue earned from the sale of Ash shall be adjusted from the additional O&M expenses allowed as above. However, we direct that the ash disposal expenses allowed would not be considered for computation of Maintenance Spares, O & M Expenses and Receivables in the calculation of Interest on Working Capital."

(b) Further, the Hon'ble Commission recently in its Order dated 05.11.2018 passed in Petition No. 172/MP/2016 has held that transportation of Fly Ash is additional Revenue Expenditure not contemplated under the Normative O&M Expenses specified in the 2014 Tariff Regulations. Therefore, the Hon'ble Commission in the said Order has permitted recovery of the said Revenue Expenditure additionally from the beneficiaries. The relevant extracts of the Order are being reproduced as follows:-

"30. Existing generating project has been defined as a "project" which has been declared under commercial operation on a date prior to 1.4.2014 and new project has been defined as the project achieving COD or anticipated to be achieving COD on or after 1.4.2014. In all these situations, additional capital expenditure on

"change in law or compliance with any existing law" is allowed. However, the expenditure towards transportation of fly ash from the generating station to the place of users is an expenditure of a revenue nature.There is no corresponding provision under the 2014 Tariff Regulations for allowingthe revenue expenses /expenses of O&M nature under „Change in Law". It is pertinent to mention that the Hon'ble Supreme Court in PTC India Limited V CERC &ors{(2010) 4 SCC 603}, had held that regulatory power can be exercised only when there is no provision in the regulations framed under section 178 of the Act. The relevant observations of the Hon'ble Supreme Court are extracted as under:

"40. As stated above, the 2003 Act has been enacted in furtherance of the policy envisaged under the Electricity Regulatory Commissions Act, 1998 as it mandates establishment of an independent and transparent Regulatory Commission entrusted with wide ranging responsibilities and objectives inter alia including protection of the consumers of electricity. Accordingly, the Central Commission is set up under Section 76(1) to exercise the powers conferred on, and in discharge of the functions assigned to, it under the Act. On reading Sections 76(1) and 79(1) one finds that Central Commission is empowered to take measures/steps in discharge of the functions enumerated in Section 79(1) like to regulate the tariff of generating companies, to regulate the inter-State transmission of electricity, to determine tariff for inter-State transmission of electricity, to issue licenses, to adjudicate upon disputes, to levy fees, to specify the Grid Code, to fix the trading margin in inter-State trading of electricity, if considered necessary, etc.. These measures, which the Central Commission is empowered to take, have got to be in conformity with the regulations under Section 178, wherever such regulations are applicable. Measures under Section 79(1),

therefore, have got to be in conformity with the regulations under Section 178. To regulate is an exercise which is different from making of the regulations. However, making of a regulation under Section 178 is not a pre-condition to the Central Commission taking any steps/measures under Section 79(1). As stated, if there is a regulation, then the measure under Section 79(1) has to be in conformity with such regulation under Section 178……."

31. Accordingly, we in exercise ofthe regulatory power hold that the actual additional expenditure incurred by the Petitioner towards transportation of ash in terms of the MOEFCC Notification is admissible under „Change in Law" as additional O&M expenses. However, the admissibility of the claims is subject to prudence check of the following conditions on case to case basis for each station:"

48. Based on the above decisions of the Commission, the Petitioner has claimed additional O&M of Rs. 15.00 Crore towards ash transportation in FY 2018-19. The Petitioner has not claimed the same for computation of Maintenance spare, O&M Expense and receivables for the computation of Interest on Working Capital. The Petitioner further, request the Hon'ble Commission to allow this expense towards ash disposal on actuals. Further, the Auditor's Certificate regarding the Ash Disposal expenses is enclosed as **ANNEXURE P/6.**

49. O&M Expenses have been computed considering the norm specified in Regulation 29 (1), water charges as per Regulation 29 (2) of the 2014 Tariff Regulations and ash disposal expenses based on actuals as shown in Table below

Table J- O&M Expenses (In Rs Lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses Norm (Rs Lakh/MW)	19.95	21.21	22.54	23.96	25.47
Capacity (MW)	1050	1050	1050	1050	1050
O&M Expenses Norm	20947.5	22270.5	23667	25158	26743.5
Additional O&M Ash Transportation	0	0	0	0	1500
Water Charges (Rs Lakh)	1262.65	1160.92	1205.72	1339.05	1339.05
Total O&M Expenses (Rs Lakh)	22,210.15	23,431.42	24,872.72	26,497.05	29582.55

50. **Interest on Working Capital**: Regulation 28 (1) (a) and (3) of the 2014 Tariff Regulations provides as follows:

"(1) The working capital shall cover:

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

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

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

(iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;

(iv) Maintenance spares @ 20% of operation and maintenance expenses specified in Regulation 29;

(v) Receivables equivalent to two months of capacity charges and energy charges for sale of electricity calculated on the normative annual plant availability factor;

and

(vi) Operations and maintenance expenses for one month.

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

51. The Interest on Working Capital has been computed in accordance with the provisions of Regulation 28 of the 2014 Tariff Regulations. Since the coal stock storage capacity is higher than 30 days, cost of coal towards stock has been considered for 30 days. The cost of coal has been considered based on the actual weighted average Landed price of coal. The receivables have been calculated based on the actual energy charges at 85% of the normative PLF. The rate of interest on working capital is considered as 13.50% (SBI Base Rate of 10% as on 1.4.2014) plus 350 basis points. The computations of Interest on Working Capital are shown in Table below:

Table K- Interest on Working Capital (In Rs Lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Cost of coal for stock	8524.69	8661.60	9278.83	10584.45	9731.27
Cost of coal for generation	8524.69	8661.60	9278.83	10584.45	9731.27
Cost of secondary fuel oil (2 months)	372.43	257.42	222.26	265.66	325.79
O&M expenses (1 month)	1850.85	1952.62	2072.73	2208.09	2340.21
Maintenance Spares	4442.03	4686.28	4974.54	5299.41	5616.51
Receivables	37392.45	37745.60	38962.20	41099.18	39708.55

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Total Working Capital	61107.13	61965.11	64789.38	70041.24	67453.59
Rate of Interest on Working Capital	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	**8249.46**	**8388.21**	**8746.57**	**9455.57**	**9106.24**

52. **Total Annual Fixed Charges**: Based on above discussions, the year-wise total Annual Fixed Charges for the period 2014-15 to 2018-19 as allowed by the Commission and as claimed by the Petitioner in this true-up Petition are summarized in Table below:

Table L- Annual Fixed Charges as allowed by the Commission vide order dated 29.06.2018 in Petition No. 61/GT/2016 (In Rs Lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	26,537.00	27,796.13	28,862.55	29,653.97	29,653.97
Interest on Loan	43,059.41	41,268.36	39,427.80	37,018.66	33,238.80
Return on Equity	23,613.59	25,415.99	26,402.88	27,145.11	27,145.11
Interest on Working Capital	7,525.56	7,642.67	7,728.72	7,897.69	7,909.23
O & M Expenses	22,153.18	23,476.18	24,872.68	26,363.68	27,949.18
Total Annual Fixed Charges	**122,888.74**	**125,599.33**	**127,294.63**	**128,079.11**	**125,896.29**

53. The Petitioner has claimed the Annual Fixed charges as shown under

Table M- Annual Fixed Charges as claimed by the Petitioner (In Rs Lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	26,538.52	27,778.20	28,176.76	28,327.43	28,410.65
Interest on Loan	43,822.74	40,600.80	38,471.83	33,423.83	31,641.10
Return on Equity[1]	23,613.60	25,415.99	25,774.23	25,906.82	25,958.35

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Additional O&M Expenses(Ash Transportation)	-	-	-	-	1,500.00
Interest on Working Capital	8,249.46	8,388.21	8,746.57	9,455.57	9,106.24
O & M Expenses including Water Charges	22,210.15	23,431.42	24,872.72	26,497.05	28,082.55
Annual Fixed Charges	**1,24,434.48**	**1,25,614.62**	**1,26,042.11**	**1,23,610.69**	**1,24,698.89**

54. **Energy Charges**: It is submitted that Regulation 30 (5) and (6) of the 2014 Tariff Regulations provide as follows: -

"(5) The energy charge shall cover the primary and secondary fuel cost and limestone
consumption cost (where applicable), and shall be payable by every beneficiary for the total energy scheduled to be supplied to such beneficiary during the calendar month on ex-power plant basis, at the energy charge rate of the month (with fuel and limestone price adjustment). Total Energy charge payable to the generating company for a month shall be:
(Energy charge rate in Rs./kWh) x {Scheduled energy (ex-bus) for the month in
kWh.}
(6) Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shal determined to three decimal places in accordance with the following formulae:

(a) For coal based and lignite fired stations
ECR = {(GHR – SFC x CVSF) x LPPF / CVPF+SFC x LPSFi + LC x LPL} x 100 / (100 – AUX)
…….
Where,

AUX =Normative auxiliary energy consumption in percentage.

CVPF= (a) Weighted Average Gross calorific value of coal as received, in kCal per kg for coal based stations

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

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

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

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

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

LC = Normative limestone consumption in kg per kWh.

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

LPPF= Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month. (In case of blending of fuel from different sources, the weighted average landed price of primary fuel shall be arrived in proportion to blending ratio)

SFC = Normative Specific fuel oil consumption, in ml per kWh.

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

55. It is further submitted that as regards Fuel Cost, Regulation 23 of the 2014 Tariff Regulations provide as follows:

"The landed fuel cost of primary fuel and secondary fuel for tariff determination shall be based on actual weighted average cost of primary fuel and secondary fuel of the three preceding months, and in the absence of landed costs for the three preceding months, latest procurement price of primary fuel and secondary fuel for the generating station, before the start of the tariff period for existing stations and immediately preceding three months in case of new generating stations shall be taken into account."

56. It is submitted that the Commission vide its Order dated 29.06.2018 in Petition No. 61/GT/2016 has approved the operational norms for the Project as under:

- Gross Station Heat Rate :2330.88 kCal/kWh
- Secondary Fuel Oil Consumption: 0.5 ml/kWh
- Auxiliary Power Consumption:5.75%

57. The Petitioner respectfully submits that the Petitioner on the issue of Gross Station Heat Rate and Auxiliary Power Consumption has filed an Appeal before Hon'ble Appellate Tribunal for Electricity (Appeal No. 3398 of 2018) and Hon'ble APTEL Judgment on the matter is still awaited.

58. The Petitioner would prejudice to its rights and contentions in the Appeal filed before the Hon'ble APTEL at this stage has considered Auxiliary Power Consumption as approved by the Commission for computing the Energy Charges for FY 2014-15 to FY 2018-19. In case, the Appeal filed by the Petitioner on this issue is allowed, the impact of same will have to be allowed separately. As regards the Station Heat Rate, the Petitioner would like to submit that it has considered the Heat Rate as 1.045 times Design Heat Rate for the control period of FY 2014-15 to FY 2018-19. Petitioner has a guaranteed design heat rate of 2276.03 kcal/kwh (Contract document for the same is enclosed as **ANNEXURE - P/7**). However, as per Regulation 36 (C) (b) (i) of Tariff Regulations 2014 and 49 (C) (b) (i) of Tariff Regulations 2019, heat rate has been capped at 2267 kcal/kwh.

59. Accordingly, the Petitioner has computed the Energy Charges considering the operational norms as follows:

(a) Gross Station Heat Rate **: 2369.01 kCal/kWh** (1.045 times Design Heat Rate of 2267 kcal/kWh)

(b) Secondary Fuel Oil Consumption: **0.5 ml/kWh**

(c) Auxiliary Power Consumption : **5.75%**

60. As the actual fuel price and calorific value data for entire control period for FY 2014-15 to FY 2018-19 is available, the Petitioner for 2014-19 has considered the weighted average actual fuel prices, blending ratio and calorific value for entire year 2014-19 for computations of energy charge.

61. Based on above aspects, the energy charge computed for the tariff period 2014-19 is shown in Table below:

Table N- Energy Charges

Particulars	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Gross Station Heat Rate (kCal/kWh)	2369.02	2369.02	2369.02	2369.02	2369.02
Auxiliary Consumption (%)	5.75%	5.75%	5.75%	5.75%	5.75%
Secondary Fuel Oil Consumption (ml/kWh)	0.50	0.50	0.50	0.50	0.50
Landed Secondary Fuel Oil Price (Rs/kL)	57,956	39,949	34,587	41,342	50,698
Calorific Value of Secondary Fuel Oil (Kcal/ml)	8.82	8.86	8.85	8.87	8.87
Weighted Average Coal Price (Rs/kg)	2.05	2.05	2.13	2.34	2.14
Weighted Average Calorific Value of Coal Price (kCal/kg)	3,652.12	3,601.95	3,483.85	3363.89	3,334.58
Energy Charge (Rs/kWh)	**1.356**	**1.365**	**1.462**	**1.669**	**1.541**

62. The Petitioner would like to submit that as per clause 51 of CERC Tariff Regulation for the period 2014-19, the petitioner is entitled to claim hedging cost from its PPA beneficiaries.

51" Recovery of cost of hedging or Foreign Exchange Variation:

(1) Recovery of cost of hedging or foreign exchange rate variation shall be made directly by the generating company or the transmission licensee, as the case may be, from the beneficiaries or the long term transmission customers /DICs, as the case may be, without making any application before the Commission:

63. The Petitioner vide Letter Reference No. GKEL/GRIDCO/2018-19/1172 dated 30-03-2019 submitted an invoice to the Respondent GRIDCO claiming Rs 166,624,418/- incurred by GKEL on account of hedging cost along with Auditors Certificate. To this legitimate claim, the Respondent GRIDCO has not made this payment till date. We request the Hon'ble Commission to direct GRIDCO to pay this amount to the Petitioner at the earliest.

SECTION 2: TARIFF FOR THE PERIOD 2019 - 2024

64. It is submitted that the Tariff forms duly filled and certified by auditor as per CERC Tariff Regulations, 2019 are annexed herewith and marked as **ANNEXURE P/8**.

65. **Annual Fixed Charges:** It is submitted that based on the Capital Cost, and Debt: Equity Ratio considered in Section A, the various components of Annual Fixed Charges for the period 2019-20 to 2023-24 have been computed in accordance with the provisions the 2019 Tariff Regulations as follows:

66. **Capital Cost**: As stated above, the Petitioner has considered the closing Capital cost as on 31.03.2019 as the opening Capital cost as on 01.04.2019. The Petitioner has considered the opening Capital cost of Rs. 558943.91 Lakh for Tariff determination purpose.

67. **Debt Equity Ratio**: As regards Debt: Equity Ratio, Regulation 18 of CERC Tariff Regulations, 2019 stipulates as follows:

> *"In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:*
>
> *Provided that in case of a generating station or a transmission system including communication, system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30% shall not be taken into account for tariff computation;*

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

68. The Petitioner has considered the opening Debt: Equity ratio as on 01.04.2019 as per the closing Debt: Equity ratio for 31.03.2019. Further, the Petitioner has considered debt: Equity ratio as 70:30 as per Regulation 18 of the CERC Tariff Regulations, 2019 for the proposed Additional capitalization during the Control Period.

Table O- Equity Ratio for the Tariff Period FY 2019-24

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Debt (%)	70.00	70.00	70.00	70.00	70.00
Equity (%)	30.00	30.00	30.00	30.00	30.00

69. **Additional Capitalization**: The additional Capitalization as claimed by the Petitioner for the Period from FY 2019-20 to FY 2023-24 is shown as under:

Table P- Additional Capitalization as Claimed by Petitioner

Additional Capitalization claimed for FY 2019-20 to FY 2023-24 (Rs. in Lakh)					
Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Additional Capitalization claimed by GKEL (Ash Dyke + FGD)	60.16	860.97	76097.35	0	0
De-Capitalization Claimed by GKEL	0	0	0	0	0
Retention money paid and liabilities discharged	0	28800.10	0	0	0
Total	**60.16**	**29661.07**	**76097.35**	**0**	**0**

70. Regulation 26 (1) of the 2019 Tariff Regulation states as under:

“Additional Capitalization beyond the original scope

(1) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts beyond the original scope, maybe admitted by the Commission, subject to prudence check:

- *a. Liabilities to meet award of arbitration or for compliance of order or directions of any statutory authority, or order or decree of any court of law;*
- *b. Change in law or compliance of any existing law;*
- *c. Force Majeure events;*
- *d. Need for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security;*
- *e. Deferred works relating to ash pond or ash handling system in additional to the original scope of work, on case to case basis:*

  Provided also that if any expenditure has been claimed under Renovation and Modernization (R&M) or repairs and maintenance under O&M expenses, the same shall not be claimed under this Regulation;
- *f. Usage of water from sewage treatment plant in thermal generating station.”*

71. The additional Capitalization claimed by the Petitioner in form of raising Ash dyke as a part of Ash disposal system, future Ash Pond and Fly Ash conveying unit under the provisions of Regulation 26(1)(e), and the installation of FGD under the provisions of Regulation 26(1)(b) of the CERC Tariff regulations 2019.

72. The details of Expenditure claimed by the Petitioner for the Period from FY 2019-20 to FY 2023-24 is as under:

Table Q- Additional Capitalization as Claimed by Petitioner (Rs. in Lakh)

Particulars	Head of Work/ Equipment	Additional Capitalization claimed by the Petitioner	Regulation under which claimed
FY 2019-20	Plant and Equipment (Future Ash Pond)	60.16	Regulation 26(1)(e)
FY 2020-21	Plant and Equipment (Ash Dyke Raising)	860.97	Regulation 26(1)(e)
FY 2021-22	Plant and Equipment (Fly Ash Conveying System Unit-1)	2597.35	Regulation 26(1)(e)
	Installation of FGD	73500.00	Regulation 26(1)(b)
FY 2022-23		0.00	-
FY 2023-24		0.00	-

73. The Petitioner respectfully submits that in FY 2021-22 the Petitioner has claimed additional Capital Expenditure towards installation of FGD works. The Petitioner would like to submit that as per Section 5 of the Environmental (Protection) Act, 1986, the Ministry of Environment and Forest and Climate Change has directed vide their notification dt 07.12.2015 that the TPP units having capacity 500 MW & below, and which are installed after 01.01.2003 and up to 31.12.2016 are required to maintain the (Sulphur Dioxide) SO_2 level below 600 mg/Nm^{3}.

74. In order to meet the stipulated emission norms, the Petitioner had submitted the revised feasibility report providing details of best suited technology and estimated indicative cost to Central Electricity (CEA). The CEA vide its letter dated March 25, 2019 has issued the Advisory Report detailing the suggested technology and estimated indicative cost towards

installation of FGD at GKEL plan. The CEA vide said letter also mentioned that the cost of retrofitting of FGD for the plant needs to be discovered through open competitive bidding in consultation with the representatives of major PPA stakeholder. A True Copy of the CEA Report is annexed hereto and marked as **ANNEXURE P/9.**

75. The Petitioner is in the process of carrying further analysis on the aspects of Capital Cost for FGD, O&M Expenses of FGD and its impact on Auxiliary Power Consumption of the plant.

76. The Petitioner at this stage has considered the Capital Cost of Rs 70 Lakh/MW for installation of FGD while estimating the additional capital expenditure on this account. In this regard, it needs to be noted that CEA in its advisory report has indicated the Capital Cost of Rs 37 Lakh/MW towards the Basic Cost of FGD system which does not include taxes, duties and other costs. Hence, the Petitioner requests the Hon'ble Commission to approve the Additional Capital Expenditure towards FGD at cost of Rs 0.70 Crore/MW. The Petitioner will submit the actual Capital Cost at the time of truing up of tariff for FY 2019-20 to FY 2023-24.

77. The petitioner also submits that as of now there is no operational FGD history and hence it is now possible to assess the impact of FGD on auxiliary power consumption and additional O&M expenses towards FGD plant. Hence, the petitioner will approach the Hon'ble Commission for

approval of additional O&M Expenses and Auxiliary Consumption towards FGD once the contract for FGD is finalised.

78. **Interest on Loan ("IOL")**: Regulation 32 (5) & (6) of the 2019 Tariff Regulations states as follows:

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

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

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

79. The weighted average rate of IOL for FY 2019-24 has been considered on the basis of prevailing rates. The IOL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. The details of weighted average rate of interest are given in Form 13 and the brief workings in Interest on Loan are given in Table below:

Table R- Interest on Loan (In Rs Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	3,91,260.73	3,91,302.85	4,12,065.60	4,65,334.44	4,65,334.44
Cumulative Repayment up to Previous Year	1,51,113.38	1,79,607.57	2,08,884.64	2,40,950.46	2,75,023.85
Net Loan-Opening	2,40,147.35	2,11,695.28	2,03,180.96	2,24,383.98	1,90,310.59

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Additions	42.11	20,762.75	53,268.85	-	-
Repayment during the year	28,494.19	29,277.07	32,065.82	34,073.40	34,073.40
Net Loan-Closing	2,11,695.28	2,03,180.96	2,24,383.98	1,90,310.59	1,56,237.19
Average Loan	2,25,921.31	2,07,438.12	2,13,782.47	2,07,347.29	1,73,273.89
Weighted Average Rate of Interest on Loan (%)	12.48%	12.48%	12.48%	12.48%	12.48%
Interest	28280.99	25892.63	26681.51	25877.53	21625.36

80. **Return on Equity**: Regulation 30 (1) & (2) and Regulation 31 (2) of the 2019 Tariff Regulations states as follows:

"30. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these Regulations.

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

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

……"

"31. ***Tax on Return on Equity****:*

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

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

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

81. It is submitted that the ROE for the period from FY 2019-20 to FY 2023-24 has been computed at the rate of 19.76% after grossing up the ROE with MAT rate as per the 2019 Tariff Regulation as shown in Table below:

Table S- Return on Equity (In Rs Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	167683.17	167701.22	176599.54	199428.75	199428.75
Additions	18.05	258.29	22829.21	0.00	0.00
Increase due to discharges	0.00	8640.03	0.00	0.00	0.00
Closing Equity	167701.22	176599.54	199428.75	199428.75	199428.75
Average Equity	167692.20	172150.38	188014.14	199428.75	199428.75
Return on Equity (Base Rate) (%)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT Rate for the year (%)	21.55%	21.55%	21.55%	21.55%	21.55%

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Rate of Return on Equity (Pre-Tax) (%)	19.758%	19.76%	19.76%	19.76%	19.76%
Return on Equity (Pre Tax)	**33131.79**	**34012.62**	**37146.90**	**39402.15**	**39402.15**

82. It is submitted that in terms of Clause 31 (3) of the 2019 Tariff Regulations the grossed up rate of ROE at the end of every financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the tariff period 2019-20 to 2023-24 on actual gross income of any financial year.

83. **Depreciation**: It is submitted that Regulation 33 (2), (5) and (6) of the 2019 Tariff Regulations provide as follows:

"33. Depreciation:

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

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

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

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

The depreciation for the period from FY 2019-20 to FY 2023-24 has been computed in accordance with the above provisions of Regulations as shown in Table below:

Table T Depreciation (In Rs Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	558943.91	559004.07	588665.14	664762.49	664762.49
Gross block at the end of the year	559004.07	588665.14	664762.49	664762.49	664762.49
Average Gross Block	558973.99	573834.60	626713.81	664762.49	664762.49
Freehold land	13.36	13.36	13.36	13.36	13.36
Rate of Depreciation (%)	5.10%	5.10%	5.12%	5.13%	5.13%
Depreciable Value	558960.63	573821.24	626700.45	664749.13	664749.13
Balance Useful life of the assets(in Years)	20	19	18	17	16
Depreciation (for the period)	28494.19	29277.07	32065.82	34073.40	34073.40

84. **Operation & Maintenance Expenses ("O&M Expenses")**: The O&M Expenses have been computed considering the norm specified in Regulation 35 (1) of the 2019 Tariff Regulations. Further, Regulation 35 (6) of the 2019, Tariff Regulation states as under:

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

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

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

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

85. The Petitioner has accordingly considered the water Charges and the security expenses for computing the O&M Expenses. The Petitioner as per the current agreement is withdrawing 24 cusec of surface water per month. The water agreement with the Irrigation Department, Government of Orissa is already attached as attached as **Annexure 5**. As per the Water Agreement, the annual escalation rate applicable in water charges is 10% and the same has been considered while estimating the Water Charges. Further, the Security expenses have been claimed in accordance with the Agreement executed by GKEL with RAXA Security Services for providing security services to the plant.

86. Additional O&M Expenses: The Petitioner would like to submit that even with the enhanced ash dyke, it will not be able to dispose off the entire

ash generated and the Petitioner will have to incur certain additional O&M expenses towards ash transportation. The Petitioner has claimed an amount of Rs.15.00 Crore towards ash transportation cost as additional O&M Expenses for each year from FY 2019-20 to FY 2023-24 based on actual expenses incurred during FY 2018-19. The petitioner would submit the details of actual expenses incurred at the time of truing up.

87. The O&M Expenses have been computed considering the norms specified in Regulation 35(1) and water and Security expenses as specified in Regulation 35(6) of the 2019 Tariff Regulation is shown in the Table below:

Table U O&M Expenses (In Rs Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses Norm (Rs Lakh/MW)	27.74	28.71	29.72	30.76	31.84
Capacity (MW)	1050	1050	1050	1050	1050
O&M Expense Normative (Rs Lakh)	29127.00	30145.50	31206.00	32298.00	33432.00
Additional Operation and management Expense (Rs Lakhs)	1500	1500	1500	1500	1500
Water Charges (Rs Lakh)	979.26	1,077.19	1,184.90	1,303.40	1,433.73
Security Expenses	593.88	635.46	679.94	727.53	778.46

Total O&M Expenses (Rs Lakh)	32200.15	33358.14	34570.84	35828.93	37144.20

88. The Petitioner further submit that the Government of Odhisa, Department of Water Resources, on the recommendation of water resource Board has approved "Water Conservation Fund (WCF)". It has been decided that a corpus fund will be created by way of receipt of one-time Contribution of Rs. 2.50 Crore per cusec of water allocated to the industries which will be utilized for construction of different water conservation projects. Accordingly, Office of Executive Engineer, Rengali Right Canal Division No. II, Dhenkanal vide its letter dated 19.6.2015 has asked GKEL to deposit Rs 75 Crore towards this fund. GKEL has not deposited this fund as of now as some of the industries in Odhisa has challenged creation of this fund and the matter is sub-judice. In case, GKEL has to deposit this amount, the same needs to be allowed separately to GKEL. Hence the Petitioner requests the Hon'ble Commission to allow the reimbursement of amount deposited towards Water Conservation Fund as and when the amount is deposited by GKEL. A True Copy of Letter dated 19.06.2015 is annexed hereto and marked as **ANNEXURE P/10.**

89. Interest on Working Capital: Regulation 34 (1) (a) and (3) of the 2019 Tariff Regulations provides as follows:

"(1) Working capital shall cover:
(a) For Coal-based/lignite-fired thermal generating stations
(i) Cost of coal or lignite and limestone towards stock, if applicable, for 10 days for pit-head generating stations and 20 days for non-pit-head

generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;

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

(iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;

(iv) Maintenance spares @ 20% of operation and maintenance expenses including water charges and security expenses;

(v) Receivables equivalent to 45 days of capacity charges and energy charges for sale of electricity calculated on the normative annual plant availability factor;

and

(vi) Operation and maintenance expenses, including water charges and security expenses, for one month.

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later."

90. The Interest on Working Capital has been computed in accordance with the provisions of Regulation 34 of the 2019 Tariff Regulations. The rate of interest on working capital is considered as11.75% (SBI 1 Year MCLR plus 350 basis points). The computations of Interest on Working Capital are shown in Table:

Table V Interest on Working Capital (In Rs Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Cost of coal for stock	8054.54	8098.74	8076.61	8076.61	8076.61
Cost of coal for generation	12081.81	12148.11	12114.91	12114.91	12114.91
Cost of secondary fuel oil (2 months)	353.97	355.92	354.94	354.94	354.94
O&M expenses (1 month)	2558.35	2654.85	2755.90	2860.74	2970.35
Maintenance Spares	6140.03	6371.63	6614.17	6865.79	7128.84
Receivables	38937.71	39064.65	40369.34	41178.31	40690.40
Total Working Capital	68126.41	68693.88	70285.88	71451.31	71336.06
Rate of Interest on Working Capital	11.75%	11.75%	11.75%	11.75%	11.75%
Interest on Working Capital	**8026.78**	**8071.53**	**8258.59**	**8395.53**	**8404.95**

91. **Total Annual Fixed Charges**: Based on above discussions, the year-wise total Annual Fixed Charges for the period 2019-20 to 2023-24 are summarized in Table belo*w:*

Table W Annual Fixed Charges (In Rs Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	28,494	29,277	32,066	34,073	34,073
Interest on Loan	28,281	25,893	26,682	25,878	21,625
Return on Equity	33,132	34,013	37,147	39,402	39,402
Interest on Working Capital	8,027	8,072	8,259	8,396	8,405
Additional O&M	1,500	1,500	1,500	1,500	1,500
O & M Expenses incl water charges and Security	30,700	31,858	33,071	34,329	35,644
Annual Fixed Charges	**1,30,134**	**1,30,612**	**1,38,724**	**1,43,578**	**1,40,650**

92. **Energy Charges**: It is submitted that Regulation 43 (1) and (2) of the 2019 Tariff Regulations provide as follows:-

"(1) The energy charge shall cover the primary and secondary fuel cost and limestone consumption cost (where applicable), and shall be payable by every beneficiary for the total energy scheduled to be supplied to such beneficiary during the calendar month on ex-power plant basis, at the energy charge rate of the month (with fuel and limestone price adjustment). Total Energy charge payable to the generating company for a month shall be:

Energy Charges= (Energy charge rate in Rs./kWh) x {Scheduled energy (ex-bus) for the month in kWh.}

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

(a) For coal based and lignite fired stations

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

…….

Where,

AUX =Normative auxiliary energy consumption in percentage.

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

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

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

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

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

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

LC = Normative limestone consumption in kg per kWh.

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

LPPF= Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month. (In case of blending of fuel from different sources, the weighted average landed price of primary fuel shall be arrived in proportion to blending ratio)

SFC = Normative Specific fuel oil consumption, in ml per kWh.

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

93. It is further submitted that as regards Fuel Cost, Regulation 37 & 38 of the 2019 Tariff Regulations provide as follows:

*"**37. Energy Charge:** The energy charge in respect of the thermal generating Stations shall comprise of landed fuel cost of primary fuel, cost of secondary fuel oil consumption and landed cost of reagents on account of implementation of the revise demission standards*

***38. Landed Fuel Cost of Primary Fuel:** The landed fuel cost of primary fuel for any month shall consist of base price or input price of fuel corresponding to the grade and quality of fuel and shall be inclusive of statutory charges as applicable, washery charges, transportation cost by rail or road or any other means and loading, unloading and handling charges:*

Provided that procurement of fuel at a price other than Government notified prices may be considered, if it is based on competitive bidding through transparent process;

Provided further that landed fuel cost of primary fuel shall be worked out based

on the actual bill paid by the generating company including any adjustment on account of quantity and quality;

Provided also that in case of coal-fired or lignite based thermal generating station, the Gross Calorific Value shall be measured by third party sampling and the expenses towards the third party sampling facility shall be reimbursed by the beneficiaries."

94. It is submitted that the Petitioner has computed the Energy Charges considering the operational norms as specified in the 2019 Tariff Regulations as follows:

- Gross Station Heat Rate : 2380.35 kCal/kWh (1.05 times Design Heat Rate)
- Secondary Fuel Oil Consumption : 0.5 ml/kWh

95. In this regard, it is submitted that the Petitioner has considered Auxiliary Consumption of 6.25% based on norms specified in the 2019 Tariff Regulations.

96. It is submitted that, as regards the fuel prices of fuel, the 2019 Tariff Regulations provide for fuel cost and calorific value to be considered based on actual fuel price for the preceding three months of the third quarter before the start of the tariff period. The Petitioner has accordingly considered fuel prices and calorific value for the period October to December 2018 for the purpose of Tariff Calculation.

97. Based on above aspects, the energy charge computed for the tariff period 2019-24 is shown in Table below:

Table X Energy Charges

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Station Heat Rate (kCal/kWh)	2,380.35	2,380.35	2,380.35	2,380.35	2,380.35
Auxiliary Consumption (%)	6.25%	6.25%	6.25%	6.25%	6.25%
Secondary Fuel Oil Consumption (ml/kWh)	0.50	0.50	0.50	0.50	0.50
Landed Secondary Fuel Oil Price (Rs/kL)	55,236	55,236	55,236	55,236	55,236
Calorific Value of Secondary Fuel Oil (Kcal/ml)	8.87	8.87	8.87	8.87	8.87
Weighted Average Coal Price (Rs/kg)	2.46	2.46	2.46	2.46	2.46
Weighted Average Calorific Value of Coal (kCal/kg)	3095	3095	3095	3095	3095
Energy Charge (Rs/kWh)	**1.**914	**1.**914	**1.**914	**1.**914	**1.**914

PRAYERS

98. The Petitioner in the aforesaid facts and circumstances most humbly prays that this Hon'ble Commission may be pleased to:

(a) Admit the present petition and permit the Petitioner to file such additional information/ submissions as may be necessary for the purposes of true up of tariff for 2014-19 and determination of tariff for 2019-24 under Section 62 and 79(1)(b) of the Electricity Act, 2003 read with the CERC (Terms and Conditions of Tariff) Regulations, 2014 and CERC (Terms and Conditions of Tariff) Regulations, 2019;

(b) Approve the truing up of tariff of power plant of the Petitioner for FY 2014-15 to FY 2018-19

(c) Approve the tariff of the power plant of the Petitioner, comprising of Annual Fixed Charges and Energy Charges for the period FY 2019-20 to FY 2023-24;

(d) Allow the Petitioner to charge Energy Charge Rate (ECR) on month on month basis as per Regulation 42 of the CERC (Terms and Conditions of Tariff) Regulations, 2019

(e) Allow pass through at actual any cess, duty, tax, government levy, royalty etc. including Electricity Duty on Auxiliary Consumption applicable to the Petitioner for supply of power to GRIDCO as per the provisions of PPA;

(f) Allow pass through of Water Charges, Security expenses and other charges as provided under under Regulation 34(a)(iv) of the CERC (Terms and Conditions of Tariff) Regulations, 2019

(g) Approve the reimbursement of expenditure towards petition filing fee, and expenditure on publishing of notices in newspapers as provided in Regulation 70 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and other expenditure (if any) in relation to the filing of petition;

(h) Approve the Additional Capital Expenditure towards installation of FGD to meet the revised environment norms

(i) Allow the Petitioner to file separate Petition for additional claim towards O&M Expenses and Auxiliary Power Consumption of FGD

(j) Allow the Petitioner to recover the amount deposited towards Water Conservation Fund.

(k) Allow any addition, change, modification, alteration of the present petition, if required, at a later stage; and

(l) To pass such order(s) as the Hon'ble Commission may deem fit in the circumstances and facts of the present petition.

Filed By:

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Place: New Delhi

Date: ____January, 2020