

ODISHA POWER GENERATION CORPORATION LTD.

(A Government Company of the State of Odisha)

CIN : U40104OR1984SGC001429 ; GSTN - 21AAACO4759R1ZZ



Regd. Off : ZONE - A, 7th Floor, Fortune Towers, Chandrasekharpur, Bhubaneswar - 751023, Odisha.
Ph. : 0674-2303765 - 66, **Fax :** 0674-2303755
Web : www.opgc.co.in

Ref: OPGC/Units 1 & 2/Tariff/2024-25/ *1733*.

22.11.2024

To,

The Secretary,

Odisha Electricity Regulatory Commission,
Plot No.4, Chunokoli, Sailashree Vihar
Bhubaneswar- 751 021

**Subject: Authorisation of Mr. Haresh Kumar Satapathy, AGM (C&RA) for filing of Tariff
Petition of OPGC Unit 1&2 for FY 2025-26**

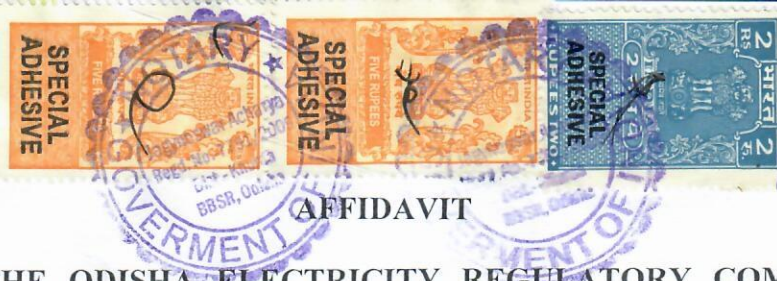
Sir,

This is to certify that Mr. Haresh Kumar Satapathy, currently serving in the capacity of Additional General Manager (C&RA), Odisha Power Generation Corporation Ltd. (OPGC), stationed at the corporate office at Zone-A, 7th Floor, Fortune Towers, Chandrasekharpur, Bhubaneswar-751023, Odisha, India (Petitioner), is duly authorised to file the Petition for determination of Generation Tariff of OPGC Unit 1&2 for FY 2025-26 and appear on behalf of the Petitioner during the tariff hearing and other proceedings before the Hon'ble Odisha Electricity Regulatory Commission.

Thanking you,

(Manas Ranjan Rout)

Managing Director
Odisha Power Generation Corporation Ltd.



**BEFORE THE ODISHA ELECTRICITY REGULATORY COMMISSION,
BHUBANESHWAR**

FILE NO. 1

CASE NO. _____ OF 2024

IN THE MATTER OF: Application for determination of Generation Tariff of Odisha Power Generation Corporation Ltd. (OPGC) Units 1 & 2 for FY 2025-26 under Sections 62 & 86 of the Electricity Act, 2003 read with Approved Bulk Supply Agreement along with Supplemental Agreement (together referred to as the 'Amended PPA'), related provisions of OERC (Conduct of Business) Regulations, 2004, OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2024 and Hon'ble Supreme Court Order dated 19.04.2018 in Case No. 9485 of 2017.

AND

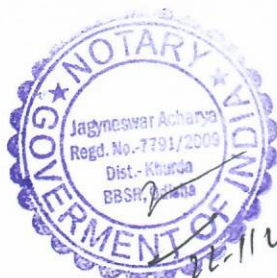
IN THE MATTER OF:

Odisha Power Generation Corporation Ltd. (OPGC)
Zone-A, 7th Floor, Fortune Towers,
Chandrasekharapur, Bhubaneswar – 751 023

..... Petitioner

I, Haresh Kumar Satapathy, son of Shri Kailash Chandra Satapathy, aged about 55 years, do solemnly affirm and say as follows:

- (a) That, I am the Additional General Manager (C&RA) of Odisha Power Generation Corporation Limited, the Petitioner in the above matter and is duly authorised by the said Petitioner to make this affidavit on its behalf.
- (b) The statements made in paragraphs 1.1 to 6.1 of the Petition herein now shown to me are true to my knowledge and statements made in paragraphs 1.1 to 6.1 are based on information made available to me and I believe them to be true.



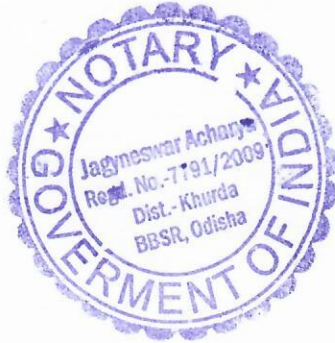
Haresh Kumar Satapathy
Deponent



Verification

I, the deponent above named do hereby verify that the contents of my above affidavit are true to my knowledge; no part of it is false and nothing material has been concealed there from.

Verified at Bhubaneswar on the 22nd day of November, 2024.



Hanesh Kumar Satapathy
Deponent



IDENTIFIED BY ME
22.11.24.
ADVOCATE, BBSR

[Signature]
22.11.2024

Jagyneshwar Acharya
Notary, Govt. Of India
Odisha, BBSR, Dist-Khurda
Regd. No.-7791/2009

ODISHA POWER GENERATION CORPORATION LIMITED
BHUBANESWAR



PETITION FOR DETERMINATION OF TARIFF FOR
IB TPS UNITS 1&2 FOR FY 2025-26

NOVEMBER 22, 2024



BEFORE THE
ODISHA ELECTRICITY REGULATORY COMMISSION
BHUBANESHWAR

CASE No. ____ of 2024

IN THE MATTER OF Petition for determination of Tariff of IB TPS Units 1&2 for
FY 2025-26

AND

IN THE MATTER OF Odisha Power Generation Corporation Ltd. (OPGC Ltd.),
THE APPLICANT Zone-A, 7th Floor, Fortune Towers, Chandrasekharpur,
Bhubaneswar - 751 023, Odisha, India (**Petitioner**)

**ODISHA POWER GENERATION CORPORATION LIMITED RESPECTFULLY
SUBMITS AS FOLLOWS:**

- 1.1 Odisha Power Generation Corporation Limited (hereinafter referred as “**OPGC**” or “**the Petitioner**”) is a company incorporated under the Companies Act, 1956 and has its registered office at Zone-A, 7th floor, Fortune Towers, Chandrasekharpur, Bhubaneswar, Odisha-751 023.
- 1.2 GRIDCO Limited (hereinafter referred as “**GRIDCO**”) had entered into Bulk Power Supply Agreement (“**PPA**”) dated 13.08.1996 with OPGC, for purchase of power from Generating Units 1 & 2 of IB Thermal Power Station, having total capacity of 420 MW (2 x 210 MW). The said PPA came into force from 01.01.1995 and was approved by Government of Odisha (“GoO”) in exercise of its power under Section 43A of the Electricity (Supply) Act, 1948.
- 1.3 OPGC, GRIDCO and GoO signed a Tripartite Agreement dated 18.10.1998 (“**Tripartite Agreement**”) providing certain further amendments to the PPA and other provisions including those concerning the establishment of Units 3&4 of IB Thermal Power Station by OPGC. Further, an Escrow and Security Agreement dated 30.11.1998 was entered

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Petition for determination of Tariff of Units 1&2 for FY 25-26

between OPGC, GRIDCO and Union Bank of India. In 2001, disputes emerged among the involved parties concerning the enforcement of the said Escrow and Security Agreement.

- 1.4 After resolving the disputes between the parties, OPGC and GRIDCO agreed to amend the existing PPA and Tripartite Agreement based on GoO Notification dated 21.06.2008 ("**2008 Notification**"). The relevant extract of the said GoO's Notification is as follows:

"3. After careful consideration of the recommendations of the task force, Government have been pleased to decide as under;

(a) In order to avoid any ambiguity with regard to tariff norms and parameters for Units 1 & 2, the provisions for calculation of incentive in the existing PPA shall stand amended to enhance the Plant Load Factor (PLF) from 68.49% to 80%. All other terms and parameters for determination of tariff for Units 1 & 2 shall be as per the existing PPA. Suitable amendments will be made in the PPA accordingly including deletion of all reference to change in tariff parameters in future. In other words, all tariff parameters will stand frozen till validity of amended PPA notwithstanding modification in tariff norms by CERC from time to time.

(b) The amended PPA shall be filed before the OERC for consent/approval.

(c) The amended PPA shall be effective with effect from 01.04.2007."

- 1.5 Accordingly, an agreement was signed on 06.09.2012 as Supplemental to the Tripartite Agreement (together called as "**Amended Tripartite Agreement**"). The Amended Tripartite Agreement has been made effective from 12.10.2009.

- 1.6 Subsequently, OPGC and GRIDCO signed an amendment to existing PPA on 19.12.2012 by amending certain clauses (together called as "**Amended PPA**"). Hon'ble OERC vide Order dated 27.04.2015 approved the Amended PPA as under:

"9. The above stipulation in PPA provides for settlement of issues if any arise due to implementation of this PPA in a future date the same shall be resolved basing on mutual discussion keeping intent and objects of the PPA intact. Therefore, the Commission has no objection to approve the PPA including its amendment between GRIDCO and OPGC for purchase of power from Unit 1 & 2 of Ib Thermal Power Station as it stands now."

- 1.7 Further, Hon'ble OERC in the said Order dated 27.04.2015 (Case No. 13/2002) directed OPGC to file an application each year for determination of Generation Tariff, as per approved Amended PPA, for rest of the control period starting from FY 2016-17

Application for determination of Tariff of Units 1&2 for FY 25-26



Harish Kumar Sotapaka

onwards since tariff for FY 2014-15 and FY 2015-16 had already been approved by Hon'ble OERC in GRIDCO's ARR Order. The relevant extract of the Order of the Hon'ble OERC is reproduced below:

"13. Due to the above provision in the Regulation read with Regulation 7.13 of the same Regulations, OPGC shall make an application before the Commission as per the above approved PPA each year for determination of tariff for the rest of the control period starting from FY 2016-17 onwards since the tariff for the FY 2014-15 and 2015-16 has already been approved by the Commission in the ARR of GRIDCO for the said year basing on the submission of GRIDCO."

- 1.8 In compliance with the above directions of the Hon'ble OERC, OPGC filed a Petition (Case No. 53/2015) for approval of Generation Tariff for FY 2016-17 under Section 62 and 86 of the Electricity Act, 2003 ("the Act"), approved Amended PPA, related provisions of the OERC (Terms and Conditions of Generation Tariff) Regulations, 2014 (**"2014 Tariff Regulations"**) and OERC (Conduct of Business) Regulations, 2004, as amended from time to time. The Hon'ble OERC vide its Order dated 21.03.2016 disposed of the said Petition approving the Generation Tariff of Units 1&2 of IB Thermal Power Station for FY 2016-17, exclusively in accordance with the terms and conditions of the 2014 Tariff Regulations, and neither the 2008 Notification nor the Amended PPA.
- 1.9 OPGC being dissatisfied with the aforementioned decision in Order dated 21.03.2016 of Hon'ble OERC, filed Appeal No. 126 of 2016 before the Hon'ble Appellate Tribunal for Electricity (hereinafter referred as **"APTEL"**) against the said Tariff Order for FY 2016-17 in Case No. 53/2015. During the pendency of the stated Appeal before the Hon'ble APTEL, OPGC filed the Petition (Case No. 62/2016) for approval of Generation Tariff for FY 2017-18 and the Hon'ble OERC disposed of the said Petition vide its Order dated 23.03.2017 determining the Generation Tariff for FY 2017-18 in line with its approach adopted in Order dated 21.03.2016. Hon'ble APTEL vide its Judgement dated 06.04.2017 in Appeal No. 126 of 2016 upheld this Hon'ble Commission's Tariff Order for FY 2016-17 dated 21.03.2016.
- 1.10 Aggrieved by the Judgment of the Hon'ble APTEL, OPGC filed Civil Appeal No. 9485 of 2017 before the Hon'ble Supreme Court (hereinafter referred as **"SC"**). During the pendency of the stated Civil Appeal before the Hon'ble SC, OPGC filed the Petition for

appeal number 9485 of 2017



for determination of Tariff of Units 1&2 for FY 25-26

approval of Generation Tariff for FY 2018-19 registered as Case No. 75/2017 and the Hon'ble OERC disposed of the said Petition vide Order dated 22.03.2018, determining the Generation Tariff for FY 2018-19 in line with its approach adopted in Order dated 21.03.2016 while determining tariff for FY 2016-17.

- 1.11 Subsequently, the Hon'ble SC vide its Judgement dated 19.04.2018 in Civil Appeal No. 9485 of 2017 set aside the Tariff Order for FY 2016-17 and remanded the matter back to the Hon'ble OERC for a fresh decision. In effect, the Hon'ble Supreme Court has held that primarily the tariff norms under the PPA are to be followed for determination of OPGC's tariff. Further, to the extent there are tariff norms not covered by the PPA, the Tariff Regulations may be relied upon by the OERC to determine OPGC's tariff. It is submitted that the effect of the SC's Judgment is that this arrangement would apply for the entire term of the subsistence of the PPA viz. till 30.06.2026. The relevant excerpt from the Judgment dated 19.04.2018 of the Hon'ble SC is reproduced below:

"6. We are of the view that the Commission vide Order dated 27.04.2015 on the joint application of the parties dated 26.02.2014 rightly fixed the tariff but the view taken in subsequent order dated 21.03.2016 which has been upheld on appeal is unsustainable.

7. Accordingly, we set aside the impugned order and remand the matter to the State Commission for fresh decision. The State Commission may take into account the Notification dated 21.06.2008 for the fixed costs, the PPA for the variable costs specified therein and for other costs not reflected in the PPA, statutory Regulations may be applied.

8. The appeal shall stand disposed of as indicated above.

9. The parties may appear before the State Commission for further proceedings on 2.07.2018." [Emphasis Supplied by underlining]

- 1.12 Then, Hon'ble OERC vide its Interim Order dated 05.05.2018 in Case No. 43 of 2017 directed that since the Hon'ble SC vide Judgment dated 19.04.2018 has set aside the Order dated 21.03.2016 passed by the Commission, OPGC is required to file fresh application for determination of Generation Tariff of its Unit- 1&2 for the period since FY 2016-17. The relevant excerpt of the Order is reproduced below:

"4. Heard the parties at length. As the Hon'ble Supreme Court vide their order dated 19.04.2018 in Civil Appeal No. 9485/2017 has set aside the order dated 21.03.2016 passed by the Commission and remanded the matter for fresh decision, OPGC Ltd. is required to file fresh application for determination of



for determination of Tariff of Units 1&2 for FY 25-26

Haverh Kumar Satapathy

Generation Tariff of its Unit-I & II within 15 days from date of this order. Basing on the said application of OPGC Ltd., a public notice shall be issued inviting suggestions /objections from the general public for re-determination of generation tariff for FY 2016-17 & FY 2017-18 which would be completed within one month fixing the date of hearing on 02.07.2018."

- 1.13 In compliance to the above direction, OPGC filed the Petition (Case No. 33 of 2018) on 25.05.2018 before the Hon'ble OERC for re-determination of Tariff for FY 2016-17, FY 2017-18 and FY 2018-19 considering the original project cost as per the approved Amended PPA. The said Petition was disposed of by the Hon'ble Commission vide Order dated 28.03.2019.
- 1.14 OPGC also filed a separate Petition, numbered as Case No. 54 of 2018, for approval of additional capitalisation for FY 2015-16, FY 2016-17, FY 2017-18 and FY 2018-19 in compliance to the Commission's directive in the Tariff Order for FY 2018-19 dated 22.03.2018 and Hon'ble SC Order in Civil Appeal No. 9485 of 2017 dated 19.04.2018.
- 1.15 In line with the approach adopted in Petitions in Case No. 33 of 2018 and Case No. 54 of 2018, OPGC had filed Petition for approval of Generation Tariff for FY 2019-20 and FY 2020-21. The petitions were numbered as Case No. 70 of 2018 and Case no. 69 of 2019 and the final Orders in these petitions were issued by the Hon'ble Commission on 29.03.2019 and 22.04.2020 respectively.
- 1.16 Subsequently, in exercise of the powers conferred under Section 61 and Section 62 read with Section 181 of the Act, the Hon'ble OERC notified the Odisha Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 (hereinafter referred as "**OERC Generation Tariff Regulations, 2020**") on 26.08.2020 for the control period of FY 2020-21 to FY 2023-24.
- 1.17 The Petitioner had filed a Petition (Case No. 43 of 2017) challenging the unilateral refusal of M/s. GRIDCO to honour its power bill in full, which was considered to be in violation of the Commission's Tariff Order dated 23.03.2017, in Case No. 62/2016. In response, the Hon'ble Commission, through its Order dated 28.10.2020, while disposing of the matter, opined that for the computation of Energy Charges, the Gross Calorific Value (GCV) of coal should be considered on "*as delivered basis*." Also, the Hon'ble

officer
Kumar Satapathy



OERC specified the methodology to arrive at the “as delivered” GCV of coal.

- 1.18 OPGC has filed Appeal No. 189 of 2020 before the Hon’ble APTEL against this Hon’ble Commission’s Order dated 28.10.2020 in Case No. 43 of 2017 on the GCV to be considered for computation of Energy Charge Rate (ECR). Pleadings have been completed in the Appeal No. 189 of 2020 and , the Hon’ble APTEL vide its daily order dated 15.09.2023 has instructed for inclusion of the Appeal in the “List of Finals” to be taken up in its due course for further proceedings.
- 1.19 In accordance with the provisions of OERC Generation Tariff Regulations, 2020 and in line with the approach adopted in Petitions in Case No. 33 of 2018, Case No. 54 of 2018, Case No. 70 of 2018 and Case No. 69 of 2019, OPGC had filed Petition for approval of Generation Tariff for FY 2021-22. The said Petition was numbered as Case No. 71 of 2020 and the final Order was issued by the Hon’ble Commission on 26.03.2021.
- 1.20 Further, Hon’ble Commission vide order dated 21.05.2021 in Petition No. 54 of 2018 disallowed claimed actual additional capitalisation for FY 2015-16 to FY 2017-18 and proposed additional capital expenditure for FY 2018-19. Aggrieved by the decision of the Hon’ble Commission, OPGC has filed Appeal No. 335/2021 before Hon’ble APTEL on 15.11.2021, against this Hon’ble Commission’s Order dated 21.05.2021 in Case No. 54 of 2018. The Hon’ble APTEL vide it’s daily order dated 15.07.2024 has instructed the Appeal to remain included in the “List of Short Matters”, and to be taken up from there, in its turn for further proceedings.”
- 1.21 In accordance with the provisions of OERC Generation Tariff Regulations, 2020 and in line with the approach adopted in Petitions in Case No. 33 of 2018, Case No. 70 of 2018, Case No. 69 of 2019, Case No. 71 of 2020, and Case No. 104 of 2021, OPGC had filed Petition (Case No. 75 of 2022) for approval of Generation Tariff for FY 2023-24, and the same was disposed of by the Hon’ble Commission vide Order dated 23.03.2023. In similar line, the annual tariff Petition filed by OPGC for FY 2024-25 (Case No 112 of 2023) has been disposed of by the Hon’ble Commission vide Order dated 13.02.2024.
- 1.22 In view of the Appeal No. 335/2021 pending before Hon’ble APTEL, OPGC had filed the Petitions (Case No. 104 of 2021, Case No. 75 of 2022 and Case No. 112 of 2023)

Harsh Kumar Satapathy



without considering the Additional Capitalisation. In the said Petition, OPGC prayed before the Hon'ble Commission for liberty to file separate Petition related to additional capitalisation on the basis of decision by Hon'ble APTEL in the said Appeal. In Para 81 of the Order dated 13.02.2024 in Case No. 112 of 2023, the Hon'ble Commission was pleased to consider the prayer of OPGC and allowed to file a separate Petition related to additional capitalisation for the period from FY 2023-24 to FY 2024-25 after the APTEL's Judgement in Case No. 335/2021 is pronounced. The relevant extract from the said Order is reproduced below:

"81.... As per the prayer of OPGC, the Commission hereby allow OPGC to file a separate petition relating to additional capitalisation for the period from the FY 2023-24 to the FY 2024-25 after the APTEL's Judgement is pronounced in the above appeal of OPGC."

- 1.23 In the meantime, the Odisha Electricity Regulatory Commission (Terms and Conditions for Determination for Generation Tariff) Regulations 2024 has been notified in the Gazette on 13.11.2024 by the Hon'ble Commission.
- 1.24 The instant Petition is being filed in line with the Orders outlined above and in terms of the relevant Provisions of the Electricity Act 2003, OERC Conduct of Business Regulations, 2004, OERC Generation Tariff Regulations 2024, the Hon'ble Supreme Court Judgement dated 19.04.2018 in Civil Appeal 9485/2017, PPA dated 13.08.1996, Amended PPA dated 19.12.2012, and other enabling provisions as detailed in the subsequent sections.
- 1.25 The Petition is structured in the following manner:
- Approach for Filing Petition
 - Generation Tariff for FY 2025-26 considering original project cost
 - Summary of Tariff Proposal for FY 2025-26
 - Compliance to Directives
 - Prayers
 - Tariff Formats
 - Annexures



Opinion given separately

2. Approach for Filing Petition

2.1 The instant Petition has been filed for determination of Generation Tariff for FY 2025-26 for IB Thermal Power Station of OPGC Ltd., having installed capacity of 420 MW (2 x 210 MW - Units 1&2), located at Banharpalli in District Jharsuguda.

2.2 Section 86(1) of the Electricity Act, 2003 empowers the State Commission to determine tariff for generation of electricity within the State. The relevant provision of the Act is as under:

“(1) The State Commission shall discharge the following functions, namely:-

(a) determine the tariff for generation, supply, transmission and wheeling of electricity wholesale, bulk or retail, as the case may be, within the State:.....”

2.3 The OERC Conduct of Business Regulations, 2004 provides that the Generating Company shall file an application by 30th November of each year before the Commission for determination of tariff for the sale of energy in the State of Odisha. The relevant provisions from the Regulations are reproduced below:

“61. Generation Tariff:-

.....

(2) the Generating Company may file an application by 30th November of each year to the Commission for determination of tariff for any of the generating station for the sale of energy in the State of Orissa giving the details of the fixed and variable costs associated with the generation and sale of energy from the generating station.

.....

(4) The Commission may determine the tariff for the sale of energy from the Generating Station of a Generating Company...”

2.4 The Odisha Electricity Regulatory Commission (Terms and Conditions for Determination for Generation Tariff) Regulations 2024 provides for filing of Petition for determination of Tariff of OPGC Units #1&2 by 30th November of every year. The relevant extract of the applicable Regulations are reproduced below:

“9 (7) Notwithstanding anything contained above OHPC and OPGC (UNIT-I & II) may make application (in the Format prescribed by the Commission) by November 30th of every year for determination of tariff in respect of their existing generating station as a whole or unit(s) thereof.”

2.5 Considering aforesaid provisions, along with the Hon'ble Supreme Court Judgement dated 19.04.2018 and Govt. of Orissa (“GoO”) Notification No. 7216/E dated



Pranesh Kumar Satepal

21.06.2008, the instant Petition has been filed based on the following agreements entered between the parties:

- a. Bulk Power Supply Agreement between OPGC and GRIDCO, dated 13.08.1996 (“PPA”) and an agreement as Supplemental to Bulk Power Supply Agreement dated 19.12.2012 (“Amended PPA”). Both agreements were approved by the Hon’ble OERC vide its Order dated 27.04.2015.
- b. Tripartite Agreement between OPGC, GRIDCO and Government of Odisha dated 18.10.1998 (“Tripartite Agreement”) and an Agreement as Supplemental to Tripartite Agreement dated 06.09.2012 (“Amended Tripartite Agreement”) which was approved by Hon’ble OERC vide its Order dated 27.04.2015.
- c. Escrow and Security Agreement dated 30.11.1998 entered between OPGC, GRIDCO and Union Bank of India, which was approved by Hon’ble OERC vide its Order dated 27.04.2015.

2.6 In line with the approach adopted in Case No. 112 of 2023, OPGC is filing the instant Petition for approval of Generation Tariff for FY 2025-26 as under:

Tariff components	Considering original project cost as per the Approved Amended PPA
O&M expenses	✓
Depreciation	×
Interest on loans	×
Interest on working capital	✓
Return on Equity	✓
Variable Charges	✓
Other Charges	✓

2.7 It is submitted that the claim of additional components of Annual Fixed Charges towards additional capitalisation for FY 2015-16 to FY 2023-24 and projected additional capitalisation for FY 2024-25 and FY 2025-26 will be claimed by OPGC through a separate Petition based on the outcome of the Appeal No. 335/2021 pending before Hon’ble APTEL.



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3 Generation Tariff for FY 2025-26 considering the original project cost

Computation of Annual Fixed Cost

- 3.1 As discussed in the foregoing paragraphs, the Hon'ble Supreme Court vide its Judgement dated 19.04.2018 has held that primarily the tariff parameters under the PPA and Government Notification dated 21.06.2008 are to be followed in determining OPGC's tariff. Except the cases where the PPA does not encompass specific tariff norms, the Tariff Regulations may be invoked by the Commission to determine OPGC's tariff. Accordingly, OPGC has considered the tariff norms and parameters as per the provisions of PPA.
- 3.2 As per Clause 3.0 of Schedule II of the Amended PPA, the Annual Fixed Cost of OPGC shall consist of the following components:
- a. Depreciation;
 - b. Return on Equity;
 - c. Interest on Loan;
 - d. Operation and Maintenance Expenses;
 - e. Interest on Working Capital.
- 3.3 The computation of each of the above components of the Annual Fixed Cost is detailed in the subsequent paragraphs.

Capital Cost

- 3.4 The Amended PPA signed between OPGC and GRIDCO has considered the Capital Cost of the Project as Rs. 1,060 Crore. It is submitted that while approving the Amended PPA vide Order dated 27.04.2015, Hon'ble OERC also approved the said capital cost of the project. Further, the Hon'ble Commission in its Tariff Order for FY 2024-25 had considered the original capital cost of the project as Rs. 1,060 Crore. In view of the same, OPGC has considered the capital cost of Rs. 1,060 Crore for the purpose of computing tariff applicable for FY 2025-26. This consistent approach aligns with the determinations and approvals previously issued by the Hon'ble Commission.



Harish Kumar Satapathy

Additional Capitalisation

- 3.5 OPGC had claimed the additional capitalisation of Rs. 13.32 Crore, Rs. 20.94 Crore and Rs. 44.11 Crore for FY 2015-16, FY 2016-17 and FY 2017-18 respectively vide Case No. 54 of 2018 respectively. Further, vide Petition in Case No. 69 of 2019, OPGC had claimed the actual additional capitalization of Rs. 43.78 Crore for FY 2018-19. The Case No. 69 of 2019 was disposed of without considering additional capitalisation for FY 2018-19, as it was linked to the Case No 54 of 2018, which was under active consideration of the Commission.
- 3.6 Vide Case No. 71 of 2020, OPGC had claimed the actual additional capitalisation of Rs. 6.41 Crore for FY 2019-20, revised additional capitalisation for FY 2020-21 and projected additional capitalisation for FY 2021-22. However, Hon'ble Commission disposed of the said Petition without considering the additional capitalisation, as Order in Case No 54 of 2018 was reserved by the Commission.
- 3.7 Hon'ble Commission vide order dated 21.05.2021 in Petition No. 54 of 2018 disallowed actual additional capital expenditure for FY 2015-16 to FY 2017-18. Aggrieved by the decision of the Hon'ble Commission, OPGC has filed an Appeal before Hon'ble APTEL on 15.11.2021, which was registered as Appeal No. 335/2021 against this Hon'ble Commission's Order dated 21.05.2021 in Case No. 54 of 2018.
- 3.8 It is submitted that following comprehensive discussions and deliberations with GRIDCO towards Renovation & Modernisation for enhancement of plant life and implementation of FGD and FGC for complying the revised Emission Standards as prescribed by MoEF & CC, OPGC filed a Petition registered as Case No 66 of 2021 for in-principle approval of the Hon'ble OERC. The Hon'ble Commission was pleased to accord in-principle approval for the R&M works and installation of FGD & FGC vide its Order dated 03.11.2021. The relevant extract from the said Order is reproduced below:

"40. ... In view of the above, the Commission accords in-principle approval for the R&M works and installation of FGD and FGC in respect of generating Units-1 & 2 of OPGC thermal power station, based on the submission of



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GRIDCO. However, the Commission is not inclined to approve the proposed capital expenditure of Rs.140 Cr. towards construction of a new ash pond. OPGC should use the existing ash pond and follow the mandate of Govt. of India for 100% ash utilization...” [Emphasis Supplied by underlining]

- 3.9 Considering the practical difficulties being faced for 100% utilisation of Ash by OPGC, a review Petition was filed before Hon’ble Commission for reconsidering construction of a new ash pond commensurate with proposed extended life of the plant which was registered as Case No 99 of 2021. The Hon’ble Commission was pleased to accord in-principle approval to construct a new ash pond. Implementation of the Renovation & Modernisation has been taken up after receiving concurrence from the Board of Directors of OPGC.
- 3.10 In the instant Petition, OPGC has not projected additional capitalisation for FY 2025-26. Based on the outcome of the Appeal filed against the Hon’ble Commission’s Order in Case No. 54 of 2018, OPGC will approach the Hon’ble Commission for approval of actual additional capitalisation for FY 2015-16 to FY 2023-24 and projected additional capitalisation for FY 2024-25 and FY 2025-26 through a separate Petition.

Debt : Equity Ratio

- 3.11 OPGC submits that Hon’ble OERC approved the project cost of Rs. 1060 Crore with equity of Rs. 450 Crore and loan of Rs. 610 Crore while approving the Amended PPA vide Order dated 27.04.2015. Further, the Hon’ble Commission in its Tariff Order for FY 2024-25 has approved the equity of Rs. 450 Crore and loan of Rs. 610 Crore. Hence, OPGC has considered actual debt : equity ratio, as approved in Amended PPA, for the purpose of determining tariff applicable for FY 2025-26.

Depreciation

- 3.12 OPGC submits that Clause 3.0 (a) of Schedule II of the Amended PPA provides that depreciation charges shall be equal to 7.5% of the Capital Cost during the year. Considering the depreciation charges computed as per the provisions of the Amended PPA, the assets corresponding to Original Capital Cost of Units 1&2 of the Generating



Chander Kumar Satapathy

Station are fully depreciated by the financial year ending 31.03.2009. Therefore, OPGC does not submit any claim towards the depreciation for FY 2025-26.

Return on Equity

3.13 OPGC has considered the actual equity of Rs. 450 Crore for computation of Return on Equity. The Clause 8.0 (10) of Schedule II of PPA provides for Return on Equity at the rate of 16%. Further, the Hon'ble Commission in its Tariff Order for FY 2024-25 and also for previous years, has approved the RoE considering the original equity base of Rs. 450 Crore and rate of RoE of 16%. Accordingly, OPGC submits the calculation of Return on Equity for FY 2025-26 as under:

Table 3.1: Return on Equity corresponding to original project cost (Rs. Crore)

Sl.	Particulars	FY 2025-26
1	Actual Equity for Station	450.00
2	Rate of Return on Equity	16.00%
3	Return on Equity	72.00

3.14 OPGC humbly requests the Hon'ble OERC to approve the Return on Equity of Rs. 72.00 Crore for FY 2025-26.

Interest on Loan Capital

3.15 OPGC submits that Clause 8.0 (7) and (11) of Schedule II of the Amended PPA provides the loan amount of Rs. 610 Crore and the interest on loan is to be calculated based on actuals. Considering the actual repayment made against the outstanding loan, OPGC submits that loan amount of Rs. 610 Crore has been fully repaid by financial year ending 31.03.2012. In view of the same, OPGC does not submit any claim towards the Interest on Loan Capital for FY 2025-26.

O&M Expenses

3.16 OPGC submits that Clause 3.0 (d) and (e) of Schedule II of the Amended PPA outlines the framework for calculation of Operation and Maintenance (O&M) expenses. It specifies that the O&M expenses for 1st year of operation shall be computed at the rate of



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2.50% of the capital cost and the capital cost shall be considered as Rs. 1,030 Crore explicitly for calculation of O&M expense. For subsequent years, these expenses are subject to an annual escalation of 8% per year starting from 01.04.1996. The Hon'ble Commission in its Tariff Order for FY 2024-25 and also for previous years approved the O&M expenses in line with the above stated provision of the approved Amended PPA.

3.17 Accordingly, OPGC submits the O&M Expenses for FY 2025-26 considering the escalation factor of 8% as per the methodology prescribed in Amended PPA as under:

Table 3.2: O&M Expenses for FY 2025-26 (Rs. Crore)

Sl.	Particulars	Legend	FY 2025-26
1	Capital Cost of Project considered for O&M Expenses as per Amended PPA	A	1030.00
2	O&M Expenses for first year @ 2.5% of Capital Cost	$B = A \times 2.5\%$	25.75
3	Escalation rate	C	8.00%
4	O&M Expenses	$D = B \times (1+C)^{29}$	239.92

3.18 OPGC humbly requests the Hon'ble OERC to approve O&M Expenses of Rs. 239.92 Crore for FY 2025-26.

Interest on Working Capital

3.19 The Clause 3.0 (f) of Schedule II of the Amended PPA provides the Interest on working Capital as under:

"f) Interest on Working Capital will be worked out on the following basis on normative level of generation calculated at the rate of interest applicable to OPGC for its Working capital facility as on the fixed charge computation date

- i) Coal cost for 1.5 months
- ii) Oil cost for 2 months
- iii) O&M expenses for 1 month
- iv) Receivables for 2 months"

3.20 As regards the rate of interest, the above said clause stipulates the interest rate applicable to OPGC for its Working Capital facility shall be applicable. As OPGC has started availing working capital from external sources, the actual interest rate for the Working



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Capital facility availed by OPGC in FY 2024-25 as on September 2024 is 8.9%. Therefore, this actual interest rate has been duly taken into consideration for computing Interest on working Capital for FY 2025-26.

- 3.21 Considering the Fuel Price and GCV as claimed in the below paragraphs of this section, OPGC submits the calculation of Interest on Working Capital for FY 2025-26 as under:

Table 3.3: Interest on Working Capital corresponding to original project cost (Rs. Crore)

Sl.	Particulars	FY 2025-26
1	Cost of Coal for one and half months	41.01
2	Cost of Secondary Fuel Oil for two months	9.48
3	O&M Expenses for one month	19.99
4	Receivables equivalent to two months	118.95
5	Total Working Capital Requirement	189.43
6	Interest Rate (%)	8.90%
7	Interest on Working Capital	16.86

- 3.22 OPGC humbly request the Hon'ble OERC to approve the Interest on Working Capital of Rs. 16.86 Crore for FY 2025-26.

Summary of Annual Fixed Cost

- 3.23 The Annual Fixed Cost proposed by OPGC for FY 2025-26 corresponding to the original project cost is summarised as under:

Table 3.4: Annual Fixed Cost corresponding to original project cost (Rs. Crore)

Particulars	FY 2025-26
Depreciation	0.00
Return on Equity	72.00
Interest on Loan Capital	0.00
O&M Expenses	239.92
Interest on Working Capital	16.86
Total Annual Fixed Cost	328.78



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3.24 OPGC humbly requests the Hon'ble OERC to kindly approve Annual Fixed Cost of Rs. 328.78 Crore corresponding to original project cost for FY 2025-26.

Operational Performance Parameters

3.25 As discussed earlier, the Hon'ble SC vide its Judgement dated 19.04.2018 has established that primarily the tariff norms under the PPA are to be followed in determining OPGC's tariff. Accordingly, OPGC has considered the operational performance parameters as per the provisions of PPA.

3.26 OPGC in Amended PPA signed with GRIDCO has agreed upon operational performance parameters. For computation of variable charges for FY 2025-26, the operational performance parameters as per Clause 8 of Schedule II of the approved Amended PPA has been considered. OPGC has considered the following Operational Performance parameters:

- a. Normative Availability
- b. Plant Load Factor (PLF)
- c. Gross Station Heat Rate
- d. Specific Oil Consumption
- e. Auxiliary Energy Consumption

Normative Availability

3.27 As per Clause 3.0 (g) of Schedule II of the Amended PPA, full Fixed Charges will be paid on achievement of Normative Availability of 68.49%.

Plant Load Factor (PLF)

3.28 As per Clause 3.0 (g) of Schedule II of the Amended PPA, the interest on working capital shall be worked out considering normative level of generation. Accordingly, OPGC has considered the PLF of 68.49%, equal to the Normative Availability for computing the coal cost, oil cost and receivables in the computation of interest on working capital.

3.29 As per Clause 3.0 (g) of Schedule II of the Amended PPA, the PLF applicable for computation of incentive shall be 80.00%. As per the generation plan submitted to



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GRIDCO, the ex-bus generation projected for FY 2025-26 is 2,764.07 MU which corresponds to gross PLF of 84.37%. Incentive for higher PLF for FY 2025-26 shall be claimed in accordance with the provisions of the Amended PPA.

3.30 **Gross Station Heat Rate:** Gross Station Heat Rate of 2,500 kCal/kWh has been considered as per Clause 8 of Schedule II of the approved Amended PPA.

3.31 **Specific Oil Consumption:** Specific Oil Consumption of 3.50 ml/kWh has been considered as per Clause 8 of Schedule II of the approved Amended PPA.

3.32 **Auxiliary Energy Consumption:** Auxiliary Energy Consumption of 9.50% has been considered as per Clause 8 of Schedule II of the approved Amended PPA.

3.33 The Operational Performance parameters considered by OPGC are summarised as under:

Table 3.5: Operational Performance Parameters for FY 2025-26

Sl.	Particulars	Unit	FY 2025-26
1	Normative Availability	%	68.49%
2	Target PLF for incentive	%	80.00%
3	Auxiliary Consumption	%	9.50%
4	Station Heat Rate	kcal/kWh	2,500
5	Specific Oil Consumption	ml/ kWh	3.50

Fuel Prices and GCV

3.34 During FY 2025-26, the coal requirement for OPGC Units 1&2 is proposed to be met from coal supply under existing FSA with Mahanadi Coal Fields Limited ("MCL") from Lakhanpur mines and Addendum Agreement to FSA with Odisha Coal and Power Limited ("OCPL") from Manoharpur mines.

3.35 Clause 7.0 of Schedule II of the existing PPA provides the methodology for computation of Fuel Cost. It provides that the Price and Gross Calorific Value of coal and oil shall be considered as delivered to the Power Station for computation of Fuel Cost. Further, proviso to Clause 9 of Schedule II of the PPA reads as follows:

"The above monthly fuel price adjustment shall be consolidated at the end of the financial year and certified by the Statutory Auditor. These prices and GCV



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for oil and coal for one year shall be weighted averages (base) for the next year."

3.36 Hon'ble Commission vide its Order dated 28.10.2020 in Case No. 43 of 2017 on the Petition filed by OPGC regarding the dispute on Gross Calorific Value of coal to be considered for tariff has ruled as under:

"13. We carefully heard the arguments and rival arguments of all the parties including opinions of experts. The bone of contention in this case is related to the calculation of Energy Charge Rate (ECR) of the power procured by GRIDCO from OPGC. After longstanding dispute in this matter, the Commission had finally redetermined the tariff for Unit-I and II of the petitioner vide case No.33 of 2018 dt.28.03.2019 for FY 2016-17, FY 2017-18 and FY 2018-19 pursuant to the judgment of the Hon'ble Supreme court of India dated 19.04.2018 in Civil Appeal No. 9485 of 2017. The Commission in the said order had directed as follows:

Directives of the Commission:

"40. The recovery of monthly Capacity Charges as approved by the Commission here shall be made as per the methodology stipulated in the PPA and GRIDCO Ltd. shall make payment after prudence check.

41. The operational norms like Auxiliary Consumption, Gross Station Heat Rate, and Consumption of Oil as indicated in Clause 8 of Schedule-II of the PPA and Price and GCV of Oil and Coal actually delivered to the power station as per Clause 7 of Schedule-II of the PPA shall be considered. Accordingly claims of monthly Energy Charges shall be made by OPGC and GRIDCO Ltd. shall make payment after prudence check of all parameters of energy charges like GCV and price of Coal & Oil etc."

The capacity charge and energy charge are to be computed as per the above order of the Commission.

14. Heat energy contents of the coal and oil are converted to electrical energy in the power station. Heat energy content of the coal per kilogram varies at different points starting from the time of its mining till its firing in the furnace due to addition and release of moisture and other impurities during its handling. PPA between the parties at clause-7 of Schedule-II specifies that Gross Calorific Value of the coal and oil shall be determined "as delivered to the power station". It is understood from the submission of the experts and parties that the GCV of coal is measured at mines end by a third party agency named CIMFR on "equilibrated method". This is done to arrive at a standardized pricing of coal of a particular grade. But the heat energy available in the power station from the coal depends upon moisture content and other



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impurities. Therefore, GCV of coal measured at equilibrated method requires moisture correction for determination of heat content available for energy conversion. Therefore, if we apply a moisture correction formula on "as billed" GCV which is determined on equilibrated method, we can arrive at GCV on total moisture basis. CERC in petition No.279/GT/2014 dated 30.07.2016 has also adopted this method. This is because the measurement of GCV on total moisture basis at power station end is the practice generally followed by the industry and it determines the volume of coal the power station requires to generate a particular quantity of energy.

GCV of coal as delivered to the power station (total moisture basis)

$$= GCV \times \frac{(1 - TM)}{(1 - IM)}$$

Where:

GCV= Gross Calorific value of coal as billed by coal supplier

TM= Total moisture as per CIMFR report

IM= Inherent moisture as per CIMFR report

The above formula should form the basis of calculation of GCV of coal on "as delivered basis" for computation of energy charge. The above formula shall take care of total moisture in calculation of GCV which is the prevalent industry practice."

3.37 OPGC has filed Appeal No. 189 of 2020 before the Hon'ble APTEL against this Hon'ble Commission's Order dated 28.10.2020 in Case No. 43 of 2017 on the GCV of Coal to be considered for computation of Energy Charge Rate. Pleadings have been completed in the Appeal No. 189 of 2020 and Hon'ble APTEL vide its daily order dated 15.09.2023 has instructed for inclusion of the Appeal in the "List of Finals" to be taken up in its due course for further proceedings.

3.38 In line with the Judgement of the Hon'ble Supreme Court of India dated 18.04.2018 in Civil Appeal No. 9485 of 2017, variable costs for OPGC are to be determined as per the PPA. As per the provision of PPA, the GCV of Oil and Coal is to be considered as actually delivered to the power station.

3.39 Since May 2017, the declared grade of Coal of Lakhanpur mines as notified by MCL was G-14. However, MCL revised the declared grade of Coal of Lakhanpur mines in November 2023 (**Annexure-1**) from G-14 to G-12. It is pertinent to mention here that



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actual coal received from Lakhanpur Mines were of G-14 grade coal against the declared G-12 grade coal. Considering OPGC's request and actual quality of coal received from Lakhanpur Mines, MCL vide its letter dated 08.05.2024 (**Annexure-2**) has revised back declared grade of coal of Lakhanpur (Lajkura) mines from G-12 to G-14 for FY 2024-25 effective from 10.05.2024.

3.40 Further, it may be noted that the coal production in OCPL mine has exceeded the requirement for OPGC's Units-3&4. Consequently, OCPL proposed OPGC to utilize a portion of this surplus coal in Units-1&2 in addition to Units-3&4 subject to the approval of Ministry of Coal, Govt. of India. The current annual coal requirement of Units-1&2 is approximately 2.7 MT which is being sourced through long term coal linkage from MCL coal mines, in accordance with the executed FSA between OPGC and MCL, which is valid till FY 2029. Given the availability of coal from OCPL mines and MGR capacity, it was envisaged to source 50% of the annual requirement for Units-1&2 i.e. 1.35 MT from OCPL. In response to the proposal of OPGC, GRIDCO vide its letter No. 191(3) dated 29.11.2023 (**Annexure-3**) accorded its in-principle consent for sourcing of coal from OCPL for use in Units-1&2 with the condition that input price of coal from OCPL would not exceed the price of linkage coal availed from MCL. The above matter was further deliberated in the meeting held on 31.01.2024 under the Chairmanship of Principal Secretary, Department of Energy, Govt. of Odisha. During the meeting, OCPL intimated that GCV based landed / delivered coal cost at OPGC is lower for OCPL coal compared to MCL coal due to better quality of coal being supplied by OCPL. Also, the input price of coal from OCPL is expected to decrease with increase in its coal production.

3.41 After detailed discussion, it was agreed that OCPL would consider the MCL price for billing to OPGC against the coal to be used in Units-1&2 with price adjustments subject to determination of the input price of coal by the Hon'ble Commission, with effect from the date of supply. OCPL further agreed to coordinating with the Ministry of Coal to secure the necessary permissions for using OCPL coal in Units-1&2, and for making the necessary adjustments in the Annual Contracted Quantity (ACQ) with MCL. It was also agreed that a supplementary FSA would be executed between OPGC and OCPL in this regard. The minutes of meeting held on 31.01.2024, capturing the above deliberations,

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were communicated to OPGC by the Department of Energy, Govt. of Odisha vide letter no. 2268 dated 29.02.2024 (**Annexure-4**).

3.42 In response to OCPL's request to designate Units-1&2 as specified end-use plants vide letter dated 19.10.2022 and 05.01.2023, the Ministry of Coal, Govt. of India provided its consent through letter no. 103/25/2015/NA dated 25.01.2023 (**Annexure-5**) with the condition that a diversion notice be provided and prescribed procedures be followed. Accordingly, OCPL vide its letter no. 837 dated 01.03.2024 (**Annexure-6**) submitted a diversion notice for 1.35 MTPA to the Ministry of Coal. The balance requirement of 1.35 MTPA is to be met from MCL mines. In the same letter, OCPL requested the Ministry of Coal to instruct MCL to reduce the ACQ to 1.35 MTPA by amending the existing FSA with OPGC, thereby accommodating the proposed diversion without imposing any penalties on OPGC.

3.43 Further, to OCPL's request, the Ministry of Coal vide its letter dated 20.03.2024 (**Annexure-7**) approved supply of 1.35 MTPA coal from OCPL's Manoharpur coal mine to Units-1&2. Subsequently, pursuant to the Clause 21.12 of the FSA dated 31.03.2022 executed between OCPL and OPGC for Units 3&4, a supplementary FSA was executed between OCPL and OPGC on 18.05.2024 (**Annexure-8**) for the supply of coal from the OCPL mines to end use plants of OPGC Units-1&2 effective till 31.03.2030. On the other hand, MCL vide its letter no. 677 dated 10.09.2024 (**Annexure-9**) has confirmed OPGC regarding reduction of ACQ from 2.7 MT to 1.158 MT for FY 2024-25. OCPL has already commenced its supply of coal since June, 2024. Presently, coal sourced from both MCL and OCPL is being used for generation of power from OPGC Units 1&2.

3.44 Pending disposal of the Appeal No 189/2020 by the Hon'ble APTEL and without prejudice to OPGC's rights under law and contentions taken in Appeal No 189/2020, OPGC has considered the GCV of coal as mandated by Hon'ble OERC in its Order dated 28.10.2020 in Case No 43/2017 and GCV of oil as actually delivered to the power station for the computation of energy charges.

3.45 Further, as the instant Petition for tariff determination for FY 2025-26 is being filed before the end of the current year FY 2024-25, it is not possible to provide the auditor



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certified value of delivered price and GCV of oil and coal for the whole year, as part of the tariff submissions. Therefore, the actual delivered fuel prices and GCV of oil and coal for the period from April to September 2024, has been considered for the purpose of computation of tariff in the instant Petition, based on the auditor certified Half Yearly Fuel Price Adjustment Bill raised on 11.11.2024 by OPGC to GRIDCO. The copy of the Half Yearly Fuel Price Adjustment Bill for the period April to September 2024 is enclosed at **Annexure-10**. Further, the weighted average price of Secondary Fuel Oil has been considered in the ratio of 90:10 for HFO and LDO as per the provisions of the Amended PPA.

- 3.46 The detailed calculation of the Weighted Average GCV of Coal considered for computation of base Energy Charge Rate based on the methodology and formula provided at Para 14 of Hon'ble OERC Order dated 28.10.2020 in Case No. 43/2017 is presented below:

Table 3.6: Gross Calorific Value of Coal (kCal/Kg)

Month	Source	Quantity of Coal as Received (MT)	GCV of Coal (kCal/Kg.)
Apr-24	MCL	2,79,192	3,203.37
May-24	MCL	3,53,730	3,251.03
Jun-24	MCL+OCPL	3,43,502	3,225.99
Jul-24	MCL+OCPL	3,63,785	3,110.21
Aug-24	MCL+OCPL	3,57,752	3,148.35
Sep-24	MCL+OCPL	3,72,924	3,339.20
	Total	20,70,885	3,213.85

- 3.47 Accordingly, GCV and Price of Coal and Oil considered for tariff computation is summarised below:

Table 3.7: Price and Gross Calorific Value of Coal and Oil

Sl.	Particulars	Unit	Base for FY 2025-26
1	Price of Coal	Rs./MT	1,697.31
2	Price of LDO	Rs./kL	81,711.23
3	Price of HFO	Rs./kL	62,584.89
4	Gross Calorific Value of Coal	kcal/kg	3,213.85
5	Gross Calorific value of LDO	kcal/ltr	10,000.00
6	Gross Calorific value of HFO	kcal/ltr	10,000.00



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Energy Charge

3.48 OPGC has computed base Energy Charge Rate/Variable Charge for FY 2025-26 as per Clause 7.0 of Schedule II of the Amended PPA. The computation of base Energy Charge Rate for FY 2025-26 is given in the Table below:

Table 3.8: Energy Charge for 2025-26

Particulars	Unit	FY 2025-26
Auxiliary Consumption	%	9.50%
Gross Station Heat Rate	kCal/kWh	2,500.00
GCV of Coal	kCal/kg	3,213.85
GCV of Oil (LDO)	kCal/ltr	10,000.00
GCV of Oil (HFO)	kCal/ltr	10,000.00
Specific Coal Consumption	kg/kWh	0.77
Specific Oil Consumption-LDO	ml/kWh	0.35
Specific Oil Consumption-HFO	ml/kWh	3.15
Price of Coal	Rs./MT	1,697.31
Price of Secondary Oil-LDO	Rs./ kL	81,711.23
Price of Secondary Oil-HFO	Rs./ kL	62,584.89
Variable Charges per kWh (base value)	Paisa/kWh	168.79

3.49 OPGC humbly requests the Hon'ble Commission to approve base Energy Charge/Variable Charge Rate of 168.79 Paisa/kWh for FY 2025-26. Any variation in actual variable charges during the year on account of fuel prices and calorific value will be claimed through Fuel Price Adjustment in supplementary bills on half yearly basis as per the provisions of PPA.

Reimbursement of other charges

3.50 Clause 10.0 of the approved Amended PPA explicitly articulates that the tariff specified therein is exclusive of any statutory taxes, levies, duties, cess, or any other form of imposition imposed or charged by any governmental authority, be it at the Central, State, or local level. For reference, the pertinent clause of the PPA is reproduced below:

"10.0 LEVIES, TAXES, DUTIES, CESS ETC.:

The above tariff is exclusive of any statutory taxes, levies, duties, cess or any other kind of imposition(s) whatsoever imposed/charged by any Government (Central/State) and/or any other local bodies/authorities on generation of



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electricity including auxiliary consumption or any other type of consumption, transmission, sale or on supply of power/energy and/or in respect of any of its installations associated with Generating Stations and/or on Transmission System, Environmental Protection, Water etc. However, electricity duty payable on energy drawn by OPGC if any shall be payable by OPGC and reimbursed by GRIDCO."

3.51 Further, Clause 11.0 (vii) of the approved Amended PPA stipulates that Supplementary bills will be raised for Fuel Price Adjustment, Incentive / Disincentive, Income Tax and for any other charges / taxes etc. The relevant extract from the Amended PPA is reproduced below for reference:

"vii) Supplementary bills will be raised for the following.

- a) Fuel price adjustment on half yearly basis*
- b) Incentive/disincentive at the end of year*
- c) Income Tax as per actual to be reimbursed as detailed in Para-6.0 of schedule – II*
- d) Any other charges/taxes etc."*

3.52 Accordingly, OPGC claims the following other charges for FY 2025-26 considering either the projected figures for the year or the actual figures of FY 2023-24 and rationale detailed in subsequent section:

- a. Electricity Duty
- b. Water Cess and Water Charges
- c. Tax and Cess on Land
- d. System Operation Charges (SOC) & Market Operation Charges (MOC) for SLDC
- e. ERPC Charges
- f. Annual inspection fees
- g. Income Tax
- h. Recovery of ARR & Tariff Petition Fee and Publication Expenses
- i. Expenses towards Ash Transportation and Other expenses for Ash Utilisation
- j. Energy Compensation Charges
- k. Contribution to Water Conservation Fund, Odisha

3.53 **Electricity Duty:** Electricity Duty is payable on the actual auxiliary consumption of the generating station which is presently governed by a rate of Rs. 0.55/kWh. OPGC has

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furnished the generation plan for FY 2025-26 to GRIDCO wherein the gross generation has been projected as 3104.14 MU. Pursuant to a mutual understanding articulated in a prior arbitral tribunal proceeding in 2004, both parties, OPGC and GRIDCO, concurred to consider an auxiliary consumption rate of 9.00% for the express purpose of Electricity Duty reimbursement. Accordingly, considering the projected generation and the auxiliary consumption of 9.00% (for the purpose of re-imbursement of Electricity Duty), the Electricity Duty for FY 2025-26 has been projected as Rs. 15.37 Crore.

Table 3.9: Energy Duty for 2025-26

Particulars	Unit	Value
Installed Capacity	MW	420
Projected Availability	%	84.37%
Gross generation	MU	3104.14
Auxiliary consumption at 9.0%	MU	279.37
Rate of Electricity Duty	Rs./kWh	0.55
Electricity Duty	Rs. Cr.	15.37

- 3.54 OPGC requests the Hon'ble Commission to kindly consider Rs. 15.37 Crore as provisional amount of ED while determining the tariff for FY 2025-26. The actual Electricity Duty payable shall be billed in accordance with the provisions of the approved Amended PPA.
- 3.55 **Water Cess and Water Charges:** Water Cess and Water Charges are being paid to Department of Water Resources, Government of Odisha on the basis of water allocated for OPGC Units #1&2 and the rate fixed by the Government. OPGC claims the Water Cess and Water Charges of Rs. 11.01 Crore which is actually incurred in FY 2023-24 and paid to the Department of Water Resources, Government of Odisha and reimbursable by GRIDCO.
- 3.56 **Tax and Cess on land:** OPGC claims the tax and cess on land of Rs. 0.25 Crore for the FY 2025-26 based on the amount actually incurred and reimbursed by GRIDCO in FY 2023-24. OPGC requests the Hon'ble Commission to kindly allow for reimbursement of the claimed amount during FY 2025-26 from GRIDCO.



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- 3.57 **System Operation Charges (SOC) & Market Operation Charges (MOC) for SLDC:** OPGC claims the amount of Rs. 0.49 Crore (@ Rs. 11,598.654/MW/year) towards charges to be paid to SLDC for SOC and MOC, on the basis of Tariff Order issued by Hon'ble Commission for SLDC for FY 2024-25. OPGC requests the Hon'ble Commission to kindly allow for reimbursement of the claimed amount during FY 2025-26 from GRIDCO.
- 3.58 **ERPC Charges:** OPGC claims the ERPC Charges of Rs. 0.16 Crore, as actually incurred and reimbursed by GRIDCO during FY 2023-24 and requests the Hon'ble Commission to kindly allow for reimbursement of the claimed amount during FY 2025-26 from GRIDCO.
- 3.59 **Annual inspection fees:** OPGC claims the annual inspection fees of Rs. 0.44 Crore, which includes Annual Electrical Inspection fee, Annual Boiler Inspection / Renewal of License fees, Consent to Operate fees etc on the basis of the amount actually incurred during FY 2024-25 up to September 2024. OPGC requests the Hon'ble Commission to kindly allow for reimbursement of the claimed amount during FY 2025-26 from GRIDCO.
- 3.60 **Income Tax:** OPGC claims the income tax of Rs. 24.22 Crore considering the Return on Equity of Rs. 72.00 Crore corresponding to the original capital cost and the applicable tax rate of 25.17% estimated for AY 2025-26. However, the actual income tax payable by OPGC for FY 2025-26 will depend upon several factors and the actual income tax paid shall be billed to GRIDCO for reimbursement. OPGC requests the Hon'ble Commission to kindly allow for reimbursement of the claimed amount during FY 2025-26 from GRIDCO.
- 3.61 **Recovery of ARR & Tariff Petition Filing Fee and Publication Expenses:** OPGC claims the provisional amount of Rs. 0.30 Crore towards recovery of ARR & Tariff Petition Filing Fee and Publication Expenses. OPGC requests the Hon'ble Commission to kindly allow for reimbursement of the claimed amount during FY 2025-26 from GRIDCO.

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3.62 **Ash Transportation and Other Ash Utilisation Expenses:** In terms of the Ministry of Environment and Forests (MoEF) Notification dated 25.01.2016 (the "**2016 Notification**") coal based thermal power plants are obligated to share the financial burden of transporting fly ash to user agencies as per the cost-sharing mechanism stipulated therein. Furthermore, to ensure 100% utilisation of fly ash generated by the coal based thermal power plants, the Central Government reviewed the existing Notifications and has introduced environmental compensation mechanism vide the MoEF Notification dated 31.12.2021 (**2021 Notification**). The 2021 Notification enforces rigorous measures to guarantee full fly ash utilization, setting clear deadlines, distinct obligations for thermal power generators and user agencies, and penalties through environmental compensation for non-adherence. The 2016 and 2021 Notifications are attached to this Petition as **Annexure-11** (Colly).

3.63 The expenses being statutory in nature, OPGC had filed a Petition (Case No. 99/2023) before the Hon'ble Commission, for the recovery of Rs. 4.44 Crore incurred towards Ash transport and Other Ash Utilisation Expenses between FY 2016-17 and FY 2022-23 for OPGC Units 1 & 2. The Hon'ble Commission was pleased to approve an amount of Rs. 4,43,74,498/- towards ash transportation and utilization expenses from FY 2016-17 to FY 2022-23 for OPGC Units 1&2. The relevant excerpt from the Order is reproduced below:

"In regards to the claim made by OPGC in Case no. 99 of 2023, it is observed that the reimbursement of Ash Transportation and Utilization expenses form a part of the PPA and therefore the Commission believes that such expenses should be reimbursed by GRIDCO in line with the provisions of the PPA. Moreover, such expenses are also mandated by MoEF in their Notifications dated 31.12.2021 and 25.01.2016. Accordingly, the Commission approves an amount of Rs 4,43,74,498/- towards ash transportation and utilization expenses from FY 2016-17 to FY 2022-23 for OPGC Units 1 & 2. Similarly, the Commission provisionally approves an amount of Rs 9,17,65,050/- as against Rs 12,23,53,400/- towards ash transportation and utilization expenses considering the contracted capacity of 75% for FY 2021-22 to FY 2022-23 for OPGC Units 3 & 4. The same shall be considered in the ARR of GRIDCO for the FY 2024-25 as pass through. However, GRIDCO shall reimburse the expenses after prudent check based on supporting documents certified by Statutory Auditors which shall be provided by OPGC to GRIDCO as and when required. In future years, such Ash transportation and utilization expenses shall be claimed by OPGC as a



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part of year end charges and the same shall be reimbursed by GRIDCO after prudent check based on relevant supporting documents."

- 3.64 Importantly, Clause 10.0 of PPA-1 expressly allows recovery of the charges on account of any imposition whatsoever by any Government (Central/State) and/or local authority through reimbursement. The expenses incurred by OPGC towards ash transportation subsidy and other ash utilisation expenses on account of ash utilisation mandated by the Central Government through the MoEF Notifications is of statutory nature and creates an absolute binding obligation on the Petitioner to pay/ subsidise fly ash transportation charges and bear other ash utilisation charges. Utilisation of ash produced from OPGC Units 1&2 and expenses incurred for the last five years is provided in table below.

Table 3.10: Ash Utilization & Expenses for Units-1&2

FY	Ash Produced (MT)	Ash Utilized (MT)	% of Ash Utilized	Expenses Incurred (Rs)	Amount Reimbursed (Rs)
2023-24	9,43,693	372894	39.51	87,57,580	.*
2022-23	11,50,353	4,64,849	40.41	38,11,895	38,11,895
2021-22	11,64,864	4,03,200	34.61	39,07,540	39,07,540
2020-21	10,96,385	7,30,990	66.67	67,30,498	67,30,498
2019-20	9,39,201	6,24,595	66.50	74,27,685	74,27,685

* Expenses claimed for reimbursement is under process at GRIDCO end

- 3.65 In continuous endeavour to improve ash utilisation for Units 1&2, the targeted ash utilisation and associated expenses for FY 2024-25 and FY 2025-26 is given in the Table below.

Table 3.11: Ash Utilization & Expenses for Units-1&2

FY	Projected Ash Production (MT)	Targeted Ash Utilisation (MT)	% Targeted of Ash Utilized	Expenses to be Incurred (Rs)	Amount Reimbursed (Rs)
2025-26	10,80,000	8,19,600	75.89	59,93,68,000	0
2024-25	11,13,620	4,30,226	38.63	28,77,82,000	0



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3.66 Considering proposed ash utilisation and its estimated expense to be incurred during FY 2025-26, OPGC has claimed Rs. 59.94 Crore towards ash transportation and utilisation expenses during FY 2025-26. However, it is humbly requested to allow reimbursement of the actual amount incurred towards Ash Transportation and Other Ash Utilisation Expenses during FY 2025-26 from GRIDCO.

3.67 **Energy Compensation Charge (ECC):** In addition to the regular Water Cess and Water Charges being paid to WRD, Govt. of Odisha, as per the Government of Odisha letter No. 6140 dated 31.07.2012 (Copy of letter attached as **Annexure-12**), OPGC is required to pay additional charges to OHPC for drawl of water in the form of Energy Compensation Charge (ECC). However, the Hon'ble Commission in Para 80 (C) of the Order dated 13.02.2024 has not allowed any amount towards ECC for FY 2024-25 in absence of actual payment to OHPC during FY 2022-23. Hon'ble OERC further opined that ECC shall be reimbursed by GRIDCO on the basis of actual payment made and claimed by OPGC for FY 2024-25.

3.68 OPGC is continuously pursuing the matter with the Water Resources Department, Government of Odisha to waive the penalty along with interest, which is under its active consideration and till date the matter has not been resolved. Pending resolution of the request, OPGC has not made any payment towards ECC to OHPC in FY 2023-24 and so far in FY 2024-25. Therefore, no amount has been considered towards ECC while projecting other costs for FY 2025-26. However, OPGC requests the Hon'ble Commission to kindly allow for reimbursement of such amount, if any, paid during FY 2025-26.

3.69 **Reimbursement of contribution towards Water Conservation Fund (WCF):** As per the Resolution of Department of Water Resources, Government of Odisha, dated 18.05.2015 (Copy attached as **Annexure-13**), OPGC is required to contribute an amount of Rs 30.65 Crore ($12.26 \text{ Cusec} \times 2.5 \text{ Crore/Cusec}$) towards creation of Water Conservation Fund. Further, as per the Resolution of Department of Water Resources, Government of Odisha, dated 03.11.2015 (Copy attached as **Annexure-14**), the Government has provided the facility to industries to deposit their contribution to the Water Conservation Fund in five equal annual instalments. As the facility of making this

opinion given satisfactorily



payment is available in five equal annual instalments, OPGC claimed for reimbursement of an amount of Rs 6.13 Crore in FY 2022-23 towards contribution to Water Conservation Fund so as to make payment in five annual instalments to reduce the burden to be passed on in tariff.

3.70 Considering OPGC's request for reimbursement of the charges of Rs. 6.13 Crore towards water conservation fund, the Hon'ble Commission in its Tariff Order for FY 2022-23 in Case No 104 of 2021 provisionally allowed reimbursement of Rs 6.13 Crore by GRIDCO towards WCF during 2022-23 subject to verification of supporting documents.

3.71 In similar lines, against OPGC's claim for reimbursement of an amount of Rs 6.13 Crore in FY 2023-24 and FY 2024-25 towards contribution to Water Conservation Fund, Hon'ble Commission was not inclined to approve any amount towards contribution of WCF for the respective years as no payment were made by OPGC in the previous year. However, the Hon'ble Commission was kind enough to allow reimbursement of the same by GRIDCO on the basis of actual payment made and claimed by OPGC during the year. The Petitioner OPGC has not made any payment towards WCF in FY 2023-24. Therefore, no amount has been considered towards WCF for FY 2025-26. However, OPGC requests the Hon'ble Commission to kindly allow for reimbursement of such amount, if any, paid during FY 2025-26.

3.72 Accordingly, the other charges claimed by OPGC for FY 2025-26 is as shown in the Table given below:

Table 3.12: Other Charges corresponding to the original project cost (Rs. Crore)

Sl.	Particulars	FY 2025-26
1	Electricity Duty	15.37
2	Water Cess and Water Charges	11.01
3	Tax and Cess on land	0.25
4	SOC and MOC for SLDC	0.49
5	ERPC Charges	0.16
6	Annual inspection fees	0.44
7	Income Tax	24.22
8	Recovery of ARR & Tariff Petition Fee	0.30
9	Ash Utilisation Expenses including Transportation Charges	59.94



Petition for determination of Tariff of Units 1&2 for FY 25-26

Haven Kumar Satepati

Sl.	Particulars	FY 2025-26
	Total	112.17

3.73 OPGC requests the Hon'ble Commission to provisionally approve the other charges of Rs. 112.17 Crore. OPGC further requests the Hon'ble Commission to kindly direct GRIDCO Ltd. for reimbursement of the other charges incurred during FY 2025-26 on actual basis.

3.74 The Audited Accounts of OPGC for FY 2023-24 is enclosed as **Annexure-11**.



Hareem Kumar Sathapathy

4. Summary of Tariff Proposal for FY 2025-26

4.1 Based on the above, the summary of Tariff Proposal for FY 2025-26 is as shown in the Table below:

Table 4.1: Summary of Tariff Proposal for FY 2025-26

Particulars	Units	FY 2025-26
Depreciation	Rs. Crore	0.00
Return on Equity	Rs. Crore	72.00
Interest on loan	Rs. Crore	0.00
O&M expenses	Rs. Crore	239.92
Interest on working capital	Rs. Crore	16.86
Total Annual Fixed Cost	Rs. Crore	328.78
Variable Charges per kWh	Paisa/kWh	168.79

4.2 The summary of other charges for FY 2025-26 is as shown in the Table below:

Table 4.2: Other Charges for FY 2025-26

Particulars	Units	FY 2025-26
Other Charges	Rs. Crore	112.17



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5. Compliance to Directives

5.1 The compliance status of the directions of the Hon'ble Commission given in the Tariff Order dated 13.02.2024 for FY 2024-25 is submitted herewith for kind consideration of the Hon'ble Commission.

5.2 Status of new Ash Pond

Commission's Directive: OPGC to submit status of new ash pond that has been approved by the Commission in Case No. 99 of 2021 including the status of FGD and FGC implementation.

OPGC's Response: Currently, ash slurry from OPGC-I operations is discharged into Ash Pond C, where ash levels have reached approximately 207.5 m RL. Efforts are underway to raise the embankment from 208.0 m to 211.0 m RL. The operational life of this pond is expected to be exhausted by December 2026. Accordingly, steps for land acquisition for the construction of a new Ash Pond D have been initiated to ensure continuity of disposal capacity. Socio economic Impact Assessment survey (SIA) study has been completed by Nabakrushna Choudhary Centre for Development Studies. Subsequently, Public hearing for Ash Pond-D has been conducted successfully in March 2024. At present, Land valuation process is under progress and it is expected to get the possession of the land by June 2025.

Simultaneously, Ash Pond A is undergoing embankment elevation from 208.0 m to 211.0 m RL. Upon completion, it will be designated solely for dry ash filling, with ash transported from Pond C to facilitate ongoing capacity management.

Status of FGD and FGC implementation : Approval from the Hon'ble Commission has been obtained to proceed with the installation of FGD and FGC. Thereafter, a comprehensive feasibility study has been conducted by an external consultant, and a detailed technical specification and scope document has been prepared for tendering. However, further tendering process has been put on hold on account of the recommendations from CSIR-NEERI regarding the installation of Flue Gas



Harish Kumar Satapathy

Desulfurization (FGD) systems (File No: I-22/2/61/2020-P&E dated 24.09.2024), (Annexure-12).

5.3 Report on Collapse of Ash Pond-C

Commission's Directive: *The Commission takes a note of the explosion of Ash Pond-C and directs OPGC to submit report including reasons for such explosion, quantum of generation disruption, impact on livestock/ humans/ environment/ spillage in surrounding areas, financial impact due to such explosion, and the steps taken in the aftermath for safe ash disposal.*

OPGC's Response: The Ash Pond C dyke for a length of ~40 meter was breached on 09.12.2023 at 08:30 hrs. which was accidental and happened unexpectedly and without any prior indication/warning. Due to the sudden breach of ash dyke, around 6.0 lakh MT ash spilled from the live ash pond (Ash Pond C) and flown to neighboring land. The spilled ash was evacuated and dumped back into Ash Pond C. The restoration work of Ash Pond C was completed on 02.05.2024.

The collapse led to disruption in immediate generation and resulted in loss of generation of approximately 195 MU and down time of Unit 1&2 of 924 Hrs. However, swift action was taken to mitigate the downtime, and generation from Unit 1&2 was resumed on 1st and 6th Jan 2024 respectively.

No casualties or injuries to Humans and adverse effects on live stock in the surrounding areas on account of this accident has been reported. Precautionary safety measures were put in place, and the affected area was evacuated immediately. There was a minimal environmental impact as the spillage ash was contained by constructing a coffer bund away from the Hirakud reservoir and emergency protocols were promptly activated to prevent any spread to surrounding areas.

Financial Impact:

The loss of generation due to breach of Ash Pond-C has resulted in under recovery of the capacity charge of Rs 1.56 Cr for FY 23-24. OPGC has expensed Rs. 32.23 Cr towards restoration of breached pond, crop compensation and other miscellaneous activities due to breach of Ash Pond-C. The same Ash Pond has been taken into service



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in April 2024. The cost incurred towards restoration of Ash Pond-C has been claimed under insurance. Presently, the claim settlement activity is under progress.

OPGC is committed to maintain the highest safety standards and to minimize any adverse impacts arising from this incident. Immediate measures were taken to ensure the safe disposal of ash, including enhanced monitoring of the ash pond and additional ash management protocols were put in place. OPGC has endeavoured to enhance ash utilisation. Preventive maintenance and inspection schedules have been intensified to avoid any recurrence of such incidents. The Ash dyke has been further strengthened by

- a. Installation of geo-composite drains;
- b. Providing rock toe at each bund height raising
- c. Compacted dry ash filling on the upstream side (up to 50 meters) away from the bunds

5.4 Initiatives on utilization of Renewable Energy for reduction of carbon footprint and preparedness to meet the RGO

Commission's Directive: *OPGC shall intimate initiatives taken on utilization of renewable energy for reduction of carbon footprint and Renewable Generation Obligation (RGO), if imposed. OPGC shall submit the present status of such renewable energy projects and preparedness to meet the RGO, if imposed.*

OPGC's Response: OPGC has been endeavouring in adopting sustainable energy practices to reduce its carbon footprint. The initiatives taken and the present status of renewable energy projects for reduction of carbon footprint and preparedness to meet Renewable Generation Obligation (RGO), if imposed are as follows:

Present status of such renewable energy projects:

- OPGC is in the process of setting up a 50 MW Solar PV Power Project at the exhausted Ash Pond-B of the existing Power Station for which GRIDCO has accorded in-principle consent to procure power subject to approval and determination of tariff by the Hon'ble Commission. Feasibility study report and DPR has already been prepared by M/s Mercados Energy Markets India Pvt. Ltd. 122nd SLSWCA (State Level Single Window Clearance Authority) has accorded in-principle approval on 30.09.2023. NIT has been published on 05.11.2024. This



Chander Kumar Satapathy

project is aimed at contributing towards clean energy generation and offsetting carbon emissions from thermal power operations.

- Feasibility study is under pipeline for 2 MW ground mounted solar PV Plant at river intake channel near raw water pump house.
- Bio-Gas Plant with Waste feeding capacity of 1MT/day releases 3 cylinder of gas/day (42 kg/day), is used for cooking in guesthouse.
- OPGC has implemented energy efficiency measures within its existing power plants to optimize fuel usage and minimize carbon emissions.

Preparedness for Renewable Generation Obligation (RGO):

Ministry of Power, Government of India vide resolution dated 27th February, 2023 has notified the Renewable Generation Obligation as per Revised Tariff Policy, 2016. The extract of the notification is as follows:

"2.0 In pursuance of clause 6.4 (5) of the Tariff Policy 2016, it has been decided that any generating company establishing a coal/lignite-based thermal generating station and having the Commercial Operation Date (COD) of the project on or after 1st April 2023 shall be required to establish renewable energy generating capacity (in MW) i.e. Renewable Generation Obligation (RGO) of a minimum of forty percent (40%) of the capacity (in MW) of a coal/lignite-based thermal generating station or procure and supply renewable energy equivalent to such capacity.

3.0 A coal/lignite based thermal generating station with Commercial Operation Date (COD) of the project between 1st April 2023 and 31st March 2025 shall be required to comply with RGO of 40% by 1st April 2025, and any other coal/lignite based thermal generating station with Commercial Operation Date (COD) of the project after 1st April 2025 shall be required to comply with RGO of 40% by the COD."

OPGC humbly submits that its current and future renewable energy projects, including solar and potential wind projects, are aligned with the requirements of RGO. In its effort to comply with the above Government Notifications, OPGC is also trying to identify new patch of land to enhance its renewable generation and compliance of RGO for its proposed upcoming expansion Project of Unit 5&6.



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Further, the Hon'ble Commission published the proposed/draft OERC (Procurement of Energy from Renewable Sources and its Compliance) Regulations, 2024 seeking views/suggestion/opinion on or before 13.09.2024. OPGC vide its submission dated 13.09.2024 has put its views on various points including the concerns in implementing RGO for Coal-Based Thermal Stations in the absence of any regulatory provision of power tie-up or firm beneficiary commitments from RE projects under RGO. The above said Regulations are not yet finalised by the Hon'ble Commission.

In view of the above, it is humbly submitted before the Hon'ble Commission to consider the points raised favourably and make suitable and firm provisions for power offtake and associated matters for smooth implementation of RGO.

OPGC remains committed to integrate renewable energy into its generation mix and contribute to the reduction of carbon emissions, in alignment with national and global climate goals.

5.5 Allotment of mine void space for disposal of ash

Commission's Directive: *OPGC has taken up a number of initiatives for fly ash utilization & disposal. However, OPGC is directed to pursue with MCL or any other mines for allotment of mine void space for disposal of ash to comply with MoEF & CC Notification.*

OPGC's Response: OPGC has been making concerted efforts to achieve 100% ash utilization in compliance with the MoEF & CC Notification. Despite persistent requests to MCL since 2006 for the allocation of void mines for fly ash backfilling, the latest proposal of allocating BOCM Mines was declined by the Director Technical, MCL, via correspondence dated 28.08.2020, due to the integration of Lakhanpur-Belpahar-Lilari mines and the ongoing extraction from additional seams in these mines.

OPGC had engaged the Centre for Fly Ash Research & Management (C-FARM), led by Dr. Vimal Kumar (former Mission Director & Head, Fly Ash Unit, Department of Science and Technology, Government of India), to provide scientific and technical expertise for securing "Consent for mine void filling with fly ash." C-FARM continues to



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coordinate with MCL and the Central Mine Planning and Design Institute on behalf of OPGC to facilitate the allotment of suitable mine voids for ash stowing.

In addition to MCL's mines, OPGC has proactively identified numerous abandoned stone quarries within a 100-km radius as potential sites for ash disposal. Furthermore, OPGC's effort to secure abandoned dolomite mines at Gomardih (Sundergarh) and the Dungri Limestone mines (Bargarh), has been turned down by Director Mines, Government of Odisha. These sites offer significant capacity, capable of accommodating millions of MT of ash, providing option for sustainable ash disposal.

In view of the above, OPGC humbly requests the Commission to direct the MCL authority and Director of Mines, Government of Odisha for making available abandon coal mines and dolomite/limestone mines respectively for ash disposal by OPGC.

5.6 Details of forced outages incidents in the last five (5) years

Commission's Directive: *OPGC shall provide number of forced outages of generating units during FY 2023-24 and repetition of such incidents in the last five (5) years and the reasons for such outage & remedial measures taken to avoid repetition of such incidence.*

OPGC's Response: The number of forced outages of OPGC Units 1&2 are as follows:

Year	No. of Forced Outages	Major Reasons for Outages
FY 2023-24	18	Boiler Tube Leakage, Generator Protection Relay, Grid Disturbance, Other Electrical & Mechanical / Operational Issue
FY 2022-23	19	
FY 2021-22	15	
FY 2020-21	11	
FY 2019-20	17	

Remedial measures taken by OPGC to minimize the outages are as follows:

- **Root Cause Analysis:** Comprehensive root cause analyses for high-impact outages, such as boiler tube leakages, are conducted and corrective recommendations are promptly executed.
- **Trip Analysis for Forced Outages:** Each forced outage is followed by a detailed trip analysis, with corrective actions implemented based on the findings.



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- **Reliability and Performance Improvements:** Special maintenance works targeting reliability and performance enhancements are undertaken during each annual outage.
- **Stringent Parameter Monitoring:** Daily monitoring of critical operating parameters is carried out to prevent failures due to parameter excursions.
- **Residual Life Assessment:** Regular boiler and turbine residual life assessments are conducted by third-party experts to proactively identify potential issues.
- **Critical Spare Parts Inventory:** A well-maintained critical spare parts inventory enables quick replacement of worn-out components, minimizing downtime.
- **Skill Development Programs:** Continuous skill development for Operations & Maintenance staff is ensured through both in-house and external training programs.

Chandran Kumar Sastapal



6. Prayers

6.1 OPGC respectfully prays that the Hon'ble OERC may:

- i) Admit the instant Petition.
- ii) Approve the tariff, including Annual Fixed Cost and base Energy Charge Rate, for FY 2025-26 as claimed in the Petition.
- iii) Approve the other charges for FY 2025-26 as claimed in the Petition and recovery of other charges on actual basis during FY 2025-26.
- iv) Approve the recovery of FPA in accordance with the approved PPA during FY 2025-26.
- v) Allow OPGC to file a separate Petition regarding additional capitalisation from FY 2025-26 after the Hon'ble APTEL pronounce Judgment in Appeal No 335/2021 filed by OPGC.
- vi) Direct the MCL authority and Director of Mines, Government of Odisha for making available abandon coal mines and dolomite/limestone mines respectively for ash disposal by OPGC
- vii) Condone any inadvertent omissions, errors, short comings and permit OPGC to add/ change/ modify/ alter this filing and make further submissions as may be required at a future date; and
- viii) Pass such other and further Orders as deemed fit and proper in the facts and circumstances of the case.

Pranav Kumar Satapathy

Petitioner

Bhubaneswar

November 22, 2024



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attested by Sd/-



Tariff Formats



Checklist of Main Tariff Forms and other information

Form No.	Title of Tariff Filing Forms (Thermal)	Submission Status
FORM- 1	Summary of Tariff	✓
FORM -1 (I)	Statement showing claimed capital cost	NA
FORM -1 (II)	Statement showing Return on Equity	✓
FORM-2	Plant Characteristics	NA
FORM-3	Normative parameters considered for tariff computations	✓
FORM- 4	Details of Foreign loans	NA
FORM- 4A	Details of Foreign Equity	NA
FORM-5	Abstract of Admitted Capital Cost for the existing Projects	NA
FORM- 6	Financial Package upto COD	NA
FORM- 7	Details of Project Specific Loans	NA
FORM- 8	Details of Allocation of corporate loans to various projects	NA
FORM-9	Statement of Additional Capitalisation after COD	NA
FORM- 10	Financing of Additional Capitalisation	NA
FORM- 11	Calculation of Depreciation on original project cost	NA
FORM- 12	Statement of Depreciation	NA
FORM- 13	Calculation of Weighted Average Rate of Interest on Actual Loans	NA
FORM- 14	Draw Down Schedule for Calculation of IDC & Financing Charges	NA
FORM- 15	Details of Fuel for Computation of Energy Charges	✓
FORM- 16	Details of Limestone for Computation of Energy Charge Rate	NA
FORM-17	Details of Capital Spares	NA
FORM- 18	Non-Tariff Income	NA
FORM-19	Details of Water Charges	NA
FORM-20	Details of Statutory Charges	✓
FORM O	Calculation of Interest on Working Capital	✓

Hanesh Kumar Satapathy
(Petitioner)



Summary of Tariff

PART-I
FORM- 1

Name of the Petitioner: Odisha Power Generation Corporation Limited

Name of the Generating Station: Ib TPS Units 1&2

Place (Region/District/State): Jharsuguda, Odisha

(Rs. Crore)

Sl.	Particulars	Unit	FY 2025-26
1	2	3	4
1	Annual Fixed Cost		
1.1	Depreciation	Rs Crore	0.00
1.2	Interest on Loan	Rs Crore	0.00
1.3	Return on Equity	Rs Crore	72.00
1.4	Interest on Working Capital	Rs Crore	16.86
1.5	O&M Expenses	Rs Crore	239.92
	Total	Rs Crore	328.78
2	Energy Charge Rate ex-bus	Paise/kWh	168.79
3	Other Charges	Rs Crore	112.17

Pranesh Kumar Satapathy
(Petitioner)



Name of the Petitioner: Odisha Power Generation Corporation Limited

Name of the Generating Station: Ib TPS Units 1&2

PART 1
FORM-1(IIA)

Statement showing Return on Equity

(Rs. Crore)

S. No.	Particulars	FY 2025-26
1	2	3
	Return on Equity	
1	Gross Opening Equity (Normal)	450.00
2	Less: Adjustment in Opening Equity	0.00
3	Adjustment during the year	0.00
4	Net Opening Equity (Normal)	450.00
5	Add: Increase in equity due to addition during the year / period	0.00
7	Less: Decrease due to De-capitalisation during the year / period	0.00
8	Less: Decrease due to reversal during the year / period	0.00
9	Add: Increase due to discharges during the year / period	0.00
10	Net closing Equity (Normal)	450.00
11	Average Equity (Normal)	450.00
12	Rate of ROE	16.00%
12	Total ROE	72.00

Aparna Kumar Satapathy
(Petitioner)



Normative Parameters considered for tariff computations

Name of the Petitioner: Odisha Power Generation Corporation Limited

Name of the Generating Station: Ib TPS Units 1&2

Particulars	Unit	FY 2025-26
1	2	3
Base Rate of Return on Equity	%	16.00%
Base Rate of Return on Equity on Add. Capitalization	%	14.00%
Effective Tax Rate	%	25.17%
Target Availability	%	68.49%
In High Demand Season	%	NA
Peak Hours	%	NA
Off-Peak Hours	%	NA
In Low Demand Season(Off-Peak)	%	NA
Peak Hours	%	NA
Off-Peak Hours	%	NA
Auxiliary Energy Consumption	%	9.50%
Gross Station Heat Rate	kCal/kWh	2500
Specific Fuel Oil Consumption	ml/kWh	3.50
Cost of Coal / Lignite for WC ¹	in Months	1.5
Cost of Main Secondary Fuel Oil for WC ¹	in Months	2.0
Fuel Cost for WC ²	in Months	NA
Liquid Fuel Stock for WC ²	in Months	NA
O&M Expenses for WC ¹	in Months	1
Maintenance Spares for WC	% of O&M	NA
Receivables for WC ¹	in Months	2.0
Storage capacity of Primary fuel	MT	NA
SBI 1 Year MCLR plus 350 basis point	%	NA
Rate of interest on working capital	%	8.90%
Blending ratio of domestic coal/imported coal		NA

Note:

1. For Coal based/lignite based generating stations

2. For Gas Turbine/Combined Cycle generating stations duly taking into account the mode of operation on gas fuel and liquid fuel.

Harish Kumar Satapathy
(Petitioner)

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O&M expenses

Name of the Petitioner: Odisha Power Generation Corporation Limited

Name of the Generating Station: Ib TPS Units 1&2

(Rs. Crore)

Sl. No.	Particulars	Legend	FY 2025-26
1	Capital Cost of Project considered for O&M expenses as per Amended PPA	A	1030.00
2	O&M expenses for first year @ 2.5% of Capital Cost	$B = A \times 2.5\%$	25.75
3	Escalation rate	C	8.00%
4	O&M expenses	$D = B \times (1 + C)^{29}$	239.92

Hanish Kumar Satapathy
(Petitioner)



PART 1
FORM- O

Calculation of Interest on Working Capital

Name of the Petitioner: Odisha Power Generation Corporation Limited

Name of the Generating Station: Ib TPS Units 1&2

(Rs. Crore)

Sl.	Particulars	FY 2025-26
1	2	3
1	Cost of Coal for one and half months	41.01
2	Cost of Secondary Fuel Oil for two months	9.48
3	O & M Expenses for one month	19.99
4	Receivables equivalent to two months	118.95
5	Total Working Capital	189.43
6	Rate of Interest	8.90%
7	Interest on Working Capital	16.86

Harish Kumar Satapathy
(Petitioner)



Details of Statutory Charges

Name of the Petitioner: Odisha Power Generation Corporation Limited

Name of the Generating Station: Ib TPS Units 1&2

(Rs. Crore)

Particulars	Amount Claimed	Basis of claim
Electricity Duty	15.37	Projected as per generation plan for FY 2025-26 shared with GRIDCO
Water Cess and Water Charges	11.01	Actual incurred for FY 2023-24
Tax and Cess on Land	0.25	Actual incurred for FY 2023-24
SOC & MOC for SLDC	0.49	Projected at rate approved for FY 2024-25
ERPC Charges	0.16	Actual incurred for FY 2023-24
Annual inspection fees	0.44	Actual incurred up to September 2024
Income Tax	24.22	Interest Rate of 25.17% is applicable to OPGC
Recovery of ARR & Tariff Petition Fee and Publication Expenses	0.30	Applicable Tariff Application fees and expected Publication Fees
Ash Utilisation Expenses including Transportation Charges	59.94	Projected as per generation plan for FY 2025-26 shared with GRIDCO
Energy Compensation Charge	0.00	Not Claimed for FY 2025-26
Contribution towards WCF	0.00	Not Claimed for FY 2025-26
Total	112.17	

Hanesh Kumar Satapathy
(Petitioner)



Energy Charges

Name of the Petitioner: Odisha Power Generation Corporation Limited

Name of the Generating Station: Ib TPS Units 1&2

Particulars	Unit	FY 2025-26
Auxiliary Consumption	%	9.50%
Gross Station Heat Rate	kcal/kWh	2,500.00
GCV of Coal	kcal/kg	3,213.85
GCV of Oil (LDO)	kcal/ltr	10,000.00
GCV of Oil (HFO)	kcal/ltr	10,000.00
Specific Coal Consumption	kg/kWh	0.77
Specific Oil Consumption-LDO	ml/kWh	0.35
Specific Oil Consumption-HFO	ml/kWh	3.15
Price of Coal	Rs./MT	1,697.31
Price of Oil-LDO	Rs./kL	81,711.23
Price of Oil-HFO	Rs./kL	62,584.89
Variable Charges per kWh (base value)	Paisa/kWh	168.79

Hareem Kumar Satapathy
(Petitioner)



Name of the Utility / Company : Odisha Power Generation Corporation Ltd.

Name of the Thermal Power Station: Ib TPS Units 1&2

S.No		Month	Unit	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
A.	OPENING QUANTITY								
1	Quantity of coal in stock at the beginning of the month	(MMT)		-	-	-	-	-	-
2	Value of coal in stock	(Rs.)		176,379 28,57,93,753	1,02,742 17,01,69,734	1,12,402 18,65,97,667	1,16,819 18,88,38,401	1,29,767 21,13,46,734	1,29,767 -
B.	QUANTITY								
3	Quantity of Coal supplied by Coal Company	(MMT)							
4	Adjustment (+/-) in quantity supplied made by Coal Company for diversion of baggers etc.	(MMT)							
5	Coal supplied by Coal Company (3+4)	(MMT)							
6	Normative Transit & Handling Losses (For coal based Projects)	(MMT)							
7	Net coal Supplied (5-6)	(MMT)							
C.	PRICE								
8	Amount charged by the Coal Company	(Rs.)							
9	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)							
10	Others/Stone/picking charges /Loco drivers salary , Sampling Charges etc.)	(Rs.)							
11	Total amountCharged (8+9+10)	(Rs.)							
D.	TRANSPORTATION								
12	Transportation charges by rail/ship/road transport	(Rs.)							
	By Rail								
	By Road								
	By Ship								
13	Adjustment (+/-) in amount charged made by Railways/Transport Company including debit/credit note for MCL.	(Rs.)							
14	Demurrage Charges, if any	(Rs.)							
15	Cost of diesel in transporting coal through MGR system, If applicable	(Rs.)							
16	Total Transportation Charges (12+(13+14+15))	(Rs.)							
17	Total amount Charged for coal supplied including Transportation (11+16)	(Rs.)							
E.	TOTAL COST								
18	Landed Cost of Coal (2+17)(1+7)	(Rs/MMT)							
F.	QUALITY								
19	GCV of the opening Coal stock at station (TM Corrected)	kCal/Kg							
20	Weighted average GCV of Coal/ lignite supplies/as billed (Ft Basis)	kCal/Kg							
21	GCV of Domestic Coal received as per OIRRC Order (TM Corrected)- GCV_TM (CIMFR)+GCV_EMI(1-TMVI-IM)	kCal/Kg							
	As billed IM	%							
	As billed TM	%							
22	Weighted average "as received GCV" of Coal (Opening + Received)_TM Corrected	kCal/Kg							
23	Weighted average GCV of coal as fired *TM Basis	(kCal/Kg)							

James H. Kurr Satapathy (Petitioner)



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Harish Kumar Satapathy

