

**ODISHA POWER GENERATION CORPORATION LTD.**

(A Government Company of the State of Odisha)

CIN : U40104OR1984SGC001429



**Regd. Off :** Zone - A, 7th Floor, Fortune Towers, Chandrasekharpur, Bhubaneswar - 751 023, Odisha.

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**Web :** www.opgc.co.in

Ref: OPGC/Ash Utilisation /2023-24/ 1964

October 04, 2023

To,

**The Secretary,**

Odisha Electricity Regulatory Commission,

Plot No.4, Chunokoli, Sailashree Vihar

Bhubaneswar- 751 021

**Sub: Authorisation of Mr. Haresh Kumar Satapathy, AGM (C&RA) for filing of the petition for Ash Utilisation Expenses**

Sir,

This is to certify that Mr. Haresh Kumar Satapathy, functioning as Additional General Manager (C&RA), Odisha Power Generation Corporation Ltd., posted at the corporate office at Zone-A, 7<sup>th</sup> Floor, Fortune Towers, Chandrasekharpur, Bhubaneswar-751023, Odisha, India (Petitioner), is hereby authorised to file the petition for recovery of additional expenditure incurred since FY 2016-17 to FY 2022-23 and to be incurred on recurring basis in terms of ash transportation subsidy and fly ash utilisation expenses for both OPGC Units 1&2 and OPGC Units 3&4, and appear on behalf of the petitioner for the hearing and other procedure before OERC.

Thanking you  
Yours faithfully

  
(P. K. Mohapatra)  
Managing Director



06 OCT 2023

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

CASE NO. \_\_\_\_ OF 2023

FILE NO. 1

**IN THE MATTER OF**

Petition for recovery of additional expenditure incurred between FY 2016-17 and FY 2022-23, and to be incurred on a recurring basis by OPGC Units 1 & 2, and Units 3 & 4 of IB TPS Phase-I & Phase-II in terms of ash transportation cost and fly ash utilization expenses consequent to Ministry of Environment, Forest & Climate Change, Government of India's (MoEF) Notifications dated 25.01.2016 and 31.12.2021.

**AND**

**IN THE MATTER OF  
THE APPLICANT**

Odisha Power Generation Corporation Ltd. (OPGC Limited),  
Zone-A, 7<sup>th</sup> Floor, Fortune Towers, Chandrasekharpur,  
Bhubaneswar, Odisha – 751023.....(Petitioner)

**AND**

**IN THE MATTER OF  
RESPONDENT**

GRIDCO Limited,  
Janpath, Bhubaneswar, Odisha – 751022.....(Respondent)

I, Haresh Kumar Satapathy, son of Shri. Kailash Chandra Satapathy, aged about 54 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 am duly authorised by the said Petitioner to make this Affidavit on its behalf.
- (b) The submission with respect to OPGC's Petition for reimbursement of Ash Transport Expenses of OPGC Units 1 & 2 and Units 3 & 4 are based on information provided to me and I believe them to be true to the best of my knowledge.



OPGC Petition for Ash Transportation Charges' Recovery



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 Bhubaneshwar on the 6<sup>th</sup> day of October, 2023.

*Hanesh Kumar Satapathy*

Deponent

Addl. General Manager (C & RA)  
Odisha Power Generation Corporation Ltd  
Bhubaneswar



SWORN BEFORE ME



*[Signature]*  
MANJULA KUMAR PRADHAN  
NOTARY PUBLIC  
BHUBANESWAR  
REGD. NO. ON-71/2009  
PH:-9437627119 (M)

**IDENTIFIED**  
*[Signature]* 06.10.23.  
ADVOCATE, BBSR



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

CASE NO. \_\_\_\_ OF 2023

FILE NO. 1

**IN THE MATTER OF**

Petition for recovery of additional expenditure incurred between FY 2016-17 and FY 2022-23, and to be incurred on a recurring basis by OPGC Units 1 & 2, and Units 3 & 4 (IB TPS Phase-I & Phase-II) in terms of ash transportation cost and fly ash utilization expenses consequent to Ministry of Environment, Forest & Climate Change, Government of India's (MoEF) Notifications dated 25.01.2016 and 31.12.2021.

**AND**

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Odisha Power Generation Corporation Ltd. (OPGC Limited),  
Zone-A, 7<sup>th</sup> Floor, Fortune Towers, Chandrasekharpur,  
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(Petitioner)

**AND**

**IN THE MATTER OF  
RESPONDENT**

GRIDCO Limited,  
Janpath, Bhubaneswar, Odisha - 751022.....(Respondent)

**ODISHA POWER GENERATION CORPORATION LIMITED ("The Petitioner")  
RESPECTFULLY SUBMITS AS FOLLOWS:**

1. Odisha Power Generation Corporation Limited (**OPGC/Petitioner**) is a company incorporated under the Companies Act, 1956 and having its registered office at Zone-A, 7<sup>th</sup> floor, Fortune Towers, Chandrasekharpur, Bhubaneswar, Odisha - 751023.
2. OPGC, a generating company as defined in the Electricity Act, 2003 (**Act**), has a coal-based thermal power station comprising of 2 Units of 210 MW capacity (Units 1 & 2) established in 1994 and 1996, situated at IB Thermal Power Station Complex, Banaharpalli, Jharsuguda District. OPGC has installed 2 Units of 660 MW capacity (Units 3 & 4) in 2019, as base load power plant, at the same site as that of the existing plant.



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3. The Petitioner is constrained to approach this Hon'ble Commission seeking recovery of additional expenditure incurred and to be incurred on a recurring basis by the Petitioner due to sharing of transportation cost of fly ash generated from the Petitioner's Units 1 & 2, and Units 3 & 4 mandated by the Ministry of Environment, Forests & Climate Change, Government of India (**MoEF**) Notifications dated 25.01.2016 and 31.12.2021.
4. Through the present Petition, the Petitioner *inter alia* seeks:
- a) A declaration from the Hon'ble Commission that compliance with the MoEF Notification dated 25.01.2016 required the Petitioner to incur substantial expenditure in terms of ash transportation cost and fly ash utilisation expenses.
  - b) A declaration from the Hon'ble Commission that the issuance of MoEF Notifications dated 25.01.2016 and 31.12.2021 is a 'Change in Law' event requiring the Petitioner to incur substantial expenditure in terms of ash transportation cost and fly ash utilisation expenses.
  - c) The permission to recover the actual expenditure already incurred in fly ash transportation so far, i.e., between FY 2016-17 and FY 2022-23, along with carrying cost, in six equal monthly instalments.
  - d) Monthly recovery of the future expenditure through monthly billing to GRIDCO with annual reconciliation.

#### MoEF Notifications

5. On 23.05.1986 the Government of India notified the Environment Protection Act, 1986 (EP Act). Section 3(2)(v) of the EP Act provided as follows: -

**"3. Power of Central Government to take measures to protect and improve environment -**

...



change new set of ash

(2) In particular, and without prejudice to the generality of the provisions of sub-section (1), such measures may include measures with respect to all or any of the following matters, namely:

....  
(v) restrictions of areas in which any industries, operations or processes or class of industries, operations or processes shall not be carried or shall be carried out subject to certain safeguards.”

6. On 19.11.1986, the Government of India notified the Environment (Protection) Rules, 1986 (EP Rules). Rule 5(3)(d) of EP Rules prescribed as follows: -

“5. Prohibition and restriction on the location of industries and the carrying out processes and operations in different areas –

...  
(3) (d) The Central Government shall, within a period of one hundred and twenty days from the date of publication of the notification in the Official Gazette, consider all the objections received against such notification and may within five hundred and forty-five days from such date of publication impose prohibition or restriction on location of such industries and the carrying on of any process or operation in an area.”

7. On 14.09.1999, the Central Government in exercise of powers vested with it under the EP Act and the EP Rules notified a mechanism for utilisation of fly ash generated by coal or lignite based thermal power plants (1999 Notification). However, at that point in time, there was no onerous condition on sharing of transportation cost with the users of fly ash.
8. Amendments to the 1999 Notification were issued on 27.08.2003 (2003 Notification) and 3.11.2009 (2009 Notification). In these Notifications, directives were *inter alia* given to building construction agencies, road embankment construction agencies and low-lying areas development works for mandatory use of ash and ash based products work within 100 km of any thermal power plant. Even at this stage, there was no obligation on thermal generators to provide fly ash transportation cost to user agencies and to bear other fly ash utilisation expenses.
9. The MoEF Notification dated 25.01.2016 (2016 Notification) amended the 1999 Notification and *inter alia* stipulated as follows:



For the first time, thermal power plants were required to share cost of transportation of fly ash to user agencies. The cost of transportation of ash for road construction projects or for manufacturing of ash based products or use as soil conditioner in agriculture activity

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within a radius of 100 km of any coal based power plant shall be borne by such coal based thermal power plant, and the cost of transportation beyond the radius of 100 km and up to 300 km with the aforesaid user agencies shall be shared equally between the user and the coal based thermal power plant.

- b) The coal based thermal power plants shall within radius of 300 km bear the entire cost of transportation of ash to the site of road construction projects under Pradhan Mantri Gramin Sadak Yojna (PMGSY) and asset creation programmes of the Government involving construction of buildings, road, dams and embankments.
  - c) Coal based thermal power plants shall comply achieve 100% utilization of fly ash generated by them before 31.12.2017.
10. To implement the polluter pays principle (PPP) and for sustainably ensuring 100% utilisation of fly ash generated by the coal or lignite based thermal power plants, the Central Government reviewed the existing Notifications and has introduced environmental compensation mechanism based on the PPP vide the MoEF Notification dated 31.12.2021 (2021 Notification).
11. In effect, the 2021 Notification changes the law applicable to all thermal power producers in the country, including OPGC. The following salient features of the 2021 Notification are *inter alia* relevant:
- a) Under clause A.(4) read with Note to clause A.(5), the MoEF has allowed thermal generators with less than 60% utilization in the year 2021-22 to achieve 100% utilization for new ash generated within 5 years w.e.f. 01.04.2022 (i.e., by 31.03.2027). Further, these thermal generators shall achieve at least 80% ash utilisation from the third year onwards (i.e., by 31.03.2025). The aforesaid timelines for ash disposal are to be reckoned year on year from 01.04.2022 onwards.

b) Under clause A.(5), the legacy ash (i.e., the ash already stored in ash pond as of date of the 2021 Notification) utilization requirement is laid down. Thermal generators are required to achieve 100% utilisation of legacy ash within 10 years from 01.04.2022 (i.e.,



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by 31.03.2032).

- c) **Clause A.(10) states that the statutory obligation of 100 per cent utilisation of fly ash shall be treated as a change in law, wherever applicable.**
- d) Under clause B, clear-cut ash usage obligations are laid down for various government and private user agencies. Clauses B. (1) and (3) require the generator to deliver fly ash free of cost to certain user agencies (such as construction agencies and mine operators), and also bear the full cost of transportation.
- e) Under clause C, Environmental Compensation (EC) is imposed both on thermal power plants and user agencies for non-compliance. Significantly, the EC payable by user agencies (per ton) is 1.5 times the EC payable by thermal generators (per ton).
- f) Under clause E.(1), the jurisdiction to enforce the 2021 Notification is with Central and State Pollution Control Boards.

The 1999, 2003, 2009, 2016 and 2021 Notifications are attached to this Petition as **Annexure-1 (Colly)**.

#### **OPGC Units 1 & 2**

- 12. GRIDCO Limited (**GRIDCO**) had entered into Bulk Power Supply Agreement (**BPSA**) with OPGC dated 13.08.1996, for purchase of power from its Generating Units 1 & 2, having capacity of 420 MW (210 MW x 2) of IB Thermal Power Station. The said BPSA 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.
- 13. OPGC, GRIDCO and GoO signed a Tripartite Agreement dated 18.10.1998 (**Tripartite Agreement**) providing certain further amendments to the existing BPSA and other provisions including those concerning the establishment of Units 3 & 4 of IB Thermal Power Station by OPGC. Further, an Escrow and Securitization Agreement dated 30.11.1998 was entered between OPGC, GRIDCO and Union Bank of India.



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**Background of the Supreme Court's Judgment dated April 19, 2018**

14. In 2001, disputes arose between the parties in respect of the enforcement of the said Escrow and Securitization Agreement. After resolution of the disputes, OPGC and GRIDCO agreed to amend the existing BPSA and Tripartite Agreement based on GoO Notification dated 21.06.2008 (**2008 GoO Notification**). The relevant excerpt of the 2008 GoO 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."*

15. Accordingly, an agreement was signed on 06.09.2012 as Supplemental to the Tripartite Agreement executed on 18.10.1998 (together referred to as the '**Amended Tripartite Agreement**'). The Amended Tripartite Agreement has been made effective from 12.10.2009. Subsequently, OPGC and GRIDCO signed an amendment to existing BPSA on 19.12.2012 by amending certain clauses (collectively referred to as the '**PPA 1**'). This Hon'ble Commission vide its Order dated 27.04.2015 in Case No. 13/2002 approved the Amended PPA.

16. Pursuant to signing of the amendment to BPSA, GRIDCO and OPGC filed a joint petition before Hon'ble OERC on 26.02.2014 seeking approval of the PPA 1. The Hon'ble OERC vide its Order dated 27.04.2015 in Case No. 13/2002 approved the PPA 1 as under (with emphasis added by underlining):

*"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*



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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.

11. Since the power purchase by GRIDCO from Unit 1 & 2 of Ib Thermal Power Station has been continuing as per mutual agreement without approved PPA and the Commission has approved the same in the ARR of GRIDCO for the concerned year there is no need to reopen the same as per the above Regulation. The parties should therefore, settle the power purchase process for the period prior to implementation of the above Regulation taking into account the original PPA and its supplemental one as approved by us now."

17. Further, the Hon'ble OERC in the said Order dated 27.04.2015 in Case No. 13/2002 directed OPGC to file an application for determination of generation tariff as per approved PPA 1, for rest of the control period starting from FY 2016-17 onwards since tariff for FY 2014-15 and FY 2015-16 had already been approved by Hon'ble OERC in GRIDCO's ARR. 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."*

18. In compliance with the above directions of the Hon'ble OERC, OPGC filed a Petition for Approval of Generation Tariff for FY 2016-17 under Sections 62 and 86 of the Act, approved PPA 1 and OERC (Conduct of Business) Regulations, 2004. The Hon'ble OERC, vide its Order dated 21.03.2016, disposed of the above Petition (Case No. 53/2015) (**2016 Tariff Order**) 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 OERC (Terms and Conditions of Generation Tariff) Regulations, 2014 (**2014 Tariff Regulations**). The Hon'ble OERC neither considered the 2008 GoO Notification nor the PPA 1 while determining tariff for Units



19. Resultantly, OPGC filed an Appeal (Appeal No. 126 of 2016) before the Hon'ble Appellate Tribunal for Electricity (APTEL) against the said Tariff Order dated 21.03.2006 in Case No. 53/2015. During the pendency of the stated Appeal before the Hon'ble APTEL, OPGC filed



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the petition for approval of generation tariff for FY 2017-18 and the Hon'ble OERC disposed of the said Petition (Case No. 62/2016) vide its Order dated 23.03.2017 determining the generation tariff for FY 2017-18 in line with its approach adopted in the tariff determination for FY 2016-17. The Hon'ble APTEL vide its Judgement dated 06.04.2017 in the stated Appeal upheld the 2016 Tariff Order.

20. Aggrieved by the Judgment of the Hon'ble APTEL, OPGC filed Civil Appeal No. 9485 of 2017 before the Hon'ble Supreme Court. During the pendency of the stated Civil Appeal before the Hon'ble Supreme Court, OPGC filed the petition for approval of generation tariff for FY 2018-19 and the Hon'ble OERC disposed of the said Petition (Case No. 75/2017) vide its Order dated 22.03.2018 determining the generation tariff for FY 2018-19 in line with its approach adopted in the tariff determination for FY 2016-17.

***Supreme Court's Judgment dated April 19, 2018***

21. The Hon'ble Supreme Court vide its Judgement dated 19.04.2018 (**Supreme Court Judgment**) in the stated Appeal set aside the 2016 Tariff Order and remanded the matter to the Hon'ble OERC for a fresh decision. In effect, the Hon'ble Supreme Court held that the tariff norms under PPA 1 would prevail in determining OPGC's generation tariff. Further, to the extent there are tariff norms not covered by PPA 1, 2014 OERC Regulations may be relied upon by the Hon'ble OERC to determine OPGC's tariff. It is submitted that the effect of the Supreme Court Judgment is that this arrangement would apply for the entire term of the subsistence of the PPA viz. till 30.06.2026. The relevant extract of the Supreme Court Judgment 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."



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A copy of the Supreme Court Judgment dated 19.04.2018 is attached herewith as **Annexure-2**.

***Relevant PPA 1 provisions***

22. Further, as per Para (D) of the Supplementary Agreement dated 19.12.2012 to the BPSA, Clause 12 of Schedule II of the Existing PPA has been amended to read as follows (underlined for emphasis):

*"12.0 In order to avoid any ambiguity with regards to the tariff norms and parameters for Unit 1 & 2, all terms and parameters for determination of tariff for Unit 1 & 2 shall be as per the PPA as amended upto date. All tariff parameters will stand frozen till validity of the PPA as amended upto date notwithstanding the modification in tariff norms by CERC from time to time. Accordingly, all references in other provisions of this PPA to change in tariff parameters in future shall be deemed to have been deleted. The tariff shall however be subject to revision at the time of renewal, replacement or extension of this Supplementary agreement or on further enhancement of the generation capacity of Unit 1 and/or 2, if any."*

23. Clause- 10 of Schedule-II of PPA 1 reads as follows (underlined for emphasis):

**"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 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."*

24. Importantly, Clause 10.0 of PPA 1 expressly allows OPGC to claim any statutory levies or any other kind of imposition whatsoever by any Government/ local body/ authority *inter alia* on account of environmental protection. Should OPGC make such a claim, GRIDCO is obliged to pay the same to OPGC. Clause 10.0 of PPA 1 is excerpted hereunder (underlined for emphasis):

*"10.0 Any statutory taxes, levies, duties, cess or any other kind of imposition whatsoever imposed/charged by any Government (State/Central) and/or any other local bodies/authorities on generation of electricity including auxiliary consumption and sale energy, environmental protection, water charges etc. shall be billed by*





OPGC and will be paid by the GRIDCO. However, electricity duty payable on energy drawn by OPGC, if any, shall be payable by OPGC and reimbursed by GRIDCO.

If OPGC shall have to bear any such levy or levies on account of energy supplied to the GRIDCO before the same is or are paid by the GRIDCO, the OPGC shall be entitled by way of reimbursement to recover such levy or levies from the GRIDCO."

25. As detailed above, the Supreme Court Judgment has held that the PPA 1 terms shall prevail for determining tariff for OPGC Units 1 & 2. Further, Clause 10 of PPA 1 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 cost 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. Hence, the Hon'ble Commission may direct GRIDCO to reimburse the claim made by OPGC towards the above cause for OPGC Units 1 & 2.
26. Accordingly, in view of the above background, OPGC is entitled to claim any levies, impositions whatsoever etc. in terms of PPA 1 provisions in view of the Supreme Court Judgment.
27. In good order, it is stated in Case No. 66/2021 filed by OPGC for implementation of Renovation and Modernisation for extension of life and installation of Flue Gas Desulfurization (FGD) for adhering to the new emission control norms, in OPGC Units 1 & 2. This Hon'ble Commission's Order dated 03.11.2021 granted a 15-year life extension to Units 1 & 2, i.e., from July 2026 to June 2041. Both OPGC and GRIDCO have acceded to the same. The PPA for the extended period shall be executed and put up for approval of this Hon'ble Commission in due course of time before the expiry of the term of PPA 1.



**OPGC Units 3 & 4**

28. OPGC and GRIDCO have also entered into a PPA dated 04.01.2011 (PPA 2) for supply of





50% of the Installed Capacity from OPGC's Units 3 & 4 (2 X 660 MW) to GRIDCO as per the allocation specified in the PPA. The Hon'ble OERC vide its Order dated 04.04.2012 in Case No. 113 of 2011 unqualifiedly approved the long-term PPA between OPGC and GRIDCO. The relevant excerpt of the Hon'ble OERC's Order dated 04.04.2012 is as follows:

*"14. In view of the above, we approve the PPA 2 between GRIDCO and OPGC, considering Govt. of Odisha notifications and keeping in view the technological advantages and the interest of the state."*

29. Further, Clause 1 of Schedule 4 of the PPA 2 provides as under:

*"1. Tariff basis*

*Tariff under this agreement shall be based on tariff norms and parameters of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 ("Tariff Regulations"). Accordingly, the Tariff norms and parameters stated hereunder have been included in this schedule based on the tariff norms and parameters outlined in the Tariff Regulations.*

*As and when any amendment to the Tariff norms and parameters are made in the Tariff Regulations, the said norms and parameters in this Schedule shall be applied to reflect the said amendments from time to time."*

30. OPGC and GRIDCO have entered into a Supplementary PPA on 24.01.2019 (**Supplementary PPA 2**) in compliance with the Government's Notification dated 20.12.2018 (**2018 GoO Notification**).

31. Meanwhile, the Hon'ble OERC had notified the 2014 OERC Regulations for the Control Period up to 31.03.2019. Further, vide the Notification dated 04.02.2020, the Hon'ble OERC had extended the applicability of 2014 OERC Regulations for a period of one year i.e. up to 31.03.2020. The said Notification also specifies that the parameters fixed for FY 2018-19 shall be applicable for FY 2019-20.

32. Thereafter, the Hon'ble OERC has issued the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 (**2020 Tariff Regulations**) applicable for the control period from 01.04.2020 to 31.03.2024, notified vide the Gazette



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Notification dated 26.08.2020.

33. The proviso to Regulation 1(4) of the 2020 OERC Regulations is reproduced hereunder:

"... Provided that, where the Commission has at any time prior to the notification of these Regulations, approved a Power Purchase Agreement (PPA) or arrangement between a generating company and a Beneficiary, or has adopted the tariff contained therein for supply of electricity from an existing project then the tariff for supply of electricity by the generating company to the Distribution Licensee shall be in accordance with such PPA or arrangement for such period as may be so approved or adopted by the Commission to the extent of existing Installed Capacity as contained in the PPA."

34. As per the aforesaid proviso to Regulation 1(4) of the 2020 OERC Regulations, read with the definitions of "existing project" and "installed capacity" under PPA 2, the following are discernible:

- a) this Hon'ble Commission had approved a power purchase agreement prior to 26.08.2020 (date of publication of the 2020 OERC Regulations in the official gazette) i.e., PPA 2 on 04.04.2012; and
- b) such approval pertains to a project that achieved commercial operations prior to 01.04.2020 (date of effectiveness of the 2020 OERC Regulations) i.e., on 21.08.2019.

35. Applying the proviso to Regulation 1(4) of the 2020 OERC Regulations, the tariff of such a project must be determined in accordance with the norms and parameters under the previously approved arrangement. In OPGC Units 3 and 4's case that is PPA 2. Therefore, the tariff for Units 3 and 4 must be determined as per the norms specified under the prevalent CERC (Terms and Conditions of Tariff) Regulations, 2019 (**2019 CERC Regulations**) in accordance with Schedule 4 to PPA 2.

36. Despite having consciously notified the proviso to Regulation 1(4) of the 2020 OERC Regulations, while approving the Supplementary PPA 2, the Hon'ble OERC in its Order dated 22.06.2021 in Case No 67/2019 observed that the tariff norms and parameters for Units 3 & 4 (2X660 MW) shall be as per the generic OERC Generation Tariff Regulations, as amended from time to time, and ruled as under:



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*"29. .... Therefore, the Commission is of the view that GRIDCO may procure power from OPGC expansion Units-3 & 4 as decided by the State Government. However, the Commission observed that as per PPA -2 the tariff norms and parameters for this project shall be as per the guidelines of CERC Tariff Regulations. The same is reiterated in the supplementary agreement to the PPA-2. Since 100% power shall be procured by GRIDCO from this expansion project of OPGC, the tariff should be as per the norms and parameters of OERC Generation Tariff Regulations notified by the Commission from time to time."*

37. Aggrieved by the aforesaid Order dated 21.06.2021 of the Hon'ble Commission, OPGC has preferred a Writ Petition before the Hon'ble High Court of Orissa on 05.11.2021. The same has been numbered as WP I No. 346631/2021 and is presently pending adjudication.
38. OPGC's Units 3 and Unit 4 have achieved COD on 03.07.2019 and 21.08.2019 respectively. On 16.11.2021, OPGC filed the tariff petition for the period since COD of Unit 3 (i.e., 03.07.2019) till 31.03.2024 following the norms and parameters of CERC Tariff Regulations. The said Petition was registered as Case No. 96/2021. It is submitted that the instant Petition was filed without prejudice to OPGC's rights under law and contentions taken in W.P.(C) No. 34663/2021 before the Hon'ble High Court.
39. Upon hearing all the stakeholders, the Hon'ble OERC passed the Order in the aforesaid matter on 07.01.2023 adopting the norms and parameters specified in 2014 OERC Regulations and 2020 OERC Regulations for the period sought in the Petition. This Hon'ble Commission at para. 12 of the said Order has observed as follows:

*"12. Further, we observe that the petitioner-OPGC has filed a Writ Petition before the Hon'ble High Court of Orissa on this matter of applicability of CERC Regulation to the determination of tariff by OERC WP(C) No.34663 of 2021 which is now pending before the said Hon'ble Court for adjudication. Therefore, continuing with our earlier stand, pending final decision of the Hon'ble High Court of Orissa in this matter, we now proceed to determine the tariff of the generating Units 3 & 4 of OPGC expansion projects basing on the norms specified by this Commission in OERC Generation Regulations."*

40. In good order, it is clarified that the relevant provisions of the 2014 OERC Regulations and 2020 OERC Regulations are *pari materia* with the relevant provisions of the 2019 CERC Regulations. All 3 Regulations allow additional capital expenditure on "change in law or compliance with any existing law". However, the expenditure towards transportation of fly ash



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from the generating station to the user agencies is an expenditure of a revenue nature. There is no corresponding provision under all 3 Regulations for allowing the recurring revenue expenses under "compliance with existing law/ Change in Law".

41. Accordingly, in view of the above background, without prejudice to the rights under law and contentions taken in W.P. (C) No. 34663/2021 before the Hon'ble High Court, OPGC is claiming additional O&M charges in terms of this Hon'ble Commission's regulatory powers under Sections 86(1)(a) and 86(1)(b) of the Act.

42. It is humbly submitted that OPGC has been incurring additional expenditure on account of transportation of ash. The additional costs claimed by the Petitioner is not on account of any failure, deficiency or imprudence attributable to the Petitioner. The said expenditure is being incurred on account of Change in Law event/ compliance with existing law up to 31.12.2021 (i.e., 2016 Notification) and Change in Law event thereafter (i.e., 2021 Notification). The Petitioner is seeking disbursal of such expense incurred up to 31.03.2023 and for future period on a monthly basis to avoid unnecessary and avoidable financial implications on the parties involved. OPGC may kindly be permitted to recover such expenditure on monthly basis for the ensuing period based on self-certification and duly reconciled and adjusted at the end of the financial year on the basis of the Audited Accounts.

43. In the past, the relief as sought by OPGC herein has been granted to NTPC Limited by the Hon'ble Central Electricity Regulatory Commission (CERC) by exercising Hon'ble CERC's regulatory power under Section 79(1)(a) of the Act. In this regard, reference may be had to:

- a) The Ld. CERC has passed Order dated 05.11.2018 in Petition No. 172/MP/2016 and recognised the 2016 Notification as a Change in Law event. Further, the Hon'ble CERC exercised its regulatory power to allow recovery of expenditure on fly ash transportation expenses as additional O&M charges. The said Petition was filed under the 2014 CERC Regulations. The relevant parts of the said Order are excerpted below:

"22. It is also noticed that the Committee constituted by the Commission to examine the technical issues with regard to ash utilization in the light of the MOEFCC Notification dated 25.1.2016 has in its report dated 16.5.2018 suggested that the expenditure towards fly ash transportation is admissible under



change in law and may be considered in terms of the Commission's order dated 19.12.2017 in Petition No. 101/MP/2016 (as stated above).

23. Based on the above discussion, we hold that the MOEFCC Notification dated 25.1.2016 which prescribes for sharing of the transportation cost by the coal and lignite based thermal power plants with the fly ash users is covered under Change in law in terms of Regulation 3(9)(ii) of the 2014 Tariff Regulations.

30. ... In all these situations, additional capital expenditure on "change in law or compliance with any existing law" is allowed. However, the expenditure towards transportation of fly ash from the generating station to the place of users is an expenditure of a revenue nature. There is no corresponding provision under the 2014 Tariff Regulations for allowing the revenue expenses /expenses of O&M nature under "Change in Law".

31. Accordingly, we in exercise of the regulatory power hold that the actual additional expenditure incurred by the Petitioner towards transportation of ash in terms of the MOEFCC Notification is admissible under "Change in Law" as additional O&M expenses. ..."

- b) Similarly, under the 2019 CERC Regulations, the Ld. CERC passed Order dated 28.10.2022 in Petition No. 205/MP/2021. In the said Order, the Ld. CERC allowed pass through of fly ash transportation expenses as additional O&M expenses, along with carrying cost, by exercising its regulatory powers. Further, all past dues were ordered to be recovered in 6 equal monthly instalments, as also prayed for herein. Lastly, the Hon'ble CERC permitted the provisional billing at 90% of the fly ash transportation charges incurred by NTPC, in respect of its generating stations, for the balance period (i.e., 2022-24), on a monthly basis based on self-certification, and the beneficiaries shall pay the same accordingly. The following excerpt is relevant in this regard (underlined for emphasis):

"25. Thus, the MOEF & CC notifications dated 25.1.2016 and 31.12.2021, has created an absolute obligation on the Petitioner, for timely disposal of fly ash. In other words, while the notification dated 25.1.2016 (which was declared as a change in law event during the period 2014-19), was necessarily required to be complied by the Petitioner during the period from 1.4.2019 till 30.12.2021, the issuance of notification dated 31.12.2021, was also required to be complied by the Petitioner from 31.12.2021 till 31.3.2024, as the same is a change in law event in terms of the above provision. ... In this background, we hold that the Petitioner is entitled to seek additional cost towards fly ash transportation charges during the period 2019-24, in terms of compliance to MOEF&CC Notification dated 25.1.2016 and as a change in law in terms of the MOEF&CC Notification dated 31.12.2021.



Prakash Kumar Swain



29. It is pertinent to mention that the Commission while fixing the O&M expense norms for the 2019-24 tariff period, had not considered/included the expenses incurred on account of transportation of fly ash. Accordingly, we, in exercise of the regulatory power under section 79(1)(a) of the Act, hold that the additional expenditure incurred by the Petitioner towards fly ash transportation cost for the period 2019-24, is admissible as additional O&M expenses, as the same is in terms of the MOEF&CC notifications dated 25.1.2016 and 31.12.2021, as stated in para 25 above.

...  
39. Petitioner has furnished the details of the distance to which fly ash has been transported from the generating station, schedule rates applicable for transportation of fly ash, as notified by the State Governments along with details, including Auditor certified accounts. These documents have been examined and accordingly, the total fly ash transportation expenditure allowed to the Petitioner generating station wise for the period 2019-22 is as per the table in para 38 above totalling to Rs.309704.03 lakh and the same shall be recovered from the beneficiaries of the respective generating stations in 6 (six) equal monthly instalments. ...

...  
43. In the light of the above discussion and keeping in view that the Petitioner is entitled for recovery of fly ash transportation charges, under change in law, as additional O&M expenses, we permit the provisional billing at 90% of the fly ash transportation charges incurred by the Petitioner, in respect of its generating stations, for the balance period (i.e. 2022-24), on a monthly basis, based on self-certification, and the beneficiaries shall pay the same accordingly. This is, however, subject to prudence check of the claims, at the time of truing-up of tariff for the period 2019-24, in respect of the generating stations of the Petitioner, in terms of Regulation 13 of the 2019 Tariff Regulations.

...  
47. In line with the above decision and since the Petitioner has been permitted to recover the fly ash transportation cost as 'additional O&M expenses', for the period 2019-24, in exercise of the regulatory powers under Section 79(1)(a) of the Act, we permit the recovery of these charges, along with carrying cost, at the rate of interest as specified, in terms of Regulation 10 (7) of the 2019 Tariff Regulations."

A copy of the Ld. CERC's Order dated 28.10.2022 in Petition No. 205/MP/2021 is attached herewith as **Annexure-3**.

- c) Further, the issue of monthly recovery and the procedure for recovery of costs has been treated as no more *res-integra* as the Hon'ble CERC's Order dated 22.03.2021 in Petition No. 405/MP/2019 has already put in place a robust mechanism of monthly recovery with annual reconciliation. Even though the said Petition was filed with respect to a power project under Section 63 of the Act and there was no mechanism suggested by the PPA, the Hon'ble CERC devised a mechanism for expeditious recovery of such expenditure to



avoid unnecessary burden on generator and beneficiaries.

- d) In this regard, it is submitted that there is no prohibition either in the 2020 OERC Regulations, nor the 2014 OERC Regulations or otherwise which restricts this Hon'ble Commission's power to adopt or devise a mechanism similar to the mechanism as formulated under the aforesaid Orders of the Hon'ble CERC.
- e) In fact, this Hon'ble Commission has already allowed ash transportation charges claimed for pass through to GRIDCO in its petition for approval of ARR for FY 2023-24 and true-up for FY 2021-22. **In para. 415 of Hon'ble Commission's Order dated 23.03.2023 in Case No. 78 & 79 of 2022, thus Hon'ble Commission has allowed pass through of Rs. 229.63 Crore (including interest) in the ARR of GRIDCO for the FY 2023-24 towards payment of ash transportation charges claimed by NTPC.** In doing so, this Hon'ble Commission has also relied on the Hon'ble CERC's Order dated 28.10.2022 in Petition No. 205/MP/2021. It is submitted that the Petitioner's project must be treated at par with NTPC's power plants with respect to pass through of ash transportation cost and fly ash utilisation expenses since the 2016 and 2021 Notifications apply equally to OPGC and NTPC.
- f) Similarly, the Hon'ble Kerala State Electricity Regulatory Commission (KSERC) has recently allowed the Kerala State Electricity Board an additional expense of Rs. 0.15 per unit towards fly ash transportation charges. In this regard, reference may be had to para. 6.57 of the KSERC's Order dated 25.06.2022 in O.P. No. 11/2022.
- g) It is submitted that, the Government of India issued the Tariff Policy, 2016 on 28.01.2016 and inter-alia stipulated as follows: -

"h) Multi Year Tariff

4) Uncontrollable costs should be recovered speedily to ensure that future consumers are not burdened with past costs. Uncontrollable costs would include (but not limited to) fuel costs, costs on account of inflation, taxes and cess, variations in power purchase unit costs including on account of adverse natural events."

- h) Further, Ministry of Power, Government of India vide its Notification dated 22.10.2021



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has notified Electricity (Timely recovery of Costs due to Change in Law) Rules 2021 for early liquidation of the additional tariff on account of Change in Law. The aforesaid Notification is attached as **Annexure-4**.

44. Ash transportation cost and utilisation expenses is in the nature of a recurring, revenue expense. The Petitioner submits that the said expense is being incurred on account of the 2016 and 2021 Notifications, which qualify as compliance with law/ Change in Law event. While finalising the normative O&M expenses under its Regulations, the Hon'ble CERC has not considered fly ash transportation cost. This Hon'ble Commission has, along the same lines, notified the 2014 and the 2020 OERC Regulations, whereunder the fly ash transportation cost has not been considered in normative O&M expenses. In a similar situation, the Hon'ble CERC has repeatedly allowed recovery of the fly ash transportation costs as additional O&M expenses in exercise of its regulatory powers. Further, this Hon'ble Commission has also approved NTPC's claim for fly ash transportation cost in GRIDCO's ARR Order for FY 2023-24 dated 23.02.2023. Hence, a similar dispensation may kindly be allowed in OPGC's case.
45. In this regard, reference may be had to the Hon'ble Supreme Court's Constitutional Bench Judgment in *PTC India Limited vs. CERC*, (2010) 4 SCC 603, wherein it was held that the regulatory power of the Hon'ble CERC as envisaged under the Act can be exercised even when no regulations are framed on a given subject. The Hon'ble Supreme Court in *Energy Watchdog vs. CERC & Ors.*, (2017) 14 SCC 80, has categorically held that the Hon'ble CERC has the power to frame a procedure, if the Regulations are silent or do not provide a specific methodology. The same regulatory powers are vested in this Hon'ble Commission as well under Sections 86(1)(a) and 86(1)(b), which may be kindly exercised in an appropriate case like the present one.
46. In any case and without prejudice to the foregoing, it is submitted that the 'Power to Relax' can be invoked by this Hon'ble Commission, if the Regulations, in any manner cause hardship to a party in peculiar facts and circumstances. In this regard, reference may be had to Regulations 7.13 and 7.14 of the 2014 OERC Regulations and Regulations 49 and 50 of the 2020 OERC Regulations, which empower this Hon'ble Commission to exercise its Power to Relax/ Power to Remove Difficulties. The said provisions of the respective Regulations are reproduced hereunder:



officer Kewar Satapathy

**A. OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014**

***"POWER TO RELAX"***

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

***POWER TO REMOVE DIFFICULTY***

*7.14 If any difficulty arises in giving effect to the provisions of these regulations, the Commission may, by order, make such provision not inconsistent with the provisions of the Act or provisions of other regulations specified by the Commission, as may appear to be necessary for removing the difficulty in giving effect to the objectives of these regulations."*

**B. OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020**

***"49. POWER TO RELAX"***

*(1) The Commission, for reasons to be recorded in writing, may relax any of the provisions of these regulations on its own motion or on an application made before it by an interested person.*

***50. POWER TO REMOVE DIFFICULTY***

*(1) If any difficulty arises in giving effect to the provisions of these regulations, the Commission may, by order, make such provision not inconsistent with the provisions of the Act or provisions of other regulations specified by the Commission, as may appear to be necessary for removing the difficulty in giving effect to the objectives of these regulations."*

47. In this regard, the ambit and scope of 'Power to Relax' provisions of a delegated legislation have been interpreted by various Courts and the Hon'ble Appellate Tribunal in a catena of cases. It is settled position of law that 'Power to Relax' can be invoked if the Regulations in any manner cause hardship to a party. Reliance is placed on the Hon'ble Tribunal's Judgment dated 24.03.2015 in *BSES Yamuna Power Limited vs. CERC & Ors.*, Appeal No. 55 of 2013, paras. 26.05, 26.08. In this case, the Hon'ble APTEL upheld the exercise of 'power to relax' by the Hon'ble CERC to allow NTPC to recover additional O&M expenses on account of pay revision during the control period. The situation was materially similar to the present case in



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that a new/ recurring expense has not been considered while fixing normative O&M expenses for the control period.

#### **Ash Utilisation Efforts by OPGC**

48. By way of a background, OPGC suffers from the following locational constraints with regard to fly ash utilization, which are as follows:

- a) OPGC's power plant is situated in the remote location of Village Banaharpalli in Jharsuguda District, Odisha, where there is a heavy concentration of thermal generating stations and therefore a high availability of fly ash but very few industries that use fly ash.
- b) Further, OPGC's power plant is situated in the extreme end of the Hirakud reservoir. The power plant is situated at a remote location approximately 30 kms. away from the nearest State Highway (SH 10-Biju Express Highway), around 20 kms. away from the nearest National Highway (NH-49), and more than 400 kms. away from the nearest sea-port (Paradip/ Gopalpur). Further, there is no big road infrastructure activity or major cement industry (apart from one cement plant) in the power plant's vicinity. Moreover, there are no large stone quarries, nor has OPGC been allotted a suitable mine void filling space in the vicinity either.
- c) Most of the power plants located in Odisha, Chhattisgarh, Uttar Pradesh, Madhya Pradesh and Assam that are located in coal bearing areas have difficulty in utilizing even 50% of their fly ash generation. The absence of many cement plants or any major national highway construction in the vicinity, leads to low fly ash utilisation from the OPGC's power plant.

49. Despite the foregoing disadvantages, OPGC has made *bona fide* efforts to facilitate 100% fly ash utilization. However, despite its best efforts, the practical impediments beyond OPGC's control have made it impossible for OPGC to achieve 100% fly ash utilization. In this regard, the various steps taken by OPGC towards utilization of fly ash are set out below:



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- a) OPGC has installed its own fly ash brick plant with production capacity of 10,000 bricks per day, and steps have been taken to utilize the bricks so manufactured in all the ongoing and upcoming construction activities of the OPGC.
- b) The OPGC supplied fly ash during FY 2016-17 for construction of fly over in Belpahar, by extending transportation cost of INR 150/- per MT.
- c) OPGC has entered into an agreement with Visveswariya National Institute of Technology, Nagpur to devise technological advancements for enhancing ash percentage up to 90% in brick production and for geopolymeric use of ash in road construction.
- d) OPGC has made provisions for adequate quantity of dry ash and supplying ash free of cost.
- e) Transportation cost of INR 150/- per MT has been extended for enhancing ash utilisation in areas of manufacturing of ash brick, other Fly Ash based products, cement/ asbestos manufacturing and road construction.
- f) OPGC has been conducting various ash utilisation awareness campaigns in the nearby community.
- g) Strong initiative has been taken to identify stone quarries in the vicinity.
- h) Using ash in construction of embankment for ash pond as well for rising of bund height for ash pond in place of precious earth.
- i) OPGC has also awarded a consultancy order to C-FARM (Centre For Fly Ash Research & Management) headed by Dr. Vimal Kumar (Former Mission Director & Head, Fly Ash Unit, DST, GoI) for scientific and technical advice for obtaining "Consent for mine void filling with Fly Ash", C-FARM is continuously deliberating with Mahanadi Coalfields Limited (MCL) (which is a Coal India Limited Subsidiary (CIL)), as well as with Central Mine Planning & Design Institute Limited (CMPDI), on behalf of the OPGC for allotment of mine void for stowing with fly ash.

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- j) OPGC is also deliberating with ZAAK Technology, Berlin for establishment of Fly Ash to sand conversion plant at its Project site for utilizing ash as one of the inputs.
- k) Considering OPGC plant's location (Pit Head), mine void back filling of ash is the prime means of utilization by which OPGC can achieve 100% ash utilization. For this reason, OPGC has been continuously following up with Mahanadi Coalfields Limited for allotment of mine void, however the allotment of mine void has yet not been materialized. The steps taken, so far, are as follows.
- i. There was a progress on mine void allotment in the year 2006. With the support from Regional Office, MoEF and Odisha State Pollution Control Board (OSPCB), MCL consented to allot Lilari mine void to OPGC. Subsequently, in July 2007, MCL accorded consent for taking up Environmental Impact Assessment (EIA) & Feasibility Study for back filling in the void based on which OPGC engaged CSIR-Central Institute of Mining and Fuel Research (CIMFR) to conduct the studies in October 2007. During the course of the EIA study, the consent given to OPGC was withdrawn by MCL unilaterally vide their letter No MCL-3185/13.02.2008 stating "the life of Lilari Mine is extended with ten more years". Thereafter, OPGC has been pursuing MCL time and again involving regulatory as well as GoO to reconsider the withdrawal or consider allotting any other mine void near to OPGC site, but there has been no progress.
  - ii. On 05.06.2010, OSPCB suggested back filling of OPGC fly ash in Belpahar Open Cast Mines (BOCM) mine void of MCL as an alternative solution to the allotment of Lilari mine void but no proactive action has been taken so far from MCL side.
  - iii. In response to the letter of Director (Operation), OPGC dated 24.08.2013, Director (Tech. P&P), MCL negated the request on the ground of proposed BOCM expansion towards dip side and no scope to back fill ash in running mine, even though OPGC proposed for a partition bund to separate the void space from active mine for ash back filling.



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- iv. In accordance with the decision taken in the high-level meeting held on 13.12.2013 under the Chairmanship of Chief Secretary, GoO, directions for allotment of BOCM mine void to OPGC were issued to MCL on 03.04.2014 by Department of Environment & Forest, GoO. The said directions were for taking expeditious steps on this front. However, there has not been any progress as yet.
- v. OPGC vide Letter No. 8375 dated 13.11.2018 had requested Director (Tech/P&P), MCL for allotment of BOCM mine void for backfilling of ash, however there was no response from the side of MCL.
- vi. OPGC vide letter dated 10.08.2020 had again requested Director (Tech/P&P), MCL for allotment of BOCM mine void for backfilling of ash. However, Director Technical, MCL vide letter dated 28.08.2020 turned down the proposal stating integration of Lakhanpur-Belpahar-Lilari mines and extraction of further seams from these mines.
- vii. In another letter dated 29.07. 2021, OPGC further requested Director Technical of MCL for allotment of mine void/ concurrent filling. The request was also turned down stating the reason of further availability of seam below.
- viii. OPGC sources entire coal from MCL mines for its Units 1 & 2 since its inception. Coal being supplied has high ash content, i.e., from 40%-45%. The utilization of this huge quantity of ash has significant cost implication.
- ix. A task force has been created by committee comprising representatives from the Central Electricity Authority (CEA), MoEF, Ministry of Mines, CIL, CIMFR, CMPDI, Central Pollution Control Board (CPCB) & NTPC. The task force has listed Rampur Colliery as one of the abandoned mines for backfilling of ash nearest to OPGC. In response to the letter of CEA for a feasibility report on mine void filling, OPGC has made a preliminary survey and has found that the Rampur underground mine is at a distance of around 25 km. from the plant and can accommodate ash generated from OPGC for a period of 5 years and it is also feasible for OPGC to dispose ash in the mentioned mine void. OPGC has also

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proposed the name of BOCM to CEA which can meet the ash utilization requirement of OPGC for at least a period of 10 years. However, there is no response from the committee.

#### OPGC's Ash Utilisation Performance

50. Ash utilisation of OPGC Units 1 & 2 since FY 1999-20 till FY 2015-16 is provided in Table-1 below.

**Table-1 (Ash Utilisation of Units 1 & 2)**

FY	Ash Produced (MT)	Ash Utilized (MT)	% of Ash Utilized
2015-16	1162985	238884	20.54
2014-15	897588	203398	23
2013-14	1080583	147560	14
2012-13	1109346	180129	16
2011-12	1047806	175425	17
2010-11	1111512	307447	28
2009-10	1052871	241754	23
2008-09	1110644	255742	23
2007-08	1087544	169427	16
2006-07	1123888	146430	13
2005-06	1057333	70074	7
2004-05	1076700	148994	14
2003-04	890053	66517	7
2002-03	849678	19140	2
2001-02	966477	5196	1
2000-01	1007600	30673	3
1999-20	1127600	100100	9

However, there is no response from the committee.

51. Ash utilisation of OPGC Units 1 & 2 from FY 2016-17 till FY 2022-23 is provided in Table-2 below.



**Table-2 (Ash Utilisation of Units 1 & 2)**

FY	Ash Produced (MT)	Ash Utilized (MT)	% of Ash Utilized
2022-23	1150353	464849	40.41
2021-22	1164864	403200	34.61
2020-21	1096385	730990	66.67
2019-20	939201	624595	66.50
2018-19	1014085	343411	33.86
2017-18	1096142	607344	55.41
2016-17	1237357	434725	35.13

52. Ash utilisation details of OPGC Units 3 & 4 since COD of the Unit #3 on 03.07.2019 (in FY 2019-20) till FY 2022-23 is given in Table-3 below.

**Table-3 (Ash Utilisation of Units 3 & 4)**

FY	Ash Produced (MT)	Ash Utilized (MT)	% of Ash Utilized
2022-23	2823724	657506	23.29
2021-22	2420650	578046	23.88
2020-21	2125576	484577	22.80
2019-20	1233724	213978	17.34

53. Further, plant wise details of ash produced and its utilisation for different activities such as land development, supply to cement & other manufacturing industries with ash as an input material, bricks manufacturing, ash dyke raising, roads/ rail embankment, mine filling and other activities as submitted to CEA in the prescribed format for the period since FY 2016-17 is attached as **Annexure-5 (Colly.)**. In the meantime, OPGC has formulated its ash Utilisation Policy, which has been annexed to this Petition as **Annexure-6**.

54. Plant-wise details of actual ash transportation expenses incurred by the Petitioner in its Units 1 & 2, and Units 3 & 4 against ash utilisation (including quantities) for the period since FY 2016-17 till FY 2022-23 are provided in the Tables 4 & 5 below.



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Table-4

## Ash Transportation Cost Incurred in OPGC Units 1&amp;2

FY	Ash Qty Transported (MT)	Transport Expenses (Rs)	GST Amount (Rs)	Total Ash Transportation Cost (Rs)
2022-23	10,787	20,50,115	3,69,021	24,19,136
2021-22	13,394	20,09,182	3,61,653	23,70,835
2020-21	11,695	17,54,326	3,15,778	20,70,104
2019-20	18,664	27,99,676	5,03,941	33,03,617
2018-19	25,994	38,99,163	7,01,849	46,01,012
2017-18	18,014	27,02,181	4,86,393	31,88,574
2016-17	60,063	90,09,505	16,21,711	1,06,31,216
<b>Total</b>	<b>1,58,611</b>	<b>2,42,24,148</b>	<b>43,60,346</b>	<b>2,85,84,493</b>

Table -5

## Ash Transportation Cost Incurred in OPGC Units 3&amp;4

FY	Ash Qty Transported (MT)	Transport Expenses (Rs)	GST Amount (Rs)	Total Ash Transportation Cost (Rs)
2022-23	11,81,951	3,70,31,088	18,51,554	3,88,82,642
2021-22	3,52,662	7,70,28,736	38,51,437	8,08,80,173
<b>Total</b>	<b>15,34,613</b>	<b>11,40,59,824</b>	<b>57,02,991</b>	<b>11,97,62,815</b>

55. It is to mention here that, during FY 2019-20 and FY 2020-21, fly ash from Units 3 & 4 were utilized in low lying area adjacent to the Ash Silo and hence no additional cost was incurred towards ash transport cost. Accordingly, the same has not been claimed here.
56. It is humbly submitted that since FY 2016-17 till FY 2022-23, OPGC has spent Rs 2,85,84,493/- towards Ash Transportation Cost for Utilisation of Ash of Units 1 & 2. Similarly, for OPGC Units 3 & 4, Rs 11,97,62,815/- has been spent by OPGC towards Ash Transportation Cost during FY 2021-22 and FY 2022-23.



Statement given Satisfactory

57. In addition to the Ash Transportation Cost, OPGC has incurred Rs 2,26,34,440/- towards Ash Utilisation for both Units 1 & 2 and Units 3 & 4 as given in the Table below:

**Table-6 (Ash Utilisation Expenses Other than Transportation Cost)**

Year wise	Units 1 & 2 (Rs)	Units 3 & 4 (Rs)	Total (Rs)
2016-17	24,31,902	-	24,31,902
2017-18	8,133	-	8,133
2018-19	16,36,045	-	16,36,045
2019-20	41,24,068	-	41,24,068
2020-21	46,60,394	-	46,60,394
2021-22	15,36,705	2,41,642	17,78,347
2022-23	13,92,759	23,48,943	37,41,702
<b>TOTAL</b>	<b>1,57,90,006</b>	<b>25,90,585</b>	<b>1,83,80,591</b>

58. GRIDCO is well-aware of the aforesaid expenses, including by way of OPGC's Petition dated 24.11.2021 in Case No. 99/2021. In the said Petition, OPGC has clearly made a mention that it is offering a fly ash transportation cost of INR 150/MT to eligible user agencies in compliance with the 2016 Notification.

A copy of excerpt of OPGC's Petition dated 24.11.2021 in Case No. 99/2021 is attached herewith as **Annexure-7**.

59. **Future Plan for Ash Utilisation:** The Petitioner has made best of its efforts towards the maximization of fly ash utilization in order to reduce the cost of transportation of the same. The Action Plan of OPGC for 100% average fly ash utilization for the 1<sup>st</sup> compliance cycle as per the 2021 Notification and the initiatives for the same are attached herewith as **Annexure - 8**.

60. It is respectfully prayed that the Petitioner kindly be permitted to recover the said expenditure from the sole beneficiary, GRIDCO. Further, for the future period, to avoid accumulation of outstanding dues and interest liability on this account, it is prayed that the same may be allowed to be recovered on a monthly basis as the Petitioner would continue to incur substantial, recurring revenue expenditure in view of the 2021 Notification. Hence, the deferment of this claim till the end of the tariff period will result into issues such as accrual of avoidable carrying

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cost/ interest on the deferred amount; adverse cash flow issues for the Petitioner; and ultimately, a tariff shock if the deferred expense is allowed in one go at the end of the control period. This is apparent from the following table:

**Table-7**

Sl. No.	Description	OPGC 1&2 (Rs)	OPGC 3&4 (Rs)	Total Amount (Rs)
1	Ash Transportation Expenses from FY 2016-17 to FY 2022-23.	2,85,84,493	11,97,62,815	14,83,47,308
2	Other Expenses towards Ash Utilisation from FY 2016-17 to FY 2022-23	1,57,90,005	25,90,585	1,83,80,590

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61. Pertinently, OPGC has not earned any revenue from sale of fly ash or fly ash products so far, as there is no demand for the same in the nearby areas. As a result, a separate account has not been created to keep record of revenue earned and utilisation of that revenue for developing the infrastructure for promoting ash utilization.
62. In order to explore sale of fly ash through transparent bidding process, Expression of Interest (EOI) dated 11.09.2017 was published on 17.02.2018 in a vernacular newspaper (Dharitri). This was done with the intention to comply with the 2016 Notification. The same did not get any response whatsoever from the user agencies.

A copy of the Expression of Interest (EOI) dated 11.09.2017, along with an excerpt of Dharitri newspaper dated 17.02.2018, is attached as **Annexure-9**.

63. Further, as per Approved Note dated 10.04.2020, efforts were made to offer the fly ash free of cost to user agencies on an 'as is where is' basis, with user agencies bearing the transportation cost. To this end, NIT No. ITPS/CC-22/2020-21/02 dated 19.05.2020 and NIT No. ITPS/CC-22/2020-21/04 dated 09.08.2020 were published on OPGC's website. However, no interest was shown by any user agency to bear the transportation cost either in view of the adverse locational disadvantages mentioned above.

Copies of NIT No. ITPS/CC-22/2020-21/02 dated 19.05.2020 and NIT No. ITPS/CC-22/2020-



21/04 dated 09.08.2020 is attached as **Annexure-10 (Colly.)**.

64. Thereafter, in 2021, again OPGC released NIT No. ITPS/CC-22/2021-22/12 dated 12.10.2021 for sale of fly ash to user agencies published on OPGC's website. Yet again, no user agencies showed interest.

Copy of NIT No. ITPS/CC-22/2021-22/12 dated 12.10.2021 is attached as **Annexure-11**.

65. Hence, OPGC resorted to extending the transport cost to those user agencies who are mandated to lift unutilised fly ash from thermal generators vide NIT No. ITPS/CC- 22/2022-23/17 dated 18.02.2023 and NIT No. ITPS/CC-22/2023-24/07 dated 25.07.2023.

### PRAYER

66. In view of the aforesaid facts and circumstances, it is humbly prayed that this Hon'ble Commission may be pleased to:

- (a) Admit the present Petition;
- (b) A declaration from the Hon'ble Commission that compliance with the MoEF Notification dated 25.01.2016 required the Petitioner to incur substantial expenditure in terms of ash transportation cost and fly ash utilisation expenses;
- (c) A declaration from the Hon'ble Commission that the issuance of MoEF Notifications dated 25.01.2016 is a 'Change in Law' event requiring the Petitioner to incur substantial expenditure in terms of ash transportation cost and fly ash utilisation expenses;
- (d) A declaration from the Hon'ble Commission that the issuance of MoEF Notifications dated 31.12.2021 is a 'Change in Law' event requiring the Petitioner to incur substantial expenditure in terms of ash transportation cost and fly ash utilisation expenses;
- (e) Permit recovery of additional expenditure on account of ash transportation and ash utilisation already incurred by the Petitioner from FY 2016-17 up to FY 2022-23, along with carrying cost;
- (f) Allow the Petitioner to raise Monthly Bills for reimbursement of the additional expenditure for ash transportation on a recurring basis for the period since April 2023 and to be incurred in the future, with annual reconciliation; and



attested by Mr. Satish Kumar



(g) Pass such further Order(s) as this Hon'ble Commission may deem fit in the facts and circumstances of the case.

Place: Bhubaneswar

Date: 6<sup>th</sup> October, 2023

*Chander Kumar Satapathy*

**Petitioner**

Addl. General Manager (C & RA)  
Odisha Power Generation Corporation Ltd.  
Bhubaneswar



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**MINISTRY OF ENVIRONMENT AND FORESTS****NOTIFICATION**

New Delhi, the 14th September, 1999

**S.O. 763(E).**— Whereas a draft notification containing certain directions was published, as required by sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 under the notification of the Government of India in the Ministry of Environment and Forests number S.O. 453(E) dated 22nd May, 1998 inviting objections and suggestions from all persons likely to be affected thereby, before the expiry of the period of sixty days from the date on which the copies of the Gazette of India containing the said notification are made available to the public;

And, whereas, copies of the said Gazette were made available to the public on the same date;

And, whereas, the objections and suggestions received from the public in respect of the said draft notification have been duly considered by the Central Government;

Whereas it is necessary to protect the environment, conserve top soil and prevent the dumping and disposal of fly ash discharged from coal or lignite based thermal power plants on land;

And, whereas, there is a need for restricting the excavation of top soil for manufacture of bricks and promoting the utilisation of fly ash in the manufacture of building materials and in construction activity within a specified radius of fifty kilometers from coal or lignite based thermal power plants;

And, Whereas, the Hon'ble High Court of Judicature, Delhi vide its order dated 25th August, 1999 in CWP No. 2145/99 Centre for Public Interest Litigation, Delhi v/s Union of India directed that the Central Government to publish the final notification in respect of fly ash on or before 26th October, 1999;

Now, therefore, in exercise of the powers conferred by sub-section (1), read with clause (v) of sub-section (2) of section 3 and section 5 of the Environment (Protection) Act, 1986 (29 of 1986); and in pursuance of the orders of the Hon'ble High Court, Delhi stated above, the Central Government hereby issues the following directions which shall come into force on the date of the publication of this notification, namely:—



1. Use of fly ash, bottom ash or pond ash in the manufacture of bricks and other construction activities.-

- (1) No person shall within a radius of fifty kilometers from coal or lignite based thermal power plants, manufacture clay bricks or tiles or blocks for use in construction activities without mixing atleast 25 per cent of ash (fly ash, bottom ash or pond ash) with soil on weight to weight basis.
- (2) The authority for ensuring the use of specified quantity of ash as per para (1) above shall be the concerned Regional Officer of the State Pollution Control Board or the Pollution Control Committee as the case may be. In case of non-compliance, the said authority, in addition to cancellation of consent order issued to establish the brick kiln, shall move the district administration for cancellation of mining lease. The cancellation of mining lease shall be decided after due hearing. To enable the said authority to verify the actual use of ash, the thermal power plant shall maintain month-wise records of ash made available to each brick kiln.
- (3) In case of non-availability of ash from thermal power plant in sufficient quantities as certified by the said power plant, the stipulation under para (1) shall be suitably modified (waived/relaxed) by the concerned State/Union Territory Government.
- (4) Each coal or lignite based thermal power plant shall constitute a dispute settlement committee which shall include the General Manager of the thermal power plant and a representative of All India Brick and Tile Manufacture's Federation (AIBTMF). Such a committee shall ensure unhindered loading and transport of ash without any undue loss of time. Any unresolved dispute shall be dealt with by a State/Union Territory level committee to be set up by State/Union Territory Government comprising Member Secretary of the State Pollution Control Board/Pollution Control Committee, representatives of Ministry of Power in the State/Union Territory Government and a representative of AIBTMF.

2. Utilisation of ash by Thermal Power Plants.-

All coal or lignite based thermal power plants





shall utilise the ash generated in the power plants as follows:-

- (1) Every coal or lignite based thermal power plant shall make available ash, for at least ten years from the date of publication of this notification, without any payment or any other consideration, for the purpose of manufacturing ash-based products such as cement, concrete blocks, bricks, panels or any other material or for construction of roads, embankments, dams, dykes or for any other construction activity.
- (2) Every coal or lignite based thermal power plant commissioned subject to environmental clearance conditions stipulating the submission of an action plan for full utilisation of fly ash shall, within a period of nine years from the publication of this notification, phase out the dumping and disposal of fly ash on land in accordance with the plan. Such an action plan shall provide for thirty per cent of the fly ash utilisation, within three years from the publication of this notification with further increase in utilisation by at least ten per cent points every year progressively for the next six years to enable utilisation of the entire fly ash generated in the power plant atleast by the end of ninth year. Progress in this regard shall be reviewed after five years.
- (3) Every coal or lignite based thermal power plant not covered by para (2) above shall, within a period of fifteen years from the date of publication of this notification, phase out the utilisation of fly ash in accordance with an action plan to be drawn up by the power plants. Such action plan shall provide for twenty per cent of fly ash utilisation within three years from the date of publication of this notification, with further increase in utilisation every year progressively for the next twelve years to enable utilisation of the entire fly ash generated in the power plant.
- (4) All action plans prepared by coal or lignite based thermal power plants in accordance with sub-para (2) and (3) of para 2 of this notification, shall be submitted to the Central Pollution Control Board, concerned State Pollution Control Board/Committee and concerned regional office of the Ministry of Environment and Forests within a period of six months from the date of publication of this notification.
- (5) The Central and State Government Agencies, the State Electricity Boards, the National Thermal Power Corporation and the management of the



thermal power plants shall facilitate in making available land, electricity and water for manufacturing activities and provide access to the ash lifting area for promoting and setting up of ash-based production units in the proximity of the area where ash is generated by the power plant.

- (6) Annual implementation report providing information about the compliance of provisions in this notification shall be submitted by the 30th day of April every year to the Central Pollution Control Board, concerned State Pollution Control Board/Committee and the concerned Regional Office of the Ministry of Environment and Forests by the coal or lignite based thermal power plants.

3. **Specifications for use of ash-based products.-**

- (1) Manufacture of ash-based products such as cement, concrete blocks, bricks, panels or any other material or the use of ash in construction activity such as in road laying, embankments or use as landfill to reclaim low lying areas including back filling in abandoned mines or pitheads or for any other use shall be carried out in accordance with specifications and guidelines laid down by the Bureau of Indian Standards, Indian Bureau of Mines, Indian Road Congress, Central Building Research Institute, Roorkee, Central Road Research Institute, New Delhi, Building Materials and Technology Promotion Council, New Delhi, Central Public Works Department, State Public Works Departments and other Central and State Government agencies.
- (2) The Central Public Works Department, Public Works Departments in the State/Union Territory Governments, Development Authorities, Housing Boards, National Highway Authority of India and other construction agencies including those in the private sector shall also prescribe the use of ash and ash-based products in their respective schedules of specifications and construction applications, including appropriate standards and codes of practice, within a period of four months from the publication of this notification.





- (3) All local authorities shall specify in their respective building bye-laws and regulations the use of ash and ash-based products and construction techniques in building materials, roads, embankments or for any other use within a period of four months from the date of publication of this notification.

[F. No. 16-2/95-HSMD]

V. RAJAGOPALAN, Jt. Secy.



ख. सड़क या फ्लाई ओवर तटबन्धों, जो भारतीय सड़क कांग्रेस (आई आर सी) द्वारा अधिकथित विनिर्देशों के अन्तर्गत नहीं आते हैं, के लिए आवश्यक विनिर्देश/मार्गदर्शी सिद्धान्त बनाएंगे।”।

[फा. सं.16-2/95-एच एस एम डी]

डॉ. वी. राजगोपालन, संयुक्त सचिव

टिप्पणी : मूल अधिसूचना, भारत का राजपत्र, असाधारण, भाग II, खण्ड 3, उपखण्ड (ii) में का.आ. 763(अ) दिनांक 14-9-1999 द्वारा प्रकाशित की गई है।

## MINISTRY OF ENVIRONMENT AND FORESTS

### NOTIFICATION

New Delhi, the 27th August, 2003

**S.O. 979(E).**—Whereas a draft of certain amendments to the Government of India in the Ministry of Environment and Forests notification number S.O.763 (E) dated 14<sup>th</sup> September, 1999 (hereinafter referred to as the said notification) which the Central Government proposes to make under sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) dated the 6<sup>th</sup> November, 2002 *vide* S.O. 1164 (E), dated the 5<sup>th</sup> November, 2002 inviting objections and suggestions from all persons likely to be affected thereby before the expiry of sixty days from the date on which copies of the Gazette containing the said draft amendments were made available to the public.

And, whereas copies of the said Gazette were made available to the public on 27<sup>th</sup> November 2002;

And, whereas all the objections and suggestions received from all persons likely to be affected thereby in respect of the said draft notification have been duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following amendments to the said notification, namely: -

### AMENDMENTS

1. In the said notification, in the preamble, for the words "fifty kilometers", the words "one hundred kilometres" shall be substituted.





2. In the said notification, in paragraph 1, -
- (a) in sub-paragraph (1), for the words "fifty kilometers", the words "one hundred kilometres" shall be substituted;
- (b) after sub-paragraph (1), the following sub- paragraphs shall be inserted, namely: -

"(1A) Every construction agency engaged in the construction of buildings within a radius of fifty to one hundred kilometres from a coal or lignite based thermal power plant shall use fly ash bricks or blocks or tiles or clay fly ash bricks or cement fly ash bricks or blocks or similar products or a combination or aggregate of them in such construction as per the following minimum percentage (by volume) of the total bricks, blocks and tiles, as the case may be, used in each construction project, namely:-

- (i) 25 per cent by 31<sup>st</sup> August 2004;
- (ii) 50 per cent by 31<sup>st</sup> August 2005;
- (iii) 75 per cent by 31<sup>st</sup> August, 2006; and
- (iv) 100 per cent by 31<sup>st</sup> August 2007.

In respect of construction of buildings within a radius of 50 kilometres from a coal or lignite based thermal power plant the following minimum per centage (by volume) of use of bricks, blocks and tiles shall apply: -

- (i) 50 per cent by 31<sup>st</sup> August 2004;
- (ii) 100 per cent by 31<sup>st</sup> August 2005.

(1B) The provisions of sub-paragraph (1A) shall be applicable to all construction agencies such as Housing Boards and those in the private sector



builders of apartments, hotels, resorts and cottages and the like. It shall be the responsibility of the construction agencies either undertaking the construction or approving the design or both to ensure compliance of the provisions of sub-paragraph (1A) and to submit such returns as may be called for and compliance reports to the State Government or Union territory Administration”;

(c) for sub-paragraph (2), the following sub-paragraphs shall be substituted, namely: -

“(2) The authority for ensuring the use of specified quantity of ash as per sub-paragraph (1) shall be the concerned Regional Officer of the State Pollution Control Board or the Pollution Control Committee, as the case may be.

(2A) The concerned State Government shall be the enforcing and monitoring authority for ensuring compliance of the provisions of sub-paragraph (1A).”;

(d) in sub-paragraph (3), for the words, brackets and figure “under para (1)” the words, brackets and figure “under sub-paragraph (1)” shall be substituted;

(e) after sub-paragraph (3), the following sub-paragraphs shall be inserted, namely: -

“(3A) A decision on the application for manufacture of fly ash bricks, block, and tiles and similar other fly ash based products shall be taken within thirty days from the date of receipt of the application by the competent authority. A decision on consent to establish the brick kiln shall be taken by the Pollution Control Board or the Pollution Control Committee, as the case may be, within a period of thirty days from the date of receipt of application by it.





(3B) In case of non-compliance of the provisions of sub-paragraph (1) of paragraph 1, the competent authority, in addition to cancellation of consent order issued to establish the brick kiln, shall move the district administration for cancellation of the mining lease.

(3C) All authorities sanctioning or renewing any land, soil or clay mining lease shall not grant such lease or extension of lease or renewal to clay brick, block or tile manufacturing unit within a radius of one hundred kilometres of the coal or lignite based thermal power plant in cases where the manufacturer does not mix a minimum of 25 per cent by weight of fly ash or pond ash in the manufacture of bricks or blocks or tiles. The cancellation of mining lease shall be decided by the district administration after giving the holder of such lease an opportunity of being heard. To enable the competent authority to verify the actual use of ash, the thermal power plant shall maintain month-wise records of ash made available to each brick kiln.

(3 D) It shall be sufficient compliance of this notification if within twelve months from the date of issue of this notification, manufacturers of clay bricks, blocks and tiles located within a radius of 50 to 100 kilometres of a coal or lignite based thermal power plant comply with the provisions of sub-paragraphs (1) and (2)."

- (f) in sub-paragraph (4), after brackets and letters "(AIBTMF)", the words "or a representative of local brick kiln owners association, federation, group." shall be inserted;
- (g) after sub-paragraph (4), the following sub-paragraphs shall be inserted, namely: -

"(5) No agency, person or organization shall, within a radius of 100 kilometres of a thermal power plant undertake construction or approve design for construction of roads or flyover embankments in contravention of the guidelines/specifications issued by the Indian Road Congress (IRC) as contained in IRC



specification No. SP: 58 of 2001. Any deviation from this direction can only be agreed to on technical reasons if the same is approved by Chief Engineer (Design) or Engineer-in-Chief of the concerned agency or organization or on production of a certificate of "Pond ash not available" from the thermal power plant(s) (TPPs) located within 100 kilometres of the site of construction. This certificate shall be provided by the TPP within two working days from the date of making a request for ash.

(6) Soil required for top or side covers of embankments of roads or flyovers shall be excavated from the embankment site and if it is not possible to do so, only the minimum quantity of soil required for the purpose shall be excavated from soil borrow area. In either case, the topsoil should be kept or stored separately. Voids created due to soil borrow area shall be filled up with ash with proper compaction and covered with topsoil kept separately as above. This would be done as an integral part of embankment project within the time schedule of the project.

(7) No agency, person or organization shall within a radius of 100 kilometres of a coal or lignite based thermal power plant allow reclamation and compaction of low-lying areas with soil. Only pond ash shall be used for compaction. They shall also ensure that such reclamation and compaction is done in accordance with the bye-laws, regulations and specifications laid down by the authorities mentioned in sub-paragraph (3) of paragraph 3."

3. In the said notification, in paragraph 2,

- (a) for the marginal heading "**Utilisation of ash by Thermal Power Plants**", the marginal heading "**Responsibilities of Thermal Power Plants**" shall be substituted;





- (b) for the opening words, "All coal or lignite based thermal power plants shall utilise the ash generated in the power plants as follows: -", "Every coal or lignite based thermal power plant shall take the following steps to ensure the utilisation of ash generated by it, namely: -";
- (c) in sub- paragraph (1), -
- (i) after the words "products such as cement, concrete blocks, bricks, panels", the words "or a combination thereof" shall be inserted;
  - (ii) the following shall be added at the end, namely: -

"The thermal power plants have to ensure availability of fair quantity of ash to each user including brick kilns.";

4. In the said notification, after paragraph 2, the following paragraph shall be inserted, namely: -

**"2A. Utilization of fly ash for reclamation of sea.**

"Subject to the rules made under the Environment (Protection) Act, 1986. (29 of 1986) reclamation of sea shall be a permissible method of utilization of fly ash.".

5. In the said notification, in paragraph 3, the following sub-paragraphs shall be inserted, namely: -

"(2A) All agencies including the Central Public Works Department and State Government agencies concerned with utilization of fly ash for construction purposes shall, within three months from the 1<sup>st</sup> day of September, 2003 make provisions for the use of fly ash and fly ash based bricks, blocks or tiles or aggregates of them in the schedule of approved materials and rates.



(2B) All agencies undertaking construction of roads or fly over bridges including Ministry of Road Transport and Highways (MORTH), National Highways Authority of India (NHAI), Central Public Works Department (CPWD), State Public Works Departments and other State Government Agencies, shall, within three months from the 1<sup>st</sup> day of September, 2003 -

- a. make provisions in their tender documents, schedules of approved materials and rates as well as technical documents, including those relating to soil borrow area or pit as per sub-paragraph (7) of paragraph 1; and
- b. make necessary specifications/guidelines for road or fly over embankments that are not covered by the specifications laid down by the Indian Road Congress (IRC).”

[F. No. 16-2/95-HSMD]

Dr. V. RAJAGOPALAN, Jt. Secy.

**Footnote:—** The principal notification was published in the Gazette of India, Part II, Section 3, sub-section (ii) *vide* S.O.763 (E) dated 14.9.1999.





## MINISTRY OF ENVIRONMENT AND FORESTS

## NOTIFICATION

New Delhi, the 3rd November, 2009

S.O. 2804(E).—WHEREAS, by notification of the Government of India in the Ministry of Environment and Forests number S.O. 763(E), dated the 14<sup>th</sup> September, 1999 (hereinafter referred to as the said notification) issued under sub-section (1), clause (v) of sub-section (2) of section 3 and section 5 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government, issued directions for restricting the excavation of top soil for manufacture of bricks and promoting the utilisation of fly ash in the manufacture of building materials and in construction activity within a specified radius of one hundred kilometers from coal or lignite based thermal power plants;

AND WHEREAS, the term "fly ash" means and includes all categories or groups of coal or lignite ash generated at the thermal power plant and collected by Electrostatic Precipitator (ESP) or bag filters or other similar suitable equipments; bottom ash is the ash collected separately at the bottom of the boiler, pond ash is the mixture of ESP fly ash and bottom ash, but, for the purpose of this notification, the term "fly ash" means and includes all ash generated such as Electrostatic Precipitator (ESP) ash, dry fly ash, bottom ash, pond ash and mound ash as the objective is to utilise all the ashes;

AND WHEREAS, there is a need for restricting the excavation of top soil for manufacture of bricks and for other works which involve use of top soil and promoting utilisation of fly ash produced by coal or lignite based thermal power plants including captive power plants and co-generation plants in the manufacture of building materials and construction activity;

AND WHEREAS, it was observed that there was a gradual increase in the use of fly ash in the manufacture of fly ash bricks or products from about 1.5 million tonne in 2002-2003 to 3.19 million tonne in 2006-2007 which needs to be further encouraged for achieving the ultimate objective of conservation of top soil and minimise environmental pollution caused due to fly ash;



AND WHEREAS, it is observed that construction agencies are yet to achieve their targets of utilization of fly ash based products even after the 31<sup>st</sup> August, 2007, the date prescribed for 100% utilisation of fly ash based products in the said notification of 1999 and it is also observed that many thermal power stations or plants are also yet to achieve the targets drawn up in their action plans;

AND WHEREAS, the representations of the brick kiln owners were considered with regard to transporting of fly ash over a long distance and also the logistics involved including the energy cost;

AND, WHEREAS, the issue has been examined by the Government of India in the Ministry of Environment and Forests;

AND WHEREAS, the Central Government is of the opinion that the said notification should be amended;

AND WHEREAS, clause (a) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 provides that whenever the Central Government considers that prohibition or restrictions of any industry or carrying on any processes or operation in any area should be imposed, it shall give notice of its intention to do so;

AND WHEREAS, a draft of amendment to the Government of India, Ministry of Environment and Forests notification no. S.O.763 (E), dated the 14th September, 1999 duly amended vide notification No. S.O. 979 (E), dated the 27<sup>th</sup> August, 2003 (hereinafter referred to as the said notification) which the Central Government proposes to make under subsection (1), clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) dated the 6<sup>th</sup> November, 2008 *vide* S.O. 2623 (F), inviting objections and suggestions from all persons likely to be affected thereby before the expiry of sixty days from the date on which copies of the Gazette containing the said draft amendments were made available to the public.

AND WHEREAS, copies of the said Gazette were made available to the public on the day of 6<sup>th</sup> November 2008;





AND WHEREAS, the objections and suggestions received from various persons or agencies likely to be affected thereby in respect of the said draft notification have been duly considered by the Central Government in the Ministry of Environment and Forests;

Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following amendments to the said notification, namely: -

### AMENDMENTS

1. Throughout the said notification, save as otherwise expressly provided and unless the context otherwise requires, for the word "ash" wherever it occurs, the words "fly ash" shall be substituted.

2. In the said notification, in paragraph 1,—

(a) for sub-paragraph (1), the following shall be substituted, namely:-

"(i) use of fly ash based products in construction activities";

(b) for sub-paragraphs (1A) and (1B), the following sub-paragraphs shall respectively be substituted, namely:-

"(1A) Every construction agency engaged in the construction of buildings within a radius of hundred kilometers from a coal or lignite based thermal power plant shall use only fly ash based products for construction, such as: cement or concrete, fly ash bricks or blocks or tiles or clay fly ash bricks, blocks or tiles or cement fly ash bricks or bricks or blocks or similar products or a combination or aggregate of them, in every construction project.

(1B) The provisions of sub-paragraph (1A) shall be applicable to all construction agencies of Central or State or Local Government and private or public sector and it shall be the responsibility of the agencies either undertaking construction or approving the design or both to ensure compliance of the provisions of sub-paragraph (1A) and to submit annual returns to the concerned State Pollution Control Board or Pollution Control Committee, as applicable";

(c) after sub-paragraph (1B), the following sub-paragraph shall be inserted, namely:—



“(1C) Minimum fly ash content for building materials or products to qualify as “fly ash based products” category shall be as given in the Table I below:

Table I

Serial Number	Building Materials or Products	Minimum % of fly ash by weight
(1)	(2)	(3)
1.	Fly ash bricks, blocks, tiles, etc. made with fly ash, lime, gypsum, sand, stone dust etc. (without clay).	50% of total input materials
2.	Paving blocks, paving tiles, checker tiles, mosaic tiles, roofing sheets, pre-cast elements, etc. wherein cement is used as binder.	Usage of PPC (IS-1489: Part-1) or PSC (IS-455) or 15% of OPC (IS-269/8112/12269) content.
3.	Cement.	15% of total raw materials
4.	Clay based building materials such as bricks, blocks, tiles, etc.	25% of total raw materials.
5.	Concrete, mortar and plaster.	Usage of PPC (IS-1489: Part-1) or PSC (IS-455) or 15% of OPC (IS-269/8112/12269) content.

(d) in sub-paragraph (2), for the brackets and number “(1)”, the brackets, number and letter “(1C)” shall be substituted and the number of sub-paragraph (2) shall be substituted by 1(D);

(e) in paragraph (2A), the paragraph 1(A) shall be substituted by 1(A) and 1(B) and the amended paragraph 2(A) is to be numbered as 1(F);

(f) for sub-paragraphs (3) and (3A), the following sub-paragraphs shall respectively be substituted, namely:—

“(3) In case of non-availability of fly ash from thermal power plants in sufficient quantities as certified by the said power plants, within 100 km of the site, the stipulation under sub-paragraph (1A) shall be suitably modified (waived or relaxed) by the concerned State Government or Union territory Government level monitoring committee mentioned elsewhere in this notification.

(3A) A decision on the application for manufacture of fly ash bricks, blocks and tiles and similar other fly ash based products shall be taken within thirty days from the date of receipt of the application by the concerned State Pollution Control Board or Pollution Control Committee.”;

(g) sub-paragraphs (3B), (3C) and (3D) shall be omitted;





(h) for sub-paragraphs (4) and (5), the following sub-paragraphs shall be substituted, namely:—

“(4) Each coal or lignite based thermal power plant shall constitute a dispute settlement committee which shall include the General Manager of the thermal power plant and a representative of the relevant Construction and fly ash Brick Manufacturing Industry Association or Body, as the case may be and such a Committee shall ensure unhindered loading and transport of fly ash in an environmentally sound manner without any undue loss of time. Any unresolved dispute shall be dealt with by the concerned State or Union territory Government level monitoring committee mentioned elsewhere in this notification.

(5) No agency, person or organization shall, within a radius of hundred kilometers of a thermal power plant undertake construction or approve design for construction of roads or flyover embankments with top soil; the guidelines or specifications issued by the Indian Road Congress (IRC) as contained in IRC specification No. SP: 58 of 2001 as amended from time to time, regarding use of fly ash shall be followed and any deviation from this direction can only be agreed to on technical reasons if the same is approved by Chief Engineer (Design) or Engineer-in-Chief of the concerned agency or organisation or on production of a certificate of “fly ash not available” from the thermal power plant(s) (TPPs) located within hundred kilometers of the site of construction and this certificate shall be provided by the TPP within two working days from the date of receipt of a request for fly ash, if fly ash is not available”;

(i) in sub-paragraph (6), for the words “Voids created due to soil borrow area shall be filled up with ash with proper compaction and covered with topsoil kept separately as above and this would be done as an integral part of embankment project within the time schedule of the project”, the words “Voids created at soil borrow area shall be filled up with fly ash with proper compaction and covered with topsoil kept separately as above and this would be done as an integral part of embankment project” shall be substituted;

(j) for sub-paragraph (7), the following sub-paragraphs shall be substituted, namely:—

“(7) No agency, person or organisation shall within a radius of hundred kilometers of a coal or lignite based thermal power plant undertake or approve or allow reclamation and compaction of low-lying areas with soil; only fly ash shall be used for compaction and reclamation and they shall also ensure that such reclamation and compaction is done in accordance with the specifications and guidelines laid down by the authorities mentioned in sub-paragraph (1) of paragraph 3.



(8)(i) No person or agency shall within fifty kilometers (by road) from coal or lignite based thermal power plants, undertake or approve stowing of mine without using at least 25% of fly ash on weight to weight basis, of the total stowing materials used and this shall be done under the guidance of the Director General of Mines Safety (DGMS);

Provided that such thermal power stations shall facilitate the availability of required quality and quantity of fly ash as may be decided by the expert committee referred in sub-paragraph (10) for this purpose.

(ii) No person or agency shall within fifty kilometers (by road) from coal or lignite based thermal power plants, undertake or approve without using at least 25% of fly ash on volume to volume basis of the total materials used for external dump of overburden and same percentage in upper benches of back filling of opencast mines and this shall be done under the guidance of the Director General of Mines Safety (DGMS);

Provided that such thermal power stations shall facilitate the availability of required quality and quantity of fly ash as may be decided by the expert committee referred in sub-paragraph (10) for this purpose.

(9) The provisions contained in clauses (i) and (ii) of sub-paragraph (8) shall be applicable to all mine agencies under Government, public and private sector and to mines of all minerals or metals or items and it shall be the responsibility of agencies either undertaking or approving the external dump of overburden, backfilling or stowing of mine or all these activities to ensure compliance of provisions contained in clauses (i) and (ii) of sub-paragraph (8) and to submit annual returns to the concerned State Pollution Control Board or Pollution Control Committee as applicable.

(10) The Ministry of Coal for this purpose shall constitute an expert committee comprising of representatives from Fly Ash Unit, Department of Science and Technology, Ministry of Science and Technology, Director General of Mines Safety (DGMS), Central Mine Planning and Design Institute Limited (CMPDIL), Ministry of Environment and Forests, Ministry of Power, Ministry of Mines and the Central Institute of Mining and Fuel Research (CIMFR), Dhanbad; the Committee shall also guide and advise the back filling or stowing in accordance with the provisions contained in sub-paragraphs (8) (i), 8 (ii) and (9), and specifications and guidelines laid down by the concerned authorities as mentioned in sub-paragraph (1) of paragraph 3.





(11) The concerned State Government or Union territory Government shall be the enforcing and monitoring authority for ensuring compliance of the provisions of sub-paragraphs (8) (i) and (8) (ii);

3. in the said notification, in paragraph 2,—

(a) for sub-paragraphs (1), (2) and (3), the following sub-paragraphs shall be substituted, namely:—

“(1) All coal or lignite based thermal power stations would be free to sell fly ash to the user agencies subject to the following conditions, namely:—

(i) the pond ash should be made available free of any charge on “as is where is basis” to manufacturers of bricks, blocks or tiles including clay fly ash product manufacturing unit(s), farmers, the Central and the State road construction agencies, Public Works Department, and to agencies engaged in backfilling or stowing of mines.

(ii) at least 20% of dry ESP fly ash ~~shall be made~~ available free of charge to units manufacturing fly ash or clay-fly ash bricks, blocks and tiles on a priority basis over other users and if the demand from such agencies falls short of 20% of quantity, the balance quantity can be sold or disposed of by the power station as may be possible;

Provided that the fly ash obtained from the thermal power station should be utilized only for the purpose for which it was obtained from the thermal power station or plant failing which no fly ash shall be made available to the defaulting users.

(2) All coal and, or lignite based thermal power stations ~~and, or~~ expansion units in operation before the date of this notification are to achieve the target of fly ash utilization as per the Table II given below:

**Table II**

Serial Number	Percentage Utilization of Fly Ash	Target Date
(1)	(2)	(3)
1.	At least 50% of fly ash generation	One year from the date of issue of this notification.
2.	At least 60% of fly ash generation	Two years from the date of issue of this notification.
3.	At least 75% of fly ash generation	Three years from the date of issue of this notification.



4.	At least 90% of fly ash generation	Four years from the date of issue of this notification.
5.	100% fly ash generation	Five years from the date of issue of this notification.

The unutilised fly ash in relation to the target during a year, if any, shall be utilized within next two years in addition to the targets stipulated for those years and the balance unutilized fly ash accumulated during first five years (the difference between the generation and the utilization target) shall be utilized progressively over next five years in addition to 100% utilization of current generation of fly ash.

(3) New coal and, or lignite based thermal power stations and, or expansion units commissioned after this notification to achieve the target of fly ash utilization as per Table III given below:

Table III

Serial Number	Fly ash utilization level	Target date
(1)	(2)	(3)
1.	At least 50% of fly ash generation	One year from the date of commissioning.
2.	At least 70% of fly ash generation	Two years from the date of commissioning.
3.	90% of fly ash generation	Three years from the date of commissioning.
4.	100% of fly ash generation	Four years from the date of commissioning.

The unutilised fly ash in relation to the target during a year, if any, shall be utilized within next two years in addition to the targets stipulated for these years and the balance unutilized fly ash accumulated during first four years (the difference between the generation and utilization target) shall be utilized progressively over next five years in addition to 100% utilization of current generation of fly ash.”;

(b) in sub-paragraph (4), for the words “six months”, the words “four months” shall be substituted;

(c) for sub-paragraph (6), the following sub-paragraphs shall be substituted, namely:—

“(6) The amount collected from sale of fly ash and fly ash based products by coal and/or lignite based thermal power stations or their subsidiary or sister concern unit, as applicable should be kept in a separate account head and shall be utilized only for development of infrastructure or facilities, promotion and facilitation activities for use of fly ash until 100 percent





fly ash utilization level is achieved; thereafter as long as 100% fly ash utilization levels are maintained, the thermal power station would be free to utilize the amount collected for other development programmes also and in case, there is a reduction in the fly ash utilization levels in the subsequent year(s), the use of financial return from fly ash shall get restricted to development of infrastructure or facilities and promotion or facilitation activities for fly ash utilization until 100 percent fly ash utilisation level is again achieved and maintained.

(7) Annual implementation report (for the period 1<sup>st</sup> April to 31<sup>st</sup> March) providing information about the compliance of provisions in this notification shall be submitted by the 30<sup>th</sup> day of April, every year to the Central Pollution Control Board, concerned State Pollution Control Board or Committee and the concerned Regional Office of the Ministry of Environment and Forests by the coal or lignite based thermal power plants, and also be made a part of the annual report of the thermal power plant as well as thermal power plant wise information be provided in the annual report of thermal power producing agency owning more than one thermal power plant.”;

4. in the said notification, in paragraph 3,—

(a) in sub-paragraph (2), for the words “schedules of specifications and construction applications, including appropriate standards and codes of practice, within a period of four months from the publication of this notification”, the words “tender documents, schedules of specifications and construction applications including appropriate standards and codes of practice within a period of four months from the publication of this notification” shall be substituted;

(b) for sub-paragraph (2A), the following sub-paragraph shall be substituted, namely:—

“(2A) Building construction agencies both in public and private shall prescribe the use of fly ash and fly ash-based products in their respective tender documents, schedules of specifications and construction applications, including appropriate standards and codes of practice and make provisions for the use of fly ash and fly ash based bricks, blocks or tiles or aggregates of them in the schedule of approved materials and rates within a period of four months from the publication of this notification.”;

(c) for sub-paragraphs (2B) and (3), the following sub-paragraphs shall be substituted, namely:—



“(2B) All agencies undertaking construction of roads or fly over bridges and reclamation and compaction of low lying areas, including Department of Road Transport and Highways (DORTH), National Highways Authority of India (NHAI), Central Public Works Department (CPWD), State Public Works Departments and other State Government Agencies, shall within a period of four months from the publication of this notification:-

- (a) make provisions in their tender documents, schedules of approved materials and rates as well as technical documents for implementation of this notification, including those relating to soil borrow area or pit as per sub-paragraph (6) of paragraph 1; and
- (b) make necessary specifications or guidelines for road or fly over embankments that are not covered by the specifications laid down by the Indian Road Congress (IRC).

(3) All local authorities shall specify in their respective tender documents, building bye-laws and regulations, the use of fly ash and fly ash-based products and construction techniques in building materials, roads embankments or for any usage with immediate effect.

(4) The Central Electricity Authority and other approving agencies may permit the land area for emergency ash pond or fly ash storage area up to 50 hectares for a 500 MW unit, based on 45% ash content coal, or in the same proportion for units in other capacities taking into account the ash content in coal or lignite to be used.

(5) All Financial institutions and agencies which fund construction activities shall include a clause in their loan or grant document for compliance of the provisions of this notification.

(6) A Monitoring committee shall be constituted by the Central Government with Members from Ministry of Coal, Ministry of Mines, Ministry of Power, Central Pollution Control Board, Central Electricity Authority, Head Fly Ash Unit of Department of Science and Technology and Building Material Technology Promotion Council to monitor the implementation of the provisions of the notification and submit its recommendations or observations at least once in every six months to the Secretary, Ministry of Environment and Forests. Concerned Advisor or Joint Secretary in the Ministry of Environment and Forests will be the convener of this committee.





(7) For the purpose of monitoring the implementation of the provisions of this notification the State Governments or Union territory Government shall constitute a Monitoring Committee within three months from the date of issue of this notification under the Chairmanship of Secretary, Department of Environment with representatives from Department of Power, Department of Mining, Road and Building Construction Department and State Pollution Control Board and this Committee would deal with any unresolved issue by Dispute Settlement Committee as prescribed in sub-paragraph (4) of paragraph 1, in addition to monitoring and facilitating implementation of this notification at the respective State Government or Union territory level and this Committee would also be empowered to suitably modify (waive or relax) the stipulation under sub-paragraph (1) in case of non-availability of fly ash in sufficient quantities from thermal power plant as certified by the said power plants and the Committee will meet at least once in every quarter.

[F. No. 9-8/2005-HSMD]

G. V. SUBRAHMANYAM, Scientist 'G'

**Foot Note :—**The principal notification was published in the Gazette of India, Part II, Section 3, Sub-section (ii) *vide* notification number S.O. 763(E), dated the 14th September, 1999 and was amended *vide* notification number S. O. 979(E), dated the 27th August, 2003.



- (10) संबद्ध प्राधिकारी सभी सरकारी स्कीमों या कार्यक्रमों में, उदाहरणार्थ महात्मा गांधी राष्ट्रीय ग्रामीण रोजगार गारंटी अधिनियम, 2005 (मनरेगा), स्वच्छ भारत अभियान, शहरी और ग्रामीण आवासन स्कीम, जहां संनिर्मित क्षेत्र एक हजार वर्ग फुट से अधिक है और अवसंरचना संबंधी संनिर्माण में, जिसके अंतर्गत अभिहित औद्योगिक संपदाओं या पार्कों या विशेष आर्थिक जोनों में भवन निर्माण भी है, ऐश आधारित ईटों या उत्पादों के आजापक उपयोग को सुनिश्चित करेंगे।
- (11) कृषि मंत्रालय कृषि क्रियाकलापों में ऐश के मृदा अनुकूलक के रूप में उपयोग का संवर्धन करने पर विचार कर सकेगा।\*

5. सभी संबद्ध प्राधिकारियों द्वारा उपरोक्त उपबंधों का अनुपालन करने की समयावधि 31 दिसंबर, 2017 है। कोयला या लिग्नाइट आधारित तापीय विद्युत संयंत्र, उनके द्वारा उत्पादित फ्लाई ऐश के 100 प्रतिशत उपयोग के अतिरिक्त उपरोक्त उपबंधों का अनुपालन 31 दिसंबर, 2017 से पूर्व करेंगे।

[फा. सं. 9-8/2005-एचएसएमडी]

विश्वनाथ सिन्हा, संयुक्त सचिव

**टिप्पण:-** मूल अधिसूचना भारत के राजपत्र, असाधारण, भाग II, खंड 3, उप-खंड (ii) में अधिसूचना सं. का.आ. 763(अ), तारीख 14 सितंबर, 1999 द्वारा प्रकाशित की गई थी और इसमें पश्चातवर्ती संशोधन अधिसूचना सं. का.आ. 979(अ), तारीख 27 अगस्त, 2003 और का.आ. 2804(अ), तारीख 3 नवंबर, 2009 द्वारा किए गए थे।

# MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE NOTIFICATION

New Delhi, the 25th January, 2016

**S.O. 254(E).**—Whereas a draft of certain amendments to the Government of India in the Ministry of Environment, Forests and Climate Change number S.O. 763(E), dated the 14th September, 1999 (hereinafter referred to as the said notification) which the Central Government proposes to make under sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, was published in the Gazette of India, Extraordinary, Part II, section 3, Sub-section (ii), vide S.O. 1396(E), dated the 25<sup>th</sup> May, 2015 inviting objections and suggestions from all persons likely to be affected thereby before the expiry of sixty days from the date on which copies of the Gazette containing the said draft amendments were made available to the public.

And, whereas copies of the said Gazette were made available to the public on 25th May, 2015;

And, whereas all the objections and suggestions received from all persons likely to be affected thereby in respect of the said draft notification have been duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following amendments to the said notification, namely:—

1. In the said notification, in paragraph 1,-

- in sub-paragraph 1(A), for the words “hundred kilometers”, the words “three hundred kilometers” shall be substituted;
- in sub-paragraph (3), for the figures and letters “100 km”, the words “three hundred kilometers” shall be substituted;
- in sub-paragraph (5), for the words “hundred Kilometers”, the words “three hundred Kilometers” shall be substituted;
- in sub-paragraph (7), for the words “hundred Kilometers”, the words “three hundred Kilometers” shall be substituted.





**2. In the said notification, in paragraph 2:-**

**(a) after sub-paragraph (1), the following proviso shall be inserted, namely:-**

“provided further that the restriction to provide 20 % of dry ESP fly ash free of cost shall not apply to those thermal power plants which are able to utilise 100 % fly ash in the prescribed manner.”

**(b) after sub-paragraph (7), the following sub-paragraphs shall be inserted, namely:-**

- “(8) Every coal or lignite based thermal power plants (including captive and or co-generating stations) shall, within three months from the date of notification, upload on their website the details of stock of each type of ash available with them and thereafter shall update the stock position at least once a Month.
- (9) Every coal or lignite based thermal power plants shall install dedicated dry ash silos having separate access roads so as to ease the delivery of fly ash.
- (10) The cost of transportation of ash for road construction projects or for manufacturing of ash based products or use as soil conditioner in agriculture activity within a radius of hundred kilometers from a coal or lignite based thermal power plant shall be borne by such coal or lignite based thermal power plant and the cost of transportation beyond the radius of hundred kilometers and up to three hundred kilometers shall be shared equally between the user and the coal or lignite based thermal power plant.
- (11) The coal or lignite based thermal power plants shall promote, adopt and set up (financial and other associated infrastructure) the ash based product manufacturing facilities within their premises or in the vicinity of their premises so as to reduce the transportation of ash.
- (12) The coal or lignite based thermal power plants in the vicinity of the cities shall promote, support and assist in setting up of ash based product manufacturing units so as to meet the requirements of bricks and other building construction materials and also to reduce the transportation.
- (13) To ensure that the contractor of road construction utilizes the ash in the road, the Authority concerned for road construction shall link the payment of contractor with the certification of ash supply from the thermal power plants.
- (14) The coal or lignite based thermal power plants shall within a radius of three hundred kilometers bear the entire cost of transportation of ash to the site of road construction projects under Pradhan Mantri Gramin Sadak Yojna and asset creation programmes of the Government involving construction of buildings, road, dams and embankments”.

**3. In the said notification, in paragraph 2, sub-paragraph (2A) be read as sub-paragraph (15) and at the end of the said sub-paragraph, the following sub-paragraph shall be added, namely:-**

“and the coal or lignite based thermal power plants located in coastal districts shall support, assist or directly engage into construction of shore line protection measures.”

**4. In the said notification, in paragraph 3, after sub-paragraph (7), the following shall be inserted, namely:-**

- “(8) It shall be the responsibility of all State Authorities approving various construction projects to ensure that Memorandum of Understanding or any other arrangement for using fly ash or fly ash based products is made between the thermal power plants and the construction agency or contractors.
- (9) The State Authorities shall amend Building Bye Laws of the cities having population One million or more so as to ensure the mandatory use of ash based bricks keeping in view the specifications necessary as per technical requirements for load bearing structures.
- (10) The concerned Authority shall ensure mandatory use of ash based bricks or products in all Government Scheme or programmes e.g. Mahatma Gandhi National Rural Employment Guarantee Act, 2005 (MNREGA), SWACHH BHARAT ABIYAN, Urban and Rural Housing Scheme, where built up area is more than 1000 square feet and in infrastructure construction including buildings in designated industrial Estates or Parks or Special Economic Zone.



(11) The Ministry of Agriculture may consider the promotion of ash utilisation in agriculture as soil conditioner.”

5. The time period to comply with the above provisions by all concerned authorities is 31<sup>st</sup> December, 2017. The coal or lignite based thermal power plants shall comply with the above provision in addition to 100 % utilization of fly ash generated by them before 31<sup>st</sup> December, 2017.

[F. No. 9-8/2005-HSMD]

BISHWANATH SINHA, Jt. Secy.

**Note:-** The principal notification was published in the Gazette of India, Extraordinary, Part II, section 3, Sub-section (ii) *vide* notification S.O. 763(E), dated the 14<sup>th</sup> September, 1999 and was subsequently amended *vide* notification S.O. 979(E), dated the 27<sup>th</sup> August, 2003 and S.O. 2804(E), dated the 3<sup>rd</sup> November, 2009.







# भारत का राजपत्र The Gazette of India

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EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)  
PART II—Section 3—Sub-section (ii)

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NEW DELHI, FRIDAY, DECEMBER 31, 2021/PAUSHA 10, 1943

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 31 दिसम्बर, 2021

का.आ. 5481(अ).—केन्द्रीय सरकार ने भारत सरकार के तत्कालीन पर्यावरण और वन मंत्रालय की अधिसूचना सं. का.आ. 763 (अ) तारीख 14 सितम्बर, 1999 द्वारा कोयला या लिग्नाइट आधारित ताप विद्युत संयंत्रों से तीन सौ किलोमीटर के विनिर्दिष्ट व्यास के भीतर ईंटों के विनिर्माण के लिए उपजाऊ मिट्टी के उत्खनन को प्रतिबंधित करने के लिए और भवन निर्माण सामग्री के विनिर्माण में और संनिर्माण क्रियाकलाप में फ्लाई-राख के उपयोग को बढ़ावा देने के लिए निदेश जारी किए हैं;

और, प्रदूषणकर्ता भुगतान सिद्धांत (पीपीपी) के आधार पर, ऐसा करके कोयला या लिग्नाइट आधारित ताप विद्युत संयंत्रों द्वारा फ्लाई-राख का 100 प्रतिशत उपयोग सुनिश्चित करते हुए और फ्लाई-राख प्रबंधन प्रणाली की संधारणीयता के लिए पूर्वोक्त अधिसूचना को और अधिक प्रभावकारी ढंग से कार्यान्वित करने हेतु, केन्द्रीय सरकार ने मौजूदा अधिसूचना की समीक्षा की;

और प्रदूषणकर्ता भुगतान सिद्धांत के आधार पर पर्यावरणीय प्रतिकर निर्धारित किए जाने की आवश्यकता है;

और, विनिर्माण को बढ़ावा देकर तथा निर्माण कार्य के क्षेत्र में राख आधारित उत्पादों तथा भवन निर्माण सामग्रियों के प्रयोग को अनिवार्य करके उपजाऊ मिट्टी को संरक्षित करने की आवश्यकता है;



	सीमेंट शीट या पाइप या बोर्ड या पैनल):			
	ii. सीमेंट विनिर्माण:			
	iii. रेडी मिक्स कंक्रीट:			
	iv. राख और जीओ-पॉलिमर आधारित निर्माण सामग्री:			
	v. सिंटर्ड या कोल्ड बॉन्डेड राख एग्रीगेट का निर्माण:			
	vi. सड़कों, सड़क और फ्लाई ओवर के पुश्तों का निर्माण:			
	vii. बांधों का निर्माण:			
	viii. निम्न भू-क्षेत्र का भराव:			
	ix. खनिज क्षेत्रों का भराव:			
	x. अधिभार वाले डम्पों में उपयोग:			
	xi. कृषि:			
	xii. तटीय जिलों में तटरेखा सुरक्षा संरचनाओं का निर्माण:			
	xiii. अन्य देशों को राख का निर्यात			
	xiv. अन्य (कृपया विनिर्दिष्ट करें):			
20.	सार :			
	व्यौरा	सृजित मात्रा (एमटीपी)	उपयोग की गई मात्रा (एमटीपी) और (%)	शेष मात्रा (एमटीपी)
	रिपोर्टिंग की अवधि के दौरान राख			
	पुरानी राख			
	कुल			
21.	कोई अन्य सूचना : वार्षिक अनुपालन रिपोर्ट, और विद्युत संयंत्रों और राख कुण्डों की शेष फाइलों की सॉफ्ट कॉपी ई-मेल:- <a href="mailto:moefcc-coalash@gov.in">moefcc-coalash@gov.in</a> पर भेजी जाए।			
22.	प्राधिकृत हस्ताक्षरकर्ता के हस्ताक्षर			

## MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

### NOTIFICATION

New Delhi, the 31st December, 2021

**S.O. 5481(E).**—Whereas by notification of the Government of India in the erstwhile Ministry of Environment and Forests *vide* S.O.763 (E), dated the 14<sup>th</sup> September, 1999, as amended from time to time, the Central Government, issued directions for restricting the excavation of top soil for manufacturing of bricks and promoting the utilisation of fly ash in the manufacturing of building materials and in construction activity within a specified radius of three hundred kilometres from the coal or lignite based thermal power plants;

And whereas, to implement the aforesaid notification more effectively based on the polluter pays principle (PPP) thereby ensuring 100 per cent utilisation of fly ash by the coal or lignite based thermal power plants and for the sustainability of the fly ash management system, the Central Government reviewed the existing notification; and whereas environmental compensation needs to be introduced based on the polluter pays principle;





And whereas, there is a need to conserve top soil by promoting manufacture and mandating use of ash based products and building materials in the construction sector;

And whereas, there is a need to conserve top soil and natural resources by promoting utilisation of ash in road laying, road and flyover embankments, shoreline protection measures, low lying areas of approved projects, backfilling of mines, as an alternative for filling of earthen materials;

And whereas, it is necessary to protect the environment and prevent the dumping and disposal of fly ash discharged from coal or lignite based thermal power plants on land;

And whereas, in the said notification the phrase 'ash', has been used which includes both fly ash as well as bottom ash generated from the Coal or Lignite based thermal power plants;

And whereas, the Central Government intends to bring out a comprehensive framework for ash utilisation including system of environmental compensation based on polluter pays principle;

And whereas, a draft notification on ash utilisation by coal or lignite thermal power plants in supersession of the notification of the Government of India, Ministry of Environment and Forests published in the Gazette of India, Extra Ordinary part II, section 3, sub-section (i) *vide* S.O.763 (E), dated the 14<sup>th</sup> September, 1999, by notification in exercise of the powers conferred under sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with clause (d) of sub-rule (3) of rule (5) of the Environment (Protection) Rules, 1986, was published in the Gazette of India, Extraordinary, Part II, section 3, sub-section (i), *vide* G.S.R. 285(E), dated the 22nd April, 2021 inviting objections and suggestions from all persons likely to be affected thereby before the expiry of sixty days from the date on which copies of the Gazette containing the said draft provisions were made available to the public;

And, whereas all the objections and suggestions received from all persons likely to be affected thereby in respect of the said draft notification have been duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with clause (d) of sub-rule (3) of rule (5) of the Environment (Protection) Rules, 1986, and in supersession of the Notification S.O.763 (E), dated the 14<sup>th</sup> September, 1999 except as respect things done or omitted to be done before such supersession, the Central Government hereby issues the following notification on ash utilisation from coal or lignite thermal power plants which shall come into force on the date of the publication of this notification, namely:-

**A. Responsibilities of thermal power plants to dispose fly ash and bottom ash.—**

- (1) Every coal or lignite based thermal power plant (including captive or co-generating stations or both) shall be primarily responsible to ensure 100 per cent utilisation of ash (fly ash, and bottom ash) generated by it in an eco-friendly manner as given in sub-paragraph (2);
- (2) The ash generated from coal or lignite based thermal power plants shall be utilised only for the following eco-friendly purposes, namely:-
  - (i) Fly ash based products viz. bricks, blocks, tiles, fibre cement sheets, pipes, boards, panels;
  - (ii) Cement manufacturing, ready mix concrete;
  - (iii) Construction of road and fly over embankment, Ash and Geo-polymer based construction material;
  - (iv) Construction of dam;
  - (v) Filling up of low lying area;
  - (vi) Filling of mine voids;
  - (vii) Manufacturing of sintered or cold bonded ash aggregate;
  - (viii) Agriculture in a controlled manner based on soil testing;
  - (ix) Construction of shoreline protection structures in coastal districts;



- (x) Export of ash to other countries;
- (xi) Any other eco-friendly purpose as notified from time to time.
- (3) A committee shall be constituted under the chairmanship of Chairman, Central Pollution Control Board (CPCB) and having representatives from Ministry of Environment, Forest and Climate Change (MoEFCC), Ministry of Power, Ministry of Mines, Ministry of Coal, Ministry of Road Transport and Highways, Department of Agricultural Research and Education, Institute of Road Congress, National Council for Cement and Building Materials, to examine and review and recommend the eco-friendly ways of utilisation of ash and make inclusion or exclusion or modification in the list of such ways as mentioned in Sub-paragraph (2) based on technological developments and requests received from stakeholders. The committee may invite State Pollution Control Board or Pollution Control Committee, operators of thermal power plants and mines, cement plants and other stakeholders as and when required for this purpose. Based on the recommendations of the Committee, Ministry of Environment, Forest and Climate Change (MoEFCC) may publish such eco-friendly purpose.
- (4) Every coal or lignite based thermal power plant shall be responsible to utilise 100 per cent ash (fly ash and bottom ash) generated during that year, however, in no case shall utilisation fall below 80 per cent in any year, and the thermal power plant shall achieve average ash utilisation of 100 per cent in a three years cycle:

Provided that the three years cycle applicable for the first time is extendable by one year for the thermal power plants where ash utilisation is in the range of 60-80 per cent, and two years where ash utilisation is below 60 per cent and for the purpose of calculation of percentage of ash utilisation, the percentage quantity of utilisation in the year 2021- 2022 shall be taken into account as per the table below:

Utilisation percentages of thermal power plants	First compliance Cycle to meet 100 per cent utilisation	Second compliance cycle onwards, to meet 100 per cent utilisation
>80 per cent	3 years	3 years
60-80 per cent	4 years	3 years
<60 per cent	5 years	3 years

Provided further that the minimum utilisation percentage of 80 per cent shall not be applicable to the first year and first two years of the first compliance cycle for the thermal power plants under the utilisation category of 60-80 per cent and <60 per cent, respectively.

Provided also that 20per cent of ash generated in the final year of compliance cycle may be carried forward to the next cycle which shall be utilised in the next three years cycle along with the ash generated during that cycle.

- (5) The unutilised accumulated ash i.e. legacy ash, which is stored before the publication of this notification, shall be utilised progressively by the thermal power plants in such a manner that the utilization of legacy ash shall be completed fully within ten years from the date of publication of this notification and this will be over and above the utilisation targets prescribed for ash generation through current operations of that particular year:

Provided that the minimum quantity of legacy ash in percentages as mentioned below shall be utilised during the corresponding year and the minimum quantity of legacy ash is to be calculated based on the annual ash generation as per installed capacity of thermal power plant.

Year from date of publication	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup> -10 <sup>th</sup>
Utilisation of legacy ash (in percentage of Annual ash)	At least 20 per cent	At least 35 per cent	At least 50 per cent





Provided further that the legacy ash utilisation shall not be required where ash pond or dyke has stabilised and the reclamation has taken place with greenbelt or plantation and the concerned State Pollution Control Board shall certify in this regard. Stabilisation and reclamation of an ash pond or dyke including certification by the Central Pollution Control Board (CPCB) or State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall be carried out within a year from the date of publication of this notification. The ash remaining in all other ash ponds or dykes shall be utilised in progressive manner as per the above mentioned timelines.

**Note:** The obligations under sub-paragraph (4) and (5) above for achieving the ash utilisation targets shall be applicable from 1<sup>st</sup> April, 2022.

- (6) Any new as well as operational thermal power plant may be permitted an emergency or temporary ash pond with an area of 0.1 hectare per Mega Watt (MW). Technical specifications of ash ponds or dykes shall be as per the guidelines of Central Pollution Control Board (CPCB) made in consultation with Central Electricity Authority (CEA) and these guidelines shall also lay down a procedure for annual certification of the ash pond or dyke on its safety, environmental pollution, available volume, mode of disposal, water consumption or conservation in disposal, ash water recycling and greenbelt, etc., and shall be put in place within three months from the date of publication of this notification.
- (7) Every coal or lignite based thermal power plant shall ensure that loading, unloading, transport, storage and disposal of ash is done in an environmentally sound manner and that all precautions to prevent air and water pollution are taken and status in this regard shall be reported to the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) in Annexure attached to this notification.
- (8) Every coal or lignite based thermal power plant shall install dedicated silos for storage of dry fly ash silos for at least sixteen hours of ash based on installed capacity and it shall be reported upon to the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) in the Annexure and shall be inspected by Central Pollution Control Board (CPCB) or State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) from time to time.
- (9) Every coal or lignite based thermal power plant (including captive or co-generating stations or both) shall provide real time data on daily basis of availability of ash with Thermal Power Plant (TPP), by providing link to Central Pollution Control Board's web portal or mobile phone App for the benefit of actual user(s).
- (10) Statutory obligation of 100 per cent utilisation of ash shall be treated as a change in law, wherever applicable.

**B. For the purpose of utilisation of ash, the subsequent sub-paras shall apply.—**

- (1) All agencies (Government, Semi-government and Private) engaged in construction activities such as road laying, road and flyover embankments, shoreline protection structures in coastal districts and dams within 300 kms from the lignite or coal based thermal power plants shall mandatorily utilise ash in these activities:

Provided that it is delivered at the project site free of cost and transportation cost is borne by such coal or lignite based thermal power plants.

Provided further that thermal power plant may charge for ash cost and transportation as per mutually agreed terms, in case thermal power plant is able to dispose the ash through other means and those agencies makes a request for it and the provisions of ash free of cost and free transportation shall be applicable, if thermal power plant serves a notice on the construction agency for the same.

- (2) The utilisation of ash in the said activities shall be carried out in accordance with specifications and guidelines laid down by the Bureau of Indian Standards, Indian Road Congress, Central Building Research Institute, Roorkee, Central Road Research Institute, Delhi, Central Public Works Department, State Public Works Departments and other Central and State Government Agencies.





- (3) It shall be obligatory on all mines located within 300 kilometres radius of thermal power plant, to undertake backfilling of ash in mine voids or mixing of ash with external Overburden dumps, under Extended Producer Responsibility (EPR). All mine owners or operators (Government, Public and Private Sector) within three hundred kilometres (by road) from coal or lignite based thermal power plants, shall undertake measures to mix at least 25 per cent of ash on weight to weight basis of the materials used for external dump of overburden, backfilling or stowing of mine (running or abandoned as the case may be) as per the guidelines of the Director General of Mines Safety (DGMS):

Provided that such thermal power stations shall facilitate the availability of required quantity of ash by delivering ash free of cost and bearing the cost of transportation or cost of transportation arrangement decided on mutually agreed terms and mixing of ash with overburden in mine voids and dumps shall be applicable for the overburden generated from the date of publication of this notification and the utilisation of ash in the said activities shall be carried out in accordance with guidelines laid down by the Central Pollution Control Board, Director General of Mines Safety and Indian Bureau of Mines.

Explanation.- For the purpose of this sub-paragraph, it is also clarified that the provisions of ash free of cost and free transportation shall be applicable, if thermal power plants serve a notice on the mine owner for the same and the mandate of using 25 per cent of ash for mixing with overburden dump and filling up of mine voids shall not be applicable unless a notice is served on the mine owner by thermal power plant.

- (4) (i) All mine owners shall get mine closure plans (progressive and final) to accommodate ash in the mine voids and the concerned authority shall approve mine plans for disposal of ash in mine voids and mixing of ash with overburden dumps. The Ministry of Environment, Forest and Climate Change (MoEFCC) has issued guidelines on 28<sup>th</sup> August, 2019 regarding exemption of requirement of Environmental Clearance of thermal power plants and coal mines along with the guidelines to be followed for such disposal.

(ii) The Ministry in consultation with Central Pollution Control Board (CPCB), Director General of Mine Safety (DGMS) and Indian Bureau of Mines (IBM) may issue further guidelines time to time to facilitate ash disposal in mine voids and mixing with overburden dumps and it shall be the responsibility of mine owners to get the necessary amendments or modifications in the permissions issued by various regulatory authorities within one year from the date of identification of such mines.

- (5) (i) There shall be a committee headed by Chairperson, Central Pollution Control Board (CPCB) with representatives from Ministry of Environment, Forest and Climate Change, Ministry of Power, Ministry of Mines, Ministry of Coal, Director General of Mine Safety and Indian Bureau of Mines for identification of mines for backfilling of mine voids with ash or mixing of ash with overburden dump including examination of safety, feasibility (not economic feasibility) and aspects of environmental contamination and the committee shall get updated quarterly reports prepared regarding identified mines (both underground and opencast) for the stakeholder Ministries or Departments and the committee shall start identifying the suitable mines immediately after the publication of this notification.

(ii) Thermal power plants or mines shall not wait for disposal of ash till the identification is done by the above mentioned committee, to meet the utilisation targets mandated as above.

- (6) Filling of low lying areas with ash shall be carried out with prior permission of the State Pollution Control Board or Pollution Control Committee for approved projects, and in accordance with guidelines laid down by Central Pollution Control Board (CPCB) and the State Pollution Control Board or Pollution Control Committee (PCC) shall publish approved sites, location, area and permitted quantity annually on its website.
- (7) Central Pollution Control Board after engaging relevant stakeholders, shall put in place the guidelines within one year for all types of activities envisaged under this notification including putting in place time bound online application process for the grant permission by State Pollution Control Boards (SPCBs) or Pollution Control Committees (PCCs).





- (8) All building construction projects (Central, State and Local authorities, Govt. undertakings, other Govt. agencies and all private agencies) located within a radius of three hundred kilometres from a coal or lignite based thermal power plant shall use ash bricks, tiles, sintered ash aggregate or other ash based products, provided these are made available at prices not higher than the price of alternative products.
- (9) Manufacturing of ash based products and use of ash in such products shall be in accordance with specifications and guidelines laid down by the Bureau of Indian Standards, Indian Road Congress, and Central Pollution Control Board.

**C. Environmental compensation for non-compliance.—**

- (1) In the first two years of a three years cycle, if the coal or lignite based thermal power plant (including captive or co-generating stations or both) has not achieved at least 80 per cent ash (fly ash and bottom ash) utilisation, then such non-compliant thermal power plants shall be imposed with an environmental compensation of Rs. 1000 per ton on unutilised ash during the end of financial year based on the annual reports submitted and if it is unable to utilise 100 per cent of ash in the third year of the three years cycle, it shall be liable to pay an environmental compensation of Rs. 1000 per ton on the unutilised quantity on which environmental compensation has not been imposed earlier:

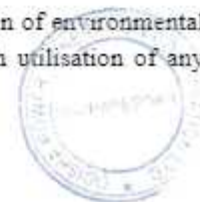
Provided that the environmental compensation shall be estimated and imposed at the end of last year of the first compliance cycle as per the various utilisation categories as mentioned in sub-paragraph (4) of Para A.

- (2) Environmental compensation collected by the authorities shall be deposited in the designated account of Central Pollution Control Board.
- (3) In case of legacy ash, if the coal or lignite based thermal power plant (including captive or co-generating stations or both) has not achieved utilisation equivalent to at least 20 per cent (for the first year), 35 per cent (for the second year), 50 per cent (for third to tenth year) of ash generated based on installed capacity, an environmental compensation of Rs. 1000 per ton of unutilised legacy ash during that financial year shall be imposed and if the utilization of legacy ash is not completed at the end of 10 years, an environmental compensation of Rs.1000 per ton shall be imposed on the remaining unutilised quantity which has not been imposed earlier.
- (4) It shall be the responsibility of the transporters or vehicle owner to deliver ash to authorised purchaser or user agency and if it is not complied, then an environmental compensation of Rs. 1500 per ton on such quantity as mis-delivered to unauthorised users or non- delivered to authorised users will be imposed besides prosecution of such non-compliant transporters by State Pollution Control Board (SPCB) or Pollution Control Committee (PCC).
- (5) It is the responsibility of the purchasers or user agencies to utilise ash in an eco-friendly manner as laid down at para B of this notification and if it is not complied, then an environmental compensation of Rs. 1500 or per ton shall be imposed by State Pollution Control Board (SPCB) or Pollution Control Committee (PCC).
- (6) If the user agencies do not utilise ash to the extent obligated under para B or the extent to which they have been intimated through Notice(s) served under sub-paragraph (1) of para D, whichever is lower, they shall be liable to pay Rs. 1500 per ton of ash for the quantity they fall short off.

Provided that the environmental compensation on building constructions shall be levied at Rs.75/- per square feet of built up area of construction.

- (7) (i) The environmental compensation collected by Central Pollution Control Board from the thermal power plants and other defaulters shall be used towards the safe disposal of the unutilised ash and the fund may also be utilised for advancing research on use of ash including ash based products.

(ii) The liability of ash utilisation shall be with thermal power plants even after imposition of environmental compensation on unutilised quantities and in case thermal power plant achieves the ash utilisation of any





particular cycle after imposition of environmental compensation in subsequent cycles, the said amount shall be returned to thermal power plant after deducting 10 per cent of the environmental compensation collected on the unutilised quantity during the next cycle and deduction of 20 per cent, 30 per cent, and so on, of the environmental compensation collected is to be made in case of utilisation of ash in subsequent cycles.

**D. Procedure for supply of ash or ash based products.—**

- (1) The owner of thermal power plants or manufacturers of ash bricks or tiles or sintered ash aggregate shall serve written notice to persons or agencies who are liable to utilise ash or ash based products, offering for sale, or transport or both.
- (2) Persons or user agencies who have been served notices by owner of thermal power plants or manufacturers of ash bricks or tiles or sintered ash aggregate, if they have already tied up with other agencies for the purpose of utilisation of ash or ash products, shall inform the thermal power plant accordingly, if they cannot use any ash or ash products or use reduced quantity.

**E. Enforcement, Monitoring, Audit and Reporting.—**

- (1) The Central Pollution Control Board (CPCB) and the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall be the enforcing and monitoring authority for ensuring compliance of the provisions and shall monitor the utilisation of ash on quarterly basis. Central Pollution Control Board shall develop a portal for the purpose within six months of date of publication of the notification. The concerned District Magistrate shall have concurrent jurisdiction for enforcement and monitoring of the provisions of this notification.
- (2) (i) Thermal power plants shall upload monthly information regarding ash generation and utilisation by 5th of the next month on the web portal. Annual implementation report (for the period 1<sup>st</sup> April to 31<sup>st</sup> March) providing information about the compliance of provisions in this notification shall be submitted by the 30<sup>th</sup> day of April, every year to the Central Pollution Control Board, concerned State Pollution Control Board or Pollution Control Committee (PCC), Central Electricity Authority (CEA), and concerned Integrated Regional Office of Ministry of Environment, Forest and Climate Change by the coal or lignite based thermal power plants. Central Pollution Control Board and Central Electricity Authority shall compile the annual reports submitted by all the thermal power plants and submit to Ministry of Environment, Forest and Climate Change by 31st May.  
  
(ii) All other user agencies shall submit consumption or utilisation or disposal of ash and use of ash based products as mandated in this notification in the compliance report of Environmental Clearance (EC) issued by Ministry of Environment, Forest and Climate Change or State Level Environment Impact Assessment Authority (SEIAA) or Consent to Operate (CTO) issued by State Pollution Control Board (SPCB) or Pollution Control Committee (PCC), whichever is applicable. The Central Pollution Control Board (CPCB) or State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall publish annual report of ash utilisation of all other agencies except thermal power plants to review the effective implementation of the provisions of the notification.
- (3) For the purpose of monitoring the implementation of the provisions of this notification, a committee shall be constituted under the Chairperson, Central Pollution Control Board (CPCB), with members from Ministry of Power, Ministry of Coal, Ministry of Mines, Ministry of Environment, Forest and Climate Change, Ministry Road Transportation and Highways, Department of Heavy Industry as well as any concerned stakeholder(s), to be nominated by the Chairman of the committee. The committee may make recommendations for effective and efficient implementation of the provisions of the notification. The committee shall meet at least once in six months and review annual implementation reports and the committee shall also hold stakeholder consultations for monitoring of ash utilisation as mandated by this notification by inviting relevant stakeholder(s) at least once in six months. The committee shall submit the six monthly report to Ministry of Environment, Forest and Climate Change (MoEFCC).





- (4) For the purpose of resolving disputes between thermal power plants and users of ash or manufacturer of ash based products, the State Governments or Union territory administration constitute a Committee within three months from the date of publication of this notification under the Chairman, State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) with representatives from Department of Power, and one representative from the Department which deals with the subject of concerned agency with which dispute is made.
- (5) The compliance audit for ash disposal by the thermal power plants and the user agency shall be conducted by auditors, authorised by Central Pollution Control Board (CPCB) and audit report shall be submitted to Central Pollution Control Board (CPCB) and concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) by 30th November every year. Central Pollution Control Board (CPCB) and concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall initiate action against non-compliant thermal power plants within fifteen days of receipt of audit report.

[F. No. HSM-9/1/2019-HSM]

NARESH PAL GANGWAR, Jt. Secy.

## Annexure

Ash Compliance Report (for the period 1<sup>st</sup> April-31<sup>st</sup> March) to be submitted on or before 31<sup>st</sup> May.

Sl. No.	Details	
1.	Name of Power Plant	
2.	Name of the company	
3.	District	
4.	State	
5.	Postal address for communication:	
6.	E-mail:	
7.	Power Plant installed capacity (MW):	
8.	Plant Load Factor (PLF):	
9.	No. of units generated (MWh):	
10.	Total area under power plant (ha): (including area under ash ponds)	
11.	Quantity of coal consumption during reporting period (Metric Tons per Annum):	
12.	Average ash content in percentage (per cent):	
13.	Quantity of current ash generation during reporting period (Metric Tons per Annum): Fly ash (Metric Tons per Annum): Bottom ash (Metric Tons per Annum):	
14.	Capacity of dry fly ash storage silo(s) (Metric Tons) :	
15.	Details of utilisation of current ash generated during reporting period (a) Total quantity of current ash utilised (MTPA) during reporting period: (b) Quantity of fly ash utilised (MTPA): (i) Fly ash based products (bricks or blocks or tiles or fibre cement sheets or pipes or boards or panels) (ii) Cement manufacturing:	



	<ul style="list-style-type: none"> <li>(iii) Ready mix concrete:</li> <li>(iv) Ash and Geo-polymer based construction material:</li> <li>(v) Manufacturing of sintered or cold bonded ash aggregate:</li> <li>(vi) Construction of roads, road and fly over embankment:</li> <li>(vii) Construction of dams:</li> <li>(viii) Filling up of low lying area:</li> <li>(ix) Filling of mine voids:</li> <li>(x) Use in overburden dumps:</li> <li>(xi) Agriculture:</li> <li>(xii) Construction of shoreline protection structures in coastal districts;</li> <li>(xiii) Export of ash to other countries:</li> <li>(xiv) Others (please specify):</li> </ul> <p>(c) Quantity of bottom ash utilised (MTPA):</p> <ul style="list-style-type: none"> <li>(i) Fly ash based products (bricks or blocks or tiles or fibre cement sheets or pipes or boards or panels):</li> <li>(ii) Cement manufacturing:</li> <li>(iii) Ready mix concrete:</li> <li>(iv) Ash and Geo-polymer based construction material:</li> <li>(v) Manufacturing of sintered or cold bonded ash aggregate:</li> <li>(vi) Construction of roads, road and flyover embankment:</li> <li>(vii) Construction of dams:</li> <li>(viii) Filling up of low lying area:</li> <li>(ix) Filling of mine voids:</li> <li>(x) Use in overburden dumps:</li> <li>(xi) Agriculture:</li> <li>(xii) Construction of shoreline protection structures in coastal districts:</li> <li>(xiii) Export of ash to other countries:</li> <li>(xiv) Others (please specify):</li> </ul> <p>Total quantity of current ash unutilised (MTPA) during reporting period:</p>	
16.	Percentage utilisation of current ash generated during reporting period (per cent):	
17.	<p>Details of disposal of ash in ash ponds</p> <p>(a) Total quantity of ash disposed in ash pond(s) (Metric Tons) as on 31<sup>st</sup> March (excluding reporting period):</p> <p>(b) Quantity of ash disposed in ash pond(s) during reporting period (Metric Tons):</p> <p>(c) Total quantity of water consumption for slurry discharge into ash ponds during reporting period (m<sup>3</sup>):</p> <p>(d) Total number of ash ponds:</p> <ul style="list-style-type: none"> <li>(i) Active:</li> <li>(ii) Exhausted (yet to be reclaimed):</li> <li>(iii) Reclaimed:</li> </ul> <p>(e) total area under ash ponds (ha):</p>	
18.	<p>Individual ash pond details</p> <p><i>Ash pond-1,2, etc (please provide below mentioned details separately, if number of ash ponds is more than one)</i></p> <p>(a) Status: Under construction or Active or Exhausted or</p>	





	<p>Reclaimed</p> <p>(b) Date of start of ash disposal in ash pond (DD/MM/YYYY or MMYYYY):</p> <p>(c) Date of stoppage of ash disposal in ash pond after completing its capacity (DD/MM/YYYY or MM/YYYY):</p> <p>(Not applicable for active ash ponds)</p> <p>(c) area (hectares):</p> <p>(d) dyke height (m):</p> <p>(d) volume (m<sup>3</sup>):</p> <p>(e) quantity of ash disposed as on 31<sup>st</sup> March (Metric Tons):</p> <p>(f) available volume in percentage (per cent) and quantity of ash can be further disposed (Metric Tons):</p> <p>(g) expected life of ash pond (number of years and months):</p> <p>(e) co-ordinates (Lat and Long):</p> <p>(please specify minimum 4 co-ordinates)</p> <p>(f) type of lining carried in ash pond: HDPE lining or LDPE lining or clay lining or No lining</p> <p>g) mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)</p> <p>(h) Ratio of ash: water in slurry mix (1: __ ):</p> <p>(i) Ash water recycling system (AWRS) installed and functioning: Yes or No</p> <p>(j) Quantity of wastewater from ash pond discharged into land or water body (m3):</p> <p>(k) Last date when the dyke stability study was conducted and name of the organisation who conducted the study:</p> <p>(l) Last date when the audit was conducted and name of the organisation who conducted the audit:</p>					
19.	<p>Quantity of legacy ash utilised (MTPA):</p> <ul style="list-style-type: none"><li>i. Fly ash based products (bricks or blocks or tiles or fibre cement sheets or pipes or boards or panels):</li><li>ii. Cement manufacturing:</li><li>iii. Ready mix concrete:</li><li>iv. Ash and Geo-polymer based construction material:</li><li>v. Manufacturing of sintered or cold bonded ash aggregate:</li><li>vi. Construction of roads, road and flyover embankment:</li><li>vii. Construction of dams:</li><li>viii. Filling up of low lying area:</li><li>ix. Filling of mine voids:</li><li>x. Use in overburden dumps:</li><li>xi. Agriculture:</li><li>xii. Construction of shoreline protection structures in coastal districts;</li><li>xiii. Export of ash to other countries:</li><li>xiv. Others (please specify):</li></ul>					
20.	<p>Summary:</p> <table><tr><td>Details</td><td>Quantity generated (MTP)</td><td>Quantity utilised (MTP) and (per cent)</td><td>Balance quantity (MTP)</td></tr></table>	Details	Quantity generated (MTP)	Quantity utilised (MTP) and (per cent)	Balance quantity (MTP)	
Details	Quantity generated (MTP)	Quantity utilised (MTP) and (per cent)	Balance quantity (MTP)			



	Current ash during reporting period			
	Legacy ash			
	Total			
21.	Any other information: Soft copy of the annual compliance report, and shape files of power plant and ash ponds may be e-mailed to:- moefcc-coalash@gov.in			
22.	Signature of Authorised Signatory			





IN THE SUPREME COURT OF INDIA  
CIVIL APPELLATE JURISDICTION  
CIVIL APPEAL NO. 9485 OF 2017

ODISHA POWER GENERATION  
CORPORATION LIMITED

Appellant(s)

VERSUS

ODISHA ELECTRICITY REGULATORY  
COMMISSION & ORS.

Respondent(s)

O R D E R

1. The appellant and respondent No. 2- M/s GRIDCO Ltd. entered into Power Purchase Agreement ("PPA") dated 13.08.1996 which was amended on 19.12.2012. On 26.02.2014, a joint application was filed before the Orissa Electricity Regulatory Commission ("the State Commission") for approval of the PPA. On 8.09.2014, Orissa Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations 2014 were promulgated. The said Regulations inter alia provided as follows:

"4.4 The annual Fixed Cost for OHPC and OPGC will be determined by the Commission by taking into account the notification(s) issued by the Government of Odisha from time to time."

2. Taking into account the above Regulations, the



State Commission vide Order dated 27.04.2015 after referring to Notification dated 21.06.2008 directed as follows:

"12. The Regulation 2.7 of OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2014 provides as follows:

"The existing generation plants of OHPC and OPGC may make an application as per the Format prescribed by the Commission for determination of tariff as per annual schedule, by November 30<sup>th</sup> of every year for determination of tariff in respect of the units of the generating station completed or projected to be completed within six months from the date of application.

Provided that the OHPC and OPGC shall make an application as per the prescribed Format with necessary information and explanations, for determination of tariff based on capital expenditure incurred duly certified by the auditors or projected to be incurred up to the date of commercial operation and additional capital expenditure incurred duly certified by the auditors or projected to be incurred during the period for which application for determination of tariff is filed of the generating station."

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."

3. Thereafter, the issue of tariff for subsequent period was considered by the State Commission vide Order dated 21.03.2016 and the State Commission declined to go by the Notification dated 21.06.2008 and the PPA on the issue of fixed costs and other costs observing as follows:

"The Electricity Act, 2003 is a comprehensive piece of legislation. Cherry picking of the provisions of the Act would lead to chaos in the Regulatory regime. When a cost plus tariff is determined under a particular provision of the Act and its related Policies it is not possible to overlook other provisions of the same Act to the advantage of the Petitioner. Moreover agreements cannot override statutory provisions. The Petitioner cannot take the shelter of the agreement to insulate itself from the statutory norms. The Notification of the Government dated 21.06.2008 also favours tariff fixation in line with CERC Regulation in absence of any Regulation by OERC. Since in the meantime OERC Generation Regulation, 2014 has come into force we have to be guided by the same. Accordingly, we proceed to determine the tariff of power purchased by GRIDCO from OPGC under Section 62 of the Act. OERC has carefully examined and analysed the tariff proposal of OPGC. The written and oral submissions of the objectors have been taken into consideration while deciding the generation tariff of OPGC for FY 2016-17. The response of OPGC on the points raised by objectors have also been considered."

4. The above view has been upheld by the Appellate Tribunal as follows:



"In view of the above, we are of the opinion that the impugned order which determines the tariff on the basis of the norms stipulated in the OERC Regulations deserves to be confirmed. Needless to repeat that when regulations are in field, they have to be followed in entirety and this will also apply to the OERC Regulations."

5. We have heard learned counsel for the parties. Learned counsel for the appellant submits that there is no dispute with the proposition that the Regulations override the PPA but in the present case the Regulations itself provide for a carve out enabling the Notification dated 21.06.2008 and the PPA to be applied. This submission has been noted in the impugned order as follows:

"The OERC Regulations contain certain carve outs for the Appellant's generating station. Therefore, the PPA order dated 27/04/2015 was passed in exercise of the State Commissions's power under the OERC Regulations approving separate norms for the Appellant's generating station. However, by the impugned order, the State Commission has sought to overturn the PPA order dated 27.04.2015."

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.

.....J.  
(ADARSH KUMAR GOEL)

.....J.  
(ROHINTON FALI NARIMAN)

NEW DELHI,  
APRIL 19, 2018



ITEM NO.102

COURT NO.11

SECTION XVII

S U P R E M E C O U R T O F I N D I A  
R E C O R D O F P R O C E E D I N G S

Civil Appeal No(s). 9485/2017

ODISHA POWER GENERATION CORPORATION LIMITED

Appellant(s)

VERSUS

ODISHA ELECTRICITY REGULATORY COMMISSION &amp; ORS.

Respondent(s)

(IA No. 61323/2017-FOR STAY and IA No. 49217/2018-PERMISSION TO PLACE ON RECORD ADDL. DOCUMENTS)

Date : 19-04-2018 This appeal was called on for hearing today.

CORAM :

HON'BLE MR. JUSTICE ADARSH KUMAR GOEL  
HON'BLE MR. JUSTICE ROHINTON FALI NARIMAN

For Appellant(s)      Mr. Jayant Bhushan, Sr. Adv.  
                                 Mr. Sitesh Mukherjee, Adv.  
                                 Mr. Syed Jafar Alam, AOR  
                                 Mr. Deep Rao, Adv.  
                                 Mr. Divyanshu Bhatt, Adv.

For Respondent(s)      Mr. Rutwik Panda, AOR  
RR-1                        Ms. Nikhar Berry, Adv.  
                                 Ms. Anshu Malik, Adv.

RR-2                        Mr. Raj Kumar Mehta, AOR  
                                 Ms. Himanshi Andley, Adv.

UPON hearing the counsel the Court made the following  
O R D E R

The appeal stands disposed of in terms of the signed order.  
Pending applications also stand disposed of.

(SUSHIL KUMAR RAKHEJA)  
COURT MASTER (SH)

(SAROJ KUMARI GAUR)  
BRANCH OFFICER

(Signed order is placed on the file.)





**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No.205/MP/2021**

**Coram:**

**Shri I.S. Jha, Member  
Shri Arun Goyal, Member  
Shri Pravas Kumar Singh, Member**

**Date of Order: 28<sup>th</sup> October, 2022**

**IN THE MATTER OF:**

Petition for recovery of additional expenditure incurred due to Ash transportation charges consequent to Ministry of Environment and Forest & Climate Change, Government of India Notification dated 3.11.2009 and Notification dated 25.1.2016 on a recurring basis.

**AND**

**IN THE MATTER OF**

NTPC Ltd  
NTPC Bhawan,  
Core-7, SCOPE Complex,  
7, Institutional Area, Lodhi Road,  
New Delhi-110003

.....**Petitioner**

**Vs**

1. Uttar Pradesh Power Corporation Limited,  
Shakti Bhawan, 14, Ashok Marg,  
Lucknow.

2. Jaipur Vidyut Vitran Nigam Limited,  
Vidyut Bhawan, Janpath,  
Jaipur-302005

3. Ajmer Vidyut Vitran Nigam Limited,  
Vidyut Bhawan, Panchsheel Nagar,  
Makarwali Road, Ajmer- 305004

4. Jodhpur Vidyut Vitran Nigam Limited,  
New Power House, Industrial Area,  
Jodhpur-342003

5. Tata Power Delhi Distribution Limited,  
NDPL House, Hudson Lines, Kingsway Camp  
Delhi-110009

6. BSES Rajdhani Power Limited,



BSES Bhawan, 2nd Floor, B-Block, Nehru Place,  
New Delhi – 110019

7. BSES Yamuna Power Limited,  
2nd Floor, B Block, Shakti Kiran Building,  
Near Karkardooma Court, New Delhi-110092

8. Haryana Power Purchase Centre,  
Shakti Bhawan, Energy Exchange, Room No. 446,  
Top Floor, Sector-6, Panchkula- 134109

9. Punjab State Power Corporation Limited,  
The Mall, Patiala-147001

10. Himachal Pradesh State Electricity Board, Vidyut  
Bhawan, Kumar House Complex Building-II Shimla-171004

11. Power Development Department,  
Government of J&K, SLDC Building,  
1st Floor, Gladani Power House, Narwal, Jammu  
-190009

12. Power Department,  
Union Territory of Chandigarh, Sector 9-D,  
Chandigarh-160019

13. Uttarakhand Power Corporation Limited,  
Urja Bhawan, Kanwali Road, Near Balli Wala Chowk,  
Dehradun -248001

14. Madhya Pradesh Power Management Company Limited,  
Block No-11, Ground floor, Shakti Bhawan,  
Vidhyut Nagar, Rampur, Jabalpur-482008

15. Maharashtra State Electricity Distribution Company Limited  
Prakashgad, 4th Floor, Bandra (East),  
Mumbai- 400051

16. Gujarat Urja Vikas Nigam Limited,  
Vidhyut Bhawan, Race Course,  
Vadodara - 390 007

17. Chhattisgarh State Power Distribution Company Limited,  
P.O Sunder Nagar, Dangania, Raipur-492013.

18. Goa Electricity Department,  
Government of Goa, Aquem Alto,  
Margao, Goa – 403601.





19. Electricity Department, Administration of Daman and Diu,  
Plot No. 35, OI DC Complex, Near Fire Station, Somnath,  
Daman -396210

20. Electricity Department,  
Dadar and Nagar Haveli 66kV, Amli Industrial Estate,  
Silvassa- 396230

21. West Bengal State Electricity Distribution Company Ltd, Vidyut  
Bhawan, Bidhan Nagar, Block DJ, Sector-II, Salt Lake City, Kolkata-700  
091.

22. Bihar State Electricity Board,  
Vidyut Bhawan, Bailey Road, Patna-800021

23. Jharkhand State Electricity Board,  
Main Secretariat, Doranda, Ranchi-834002

24. GRIDCO Limited,  
Janpath, Bhubaneswar-751 022

25. Power Department, Government of Sikkim,  
Kaji Road, Gangtok-737101

26. Eastern Power Distribution Company Limited,  
P&T Colony, Seethammadhara, Vishakapatnam,  
Andhra Pradesh-530013

27. Southern Power Distribution Company Limited,  
Srinivassa Kalyana Mandapam Backside, Tiruchanoor Road,  
Kesavayanagunta, Tirupati-517501

28. Northern Power Distribution Company Limited,  
Opp. NIT Petrol Pump, Chaitanapuri, Warangal-506004

29. Central Power Distribution Company Limited, Mint  
Compound, Hyderabad-500063.

30. Government of Puducherry,  
137, Netaji Subhash Chandra Bose Salai,  
Puducherry - 605 001

31. Tamil Nadu Generation and Distribution Corporation Limited,  
NPKRR Maaligai, 144, Anna Salai,  
Chennai-600 002

32. Kerala State Electricity Board,  
Vaidyuthi Bhavanam, Pattom,  
Trivandrum – 695004

33. Bangalore Electricity Supply Company,  
K.R. Circle, Bangalore-506001,  
Karnataka

34. Mangalore Electricity Supply Company,



Paradigm Plaza, AB Shetty Circle,  
Mangalore-575001

35. Chamundeshwari Electricity Supply Corporation,  
927, L J Avenue, GF, New Kantharaj Urs Road,  
Saraswathipuram, Mysore-570009

36. Gulbarga Electricity Supply Corporation,  
Station Road, Gulbarga, Karnataka-585102

37. Hubli Electricity Supply Company,  
Navanagar, P.B Road, Hubli, Karnataka- 580025

38. Assam State Electricity Board,  
Bijulee Bhawan, Paltan Bazar,  
Guwahati- 781001

..... Respondents

**Parties present:**

Shri Venkatesh, Advocate, NTPC  
Shri Ashutosh K. Srivastava, Advocate, NTPC  
Shri Jatin Ghuliani, Advocate, NTPC  
Shri Abhishek Nangia, Advocate, NTPC  
Shri Anand Sagar Pandey, NTPC  
Shri Manoj Kumar, NTPC  
Shri Buddy A. Ranganadhan, Advocate, BPRL & MSEDCL  
Shri Anupam Varma, Advocate, BPRL  
Shri Rahul Kinra, Advocate, BPRL  
Shri Aditya Ajay, Advocate, BPRL  
Ms. Megha Bajpeyi, BPRL  
Shri Aashish A. Bernard, Advocate, MPPMCL  
Shri Anurag Naik, MPPMCL  
Shri S. Vallinayagam, Advocate, TANGEDCO  
Ms. B. Rajeswari, TANGEDCO  
Ms. R. Ramalakshmi, TANGEDCO  
Ms. R. Alamelu, TANGEDCO  
Shri P.V. Dinesh, Advocate, KSEBL  
Shri Shashwat Kumar, Advocate, BSPHCL  
Shri Rahul Chouhan, Advocate, BSPHCL  
Shri R.K. Mehta, Advocate, GRIDCO  
Ms. Himanshi Andley, Advocate, GRIDCO  
Shri Durga M Sahoo, GRIDCO  
Shri Mahfooz Alam, GRIDCO  
Shri Arunav Patnaik, Advocate, Karnataka Discoms  
Ms. Bhabna Das, Advocate, Karnataka Discoms  
Shri Anup Jain, Advocate, MSEDCL  
Shri Akash Goel, Advocate, MSEDCL  
Shri D.H. Agarwal, MSEDCL  
Shri B.K. Saxena, UPPCL





### ORDER

The Petitioner, NTPC has filed this petition seeking the following reliefs:

- (a) *Admit the present Petition;*
- (b) *Permit recovery of additional expenditure on account of ash transportation already incurred by the Petitioner upto 2020-21;*
- (c) *Allow the Petitioner to raise Monthly Bills for reimbursement of the additional expenditure for ash transportation for the remaining period of the control period FY 2019-24;*
- (d) *Pass such further Order(s) as this Hon'ble Commission may deem fit in the facts and circumstances of the case."*

2. The Petitioner, which is a central generating company, has filed this petition for recovery of additional expenditure on account of fly ash transportation charges for its generating stations for the 2019-24 tariff period under Section 79(1)(a) of the Act read with Regulation 76 and 77 of the 2019 Tariff Regulations. While the Petitioner has sought reimbursement of the Ash transportation expenditure incurred during 2019-20 and 2020-21, it has, for the future periods, sought reimbursement of the said expenditure, on a monthly basis, from the various beneficiaries of the generating stations of the Petitioner. In the interim, the Petitioner has also sought permission to raise monthly bills on the beneficiaries, to recover the ash transportation expenditure, which was incurred, during the pendency of the petition. Some of the Respondents herein raised issues on the 'admissibility' of the petition on various grounds and the Commission vide its order dated 27.5.2022 rejected the submissions of the Respondents and held that the Petition was maintainable. Accordingly, the Petition was admitted and the parties were directed to complete their pleadings on merits. The relevant portions of the order dated 27.5.2022 is extracted below:

#### ***Jurisdiction***

24.... As Commission has the jurisdiction to regulate the tariff of the generating stations of the Petitioner, in terms of Section 79(1)(a) of the Act, the petition is maintainable, on this count.



### **Cause of action**

26.....The Petitioner has also submitted that it has complied with the directions given in order dated 5.11.2018 in Petition No. 172/MP/2016 and the recovery of fly ash transportation charges are subject to triuing up by the Commission. Further, the Commission in its order determining tariff of Ramagundam STPS, Stage-III, for the 2019-24 tariff period had taken a view that the issue of fly ash transportation charges claimed in the tariff petitions are to be governed by the decision of the Commission in this petition. In the light of the above submissions, we are of the considered view that the Petitioner has established a 'cause of action' for the Commission to adjudicate the reliefs sought for by the Petitioner and to pass orders, on merits. The Petition is therefore maintainable on this count.

### **Impermissibility under law**

28. We notice that, in the present case, the Petitioner has only claimed the recovery of fly ash transportation charges incurred or to be incurred for the 2019-24 tariff period, in terms of its prayers in paragraph 1 above, subject to triuing up and has not split any of its claims, as contended by the Respondents. Moreover, the claim of the Petitioner for fly ash transportation charges in some of the tariff petitions filed by the Petitioner for the 2019-24 tariff period, had already been disposed of with the observation that the recovery of the said charges, will be governed by the decision taken in this petition. This decision will also be applicable to the remaining tariff petitions in respect of some of the generating stations of the Petitioner, for the 2019-24 tariff period, which are pending. In view of this, the submissions of the Respondents are not acceptable. Therefore, the objection of the Respondents that the claim of the Petitioner is barred by the principles contained in Order 2 Rule 2 of CPC is rejected.

31.....Moreover, the recovery of fly ash transportation charges for the 2014-19 tariff period had been allowed by the Commission in some of its orders, based on prudence check of the data furnished by the Petitioner, in those petitions. But, in cases where the recovery of fly ash transportation charges has not been allowed for the 2014-19 tariff period, the Petitioner has been directed to approach the Commission by a separate petition, along with relevant data/information for consideration. Therefore, the objection of the Respondents that the claim of the Petitioner is barred by the principles of res judicata under Section 11 of the CPC is rejected. The Petition is therefore maintainable.'

### **Other issues**

"32. Some of Respondents have raised issues like (a) absence of a provision under the Tariff Regulations for recovery of additional O&M expenses over and above the normative values specified (b) failure of the Petitioner to comply with the procedure stipulated in order dated 5.11.2018 in Petition No. 172/MP/2016 (c) exercise of the 'power to relax' to be used sparingly and for cogent reasons (d) no provision for carrying cost etc., Since the Commission, after hearing the parties on 17.2.2022, has reserved its order on 'maintainability' of the petition, the issues raised on merits, have not been considered, in this order.

33. In view of the above discussions, we hold that the present petition filed by the Petitioner is maintainable. Accordingly, the petition is 'admitted' The Respondents are directed to file their replies on merits, on or before 16.6.2022, after serving copy to the Petitioner who shall file its rejoinders, by 27.6.2022. ...."

34. The Petition shall be listed for hearing 'on merits', in due course for which separate notice will be issued."

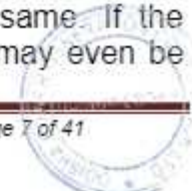




### **Reply of the Respondents**

3. The Respondent BSPHCL vide affidavit dated 16.6.2022 has mainly submitted the following:

- (a) The Petitioner has failed to comply with the directions issued by this Commission in its order dated 5.11.2018 in Petition No.172/MP/2016. As per directions of the Commission in the said order, only actual additional expenditure incurred by the Petitioner towards the transportation of ash as per Ministry of Environment, Forest & Climate Change (MoEF&CC) Notification dated 25.1.2016 has been allowed under change in law. There has been neither any finding to substantiate that the Petitioner has actually incurred such expenses nor any determination of such expenses on a generic basis.
- (b) The directions issued in order dated 5.11.2018 was never challenged by the petitioner and hence, have attained finality. The Petitioner cannot circumvent the established legal position, whereby, the claims of the Petitioner can only be entertained on actuals, pursuant to prudence check, on a case to case basis, through truing-up exercise. As the Petitioner has already filed station-wise tariff petitions for the same, the filing of the present petition is unnecessary and unwarranted.
- (c) There is no provision in the Tariff Regulations, which allow the reliefs claimed by the Petitioner. The tariff of particular station constitutes different components which are duly considered at the time of determination of tariff. It is in the nature of a bundle of charges and the components of the same cannot be recovered on a separate basis.
- (d) The claim relating to the cost of fly ash transportation has to be determined as an additional O&M expense on case-to-case basis, as per the procedure stipulated in the order dated 5.11.2018. Neither the procedure stipulated in the said order, nor the regulations issued by this Commission allow any claims, without actual quantification in respect of additional O&M expense, and hence, the Petitioner is not entitled to raise an invoice. The concept of carrying cost implies the restitution of the affected party back to its financial position, as if the change in law event has not occurred. This concept essentially provides a protection to the affected parties in competitively bid projects under Section 63 of the Electricity Act, 2003. However, there is no concept of restitution in projects developed under Section 62 of the said Act.
- (e) The Ministry of Power (MOP), Government of India (GOI) vide its Notification dated 22.9.2021 has laid down guidelines for utilization of fly ash and the detailed procedure for computation of ash transportation charges. It is evident that if the above guidelines are followed, a power plant is not necessarily required to incur any expenditure in disposing of the fly ash.
- (f) The MoEF&CC Notification dated 31.12.2021 does not make it strictly mandatory to supply fly ash and bear the transportation cost towards the same. If the Petitioner take a prudent approach towards disposal of fly ash, it may even be





able to avoid levy of transportation costs and instead even earn revenue towards selling of the fly ash. The Petitioner has to abide by the MOP Notification and cannot ask for pass through of ash transportation charges without prudence check by the Commission. Therefore, the prayer of the Petitioner that it may be permitted to raise monthly bills of ash transportation is not admissible and liable to be rejected

4. The Respondent BRPL vide reply affidavit dated 17.6.2022 has mainly submitted the following:

- (a) There is no material difference between the MoEF&CC notification dated 25.1.2016 and 31.12.2021 as (i) Liability of fly ash transportation has been casted upon the Petitioner since 25.1.2016 and there is no change to that effect (ii) Notifications are premised on the 'polluter pays' principle introduced firstly by notification 14.9.1999, which mandated ash utilization. The notification dated 25.1.2016 amended the earlier notification and the Petitioner was made liable to bear the fly ash transportation charges and nearly extended the timeline for 100% fly ash utilization by the Petitioner to 31.12.2017 (iii) Due to non-compliance with the timelines for 100% fly ash cultivation, the notification dated 31.12.2021 has extended the timelines prescribed earlier vide notification dated 25.1.2016. As such there is not change in the responsibility of the Petitioner to bear the fly ash transportation cost.
- (b) The Petitioner was admittedly aware of its obligation towards fly ash utilization and transportation and the notification dated 31.12.2021 only extended the timeline for carrying out such obligation. The Petitioner cannot claim the notification dated 31.12.2021 to be change in law event, when there has been no material change qua the responsibility of the Petitioner.
- (c) The Hon'ble Supreme Court vide its judgment dated 10.5.2022 in Civil Appeal No. 1692-1693 of 2020 (*M/s Aravali Power Company Pvt. Ltd. Vs Ved Prakash & anr and batch*) has directed MoEF&CC to revisit the parameters provided in the motivation dated 31.12.2021 and accordingly modify the same, taking into account the provisions of Hazardous and other wastes (Management and Trans boundary Moments) Rules, 2016.
- (d) Even if the Notification dated 31.12.2021 is considered as a change in law event, the MoEF&CC has to review the parameters set-out in the said notification in terms of the above directions of the Hon'ble Supreme Court and therefore, the claims of the Petitioner has to be reconsidered in view of the review by MoEF&CC.
- (e) The Petitioner reliance to order dated 5.11.2018 in Petition No.172/MP/2016 to suggest a change in law event in 2021 under the 2019 Tariff Regulations issued on 7.3.2019 for the events which are prior to the issuance of the 2019 Tariff Regulations is erroneous. Moreover, the notification dated 25.1.2016 which was declared as change in law event in context of the previous control period cannot be considered as change in law under the 2019-24 tariff period.
- (f) There is no provision under the 2019 Tariff Regulations which allows the recovery of the additional O&M expenses over and above the normative values





specified therein. Allowing the claims of the Petitioner for additional O&M expenses amounts to truing up of the normative O&M expenses specified under the 2019 Tariff Regulations, which is not permissible.

- (g) The draft 2019 Tariff Regulations did not include any provision for recovery of additional O&M expenses over and above the normative amounts. Also, the normative expenses specified under the 2019 Tariff Regulations were only after due consideration and analysis of the requirements of the various generating station for the 2019-24 tariff period. As such, the Commission had consciously not included any provision to allow the recovery of additional O&M expenses on ash transportation while specifying the 2019 Tariff Regulations.
- (h) The 2019 Tariff Regulations were not challenged by the Petitioner and therefore, it is not opened to the Petitioner to now seek additional O&M in the absence of any provision allowing such recovery. The prayer of the Petitioner, in effect, seeks the amendment of the 2019 Tariff Regulations which is not permissible (Commission's order dated 5.8.2018 in Petition No.215/MP/2018 was referred to).
- (i) The transportation cost of fly ash generated at the Petitioner's generating station are a consequence of the Petitioner's failure to achieve 100% ash utilization. The Petitioner is attempting to shift the burden of the consequence of its neglect of its statutory duties on the beneficiaries.
- (j) The exercise of the Power to Relax and Power to Remove difficulties is a judicial discretion and the same cannot be invoked to validate the Petitioner's non-compliance to the notification dated 14.9.1999 and 3.1.2009. the Hon'ble Supreme Court in *M.U Sinai vs Union of India and ors* (1975 3 SCC 765) has held that the power to remove difficulties must be exercised in a conditioned and restricted manner and such exercise of power shall not change the basic structure, schemes and essential provisions of the statute.

5. The Respondent TANGEDCO vide its reply affidavit dated 30.6.2022 has mainly submitted the following:

- (a) The Petitioner has only furnished a tabular column with detail of the ash sold and transportation charges incurred for the 24 generating stations, without any documentary evidence, as per the order dated 5.11.2018 in Petition No. 172/MP/2016, on a case to case basis, for each generating station.
- (b) The order dated 5.11.2018 only provides for the method to be adopted for making a claim in the tariff petition. In the absence of getting it determined after prudence check of the claim made by the Petitioner, in the tariff petitions filed and in the absence of any quantification of the claim in respect of the additional O&M charges incurred due to MoEF&CC notification, the Petitioner is not entitled to raise an invoice. The question of carrying cost does not warrant any consideration at all, as the prayer made is not in line with the regulations and has been sought under power to relax.
- (c) The MOP, GOI notifications dated 25.9.2021 and 22.2.2022, issued after





submissions of the petition have clearly formulated the procedure, to be adopted by generating station in fixing and claiming ash transportation charges. As per the directions has to have to follow certain steps in order to dispose fly ash and claim transportation cost. In view of this, the prayer for billing the beneficiaries directly in future is not feasible as the Petitioner has to certify that all steps were followed for disposal of fly ash. For the period after 31.12.2021, the Petitioner may be directed to follow the procedure laid down in the MOP notification dated 22.2.2022.

6. The Respondent, MSEDCL vide reply affidavit dated 6.7.2022, has submitted the following:

- (a) Since the parameters with respect to fly ash under the MoEF&CC notification 31.12.2021 has been put up for reconsideration, in terms of the judgment dated 10.5.2022 of the Hon'ble Supreme Court in M/s Aravali Power Co. Pvt. Ltd case, the present claims of the Petitioner cannot be looked into at this stage and any reliance on the said notification would be premature.
- (b) The Petitioner has only furnished a tabular column with detail of the ash sold and transportation charges incurred for the 24 generating stations, without any documentary evidence, as per the order dated 5.11.2018 in Petition No. 172/MP/2016, on a case to case basis, for each generating station.
- (c) Since the PPA does not provide this component in the formula for passing through the change in law claim, the claim of the Petitioner for payment will affect the cash flow of the Respondent as well. Without truing up of the generators claim, the prayers in the present petition may not be allowed.
- (d) The Commission may direct the Petitioner to follow the MOP guidelines dated 22.9.2021 and to abide by the MoEF&CC notifications dated 3.11.2009 & 25.1.2016 and directions contained in order dated 21.2.2018 in Petition No. 131/MP/2016 and order dated 22.3.2021 in Petition No.405/MP/2019 and submit all relevant data's, before raising the claim and pressing for the same in the present petition.
- (e) The Commission may direct the Petitioner to follow the mechanism for recovery of future expenditure, for transportation of ash, after adjusting the revenue earned from sale of Ash, in terms of the MOP guidelines dated 22.9.2021 and as specified by this Commission in order dated 22.3.2021 in Petition No.405/MP/2020.
- (f) The Petitioner's reliance to order dated 5.11.2018 seeking recovery of ash transportation on monthly basis, is misplaced, more so, in the absence of details of incurrence of actual additional expenditure. Also, the claim relating to cost of fly ash transportation has to be determined as an additional O&M expenses, on a case to case basis, for each generating station as per procedure stipulated in order dated 5.11.2018.
- (g) There is no provision under the 2019 Tariff Regulations to allow the recovery of additional O&M expenses over and above the normative expenses specified therein. It is settled law that this Commission, in the tariff determination





proceedings is bound by its own regulation (*judgment of Hon'ble Supreme Court in PTC vs CERC & ors (2010 4 SCC 603) was referred to*).

- (h) The Commission in its wisdom did not include any provision to allow the recovery of additional O&M expenses on ash transportation, while specifying the 2019 Tariff Regulations. Accordingly, it not open to the Petitioner to seek additional O&M expenses in the absence of any provisions allowing such recovery.
- (i) In the absence of actual quantification, the Petitioner is not entitled to raise any invoice and therefore, consequently the question of liability of carrying cost also doesn't not arise. Moreover, the concept of carrying cost is not applicable to projects developed under Section 62 of the Electricity Act, 2003.
- (j) Directions in the MoEF&CC notification dated 25.1.2016 is the consequence of the failure of the Petitioner to attain the 100% ash utilization within the timelines stated in the notifications dated 14.9.1999 and 3.11.2009. Thus, the expenditure to be incurred is wholly attributable to the Petitioner due to its failure to comply with the said notifications.

### **Hearing dated 7.7.2022**

7. During the hearing, the learned counsel for the Petitioner circulated note for arguments and mainly submitted as under:

- (a) The reliefs sought by the Petitioner in the present petition is (i) within the contours of law (ii) not in derogation of the regulations notified by this Commission and (iii) the Commission has the powers to grant the said reliefs.
- (b) The Commission vide its order dated 5.11.2018 in Petition No.172/MP/2016 has recognized the MOEF, GOI Notification dated 25.1.2016 as a 'change in law' event and allowed the recovery of fly ash transportation charges on account of such an event, on prudence check, during the 2014-19 tariff period.
- (c) The Petitioner had originally claimed the expenditure for ash transportation for 2019-20 and 2020-21 in the tariff petitions filed for the 2019-24 tariff period. However due to pendency on account of Covid-19 pandemic, the Petitioner was facing severe under recovery of the expenditure and therefore, the present petition was filed in October, 2021, seeking reimbursement of the expenditure incurred during 2019-20 and 2020-21 and for the balance period, the recovery of such expenditure to be permitted on a monthly basis. The Commission in some of its orders related to the tariff petitions filed for the 2019-24 tariff period, has held that the reimbursement of charges towards fly ash transportation, shall be governed by the decision of the Commission in the present petition.
- (d) The Commission in its order dated 28.5.2022, has held that the present petition is maintainable. The expenses on account of ash transportation being of recurring nature, has increased, on a year-to-year basis and has caused cash-flow problems to the Petitioner. MoEF&CC, GOI Notification on 31.12.2021 categorically prescribed that the expenditure incurred for meeting 100% Fly Ash utilization shall be considered as 'change in law'.





(e) The submission of Respondent BSPHCL that the tariff regulations notified by this Commission, do not permit the recovery of such expenditure, was considered at length and rejected by this Commission in para 23 of the order dated 28.5.2022. Similarly, the argument of the Respondents (TANGEDCO and BRPL) that fly ash utilisation is the sole responsibility of the Petitioner and since the Petitioner has defaulted in meeting such obligations (as per MOEF & CC notifications), the beneficiaries should not be saddled with the liability was also considered and rejected in the said order dated 28.5.2022;

(f) After filing this petition, the Petitioner has incurred a total expenditure of Rs 1440 crore during 2021-22. As on date, the total expenditure incurred by the Petitioner is Rs. 3092 crores up to 31.3.2022. and continues to incur expenditure on fly ash transportation, on a month on month basis. The gravity of the situation compelling the Petitioner to file the present petition has been accepted by this Commission in paras 26 and 28 of the order dated 28.5.2022;

(g) Though the 2014 Tariff Regulations did not provide for a mechanism to permit the recovery of fly ash transportation expenses as 'change in law', the Commission, after considering the difficulty faced by the Petitioner and in exercise of the regulatory power under section 79(1)(a) of the Act, had granted relief to the Petitioner for recovery of such expenditure as additional O&M expenses. (*judgment dated 15.3.2020 of the Hon'ble Supreme Court in PTC Ltd. vs. CERC was referred to*). As the 2019 Tariff Regulations also do not deal with recovery of the said expenditure, this Commission, in exercise of the power under section 79 (1)(a) can grant relief to the Petitioner, which is otherwise not envisaged under the Regulations, following the principles enshrined under section 61 of the Act.

(g) The mechanism for the monthly recovery of fly ash expenditure with annual reconciliation, put in place by the Commission in its order dated 22.3.2021 in Petition No. 405/MP/2019 (GKEL & anr v DHBVNL & ors) may be adopted in the present case of the Petitioner.

8. The representative of the Respondent UPPCL referred to its reply and pointed out that the Commission in its order dated 2.9.2021 in Petition No. 300/GT/2020 (tariff of Unchahar Thermal Power Station of the Petitioner) had not considered the fly ash transportation expenses as part of the O&M expenses. He also submitted that the same may be adopted in the present case, by allowing the recovery of fly ash transportation expenses, on an annual basis (instead of monthly basis) after adjusting the sale proceeds of fly ash. The representative also sought permission of the Commission, to file its written submissions in the matter.

9. The learned counsel for Respondent GRIDCO, while arguing that the reliefs claimed by the Petitioner are not admissible, mainly submitted as under:





(a) The prayer of the Petitioner for monthly recovery for fly ash transportation expenses was considered and rejected by this Commission in its order dated 5.11.2018 in Petition No. 172/MP/2016. The procedure and methodology for recovery of fly ash transportation expenses, is subject to prudence check of the information, only in a tariff petition in respect of each generating station, and not in the present petition.

(b) The Commission vide its order dated 5.11.2018 in Petition No.172/ MP/2016 had permitted the recovery of fly ash transportation expenses, in exercise of the regulatory power, for the 2014-19 tariff period. Despite this, the Commission, did not provide for any regulation/provision, for recovery of fly ash transportation expenditure, under the 2019 Tariff Regulations;

(c) The exercise of the 'power to relax' and 'power to remove difficulty' by this Commission, cannot be contrary to the Regulations (*judgment of the Hon'ble Supreme Court in M.U.Sinai v UOI & ors was referred to*).

(d) The Petitioner has failed to satisfy the conditions mentioned in order dated 5.11.2018 in Petition No.172/MP/2016 and therefore, no prudence check can be carried out. No steps have been taken by the Petitioner to comply with the MOEF & CC Notifications relating to the period from 1999 to 2016. In case 100% fly ash utilization is achieved in terms of the said notifications, no expenses would have been incurred towards fly ash transportation.

(e) The issue of consumers being burdened with carrying cost is misplaced and would arise only when the principal amount is admitted in terms of compliance to the MOEF&CC Notifications by the Petitioner;

(h) The Commission in its order dated 14.8.2021 in Petition No. 161/MP/2020 had not allowed the recovery of fly ash transportation charges for non-compliance of the conditions. Also, the monthly recovery of fly ash transportation expenses (with annual reconciliation) as allowed in order dated 22.3.2021 in Petition No. 405/MP/2021 was subject to the conditions to be satisfied by the Petitioner.

10. The learned counsel for the Respondent MPPMCL adopted the above submissions of the Respondent GRIDCO. He, however, submitted that the filing of the present petition, on the ground that the claims in respective tariff petitions were pending due to covid-19 pandemic, is not acceptable. The learned counsel also submitted that the 'power to relax' cannot be exercised to mitigate the hardship faced by the Petitioner. He further submitted that since the 2019 Tariff Regulations do not contain any provision for recovery of fly ash transportation expenses, the prayer of the Petitioner for relaxation, amounts to seeking 'mandamus'.

11. The learned counsel for the Respondent Delhi Discoms (BRPL & BYPL) adopted the



submissions made by the Respondents above. He also referred to the reply and submitted that since the Petitioner was aware of the MOEF&CC Notifications regarding fly ash transportation expenses, it should have sought for incorporation of a provision for allowing recovery of such expenses, while framing the 2019 Tariff Regulations. Having not done so, the prayer of the Petitioner seeking relaxation of the regulations, amounts to amendment of the regulations, which is not permissible. The learned counsel further submitted that the relief sought by the Petitioner does not fall within the ambit of Regulation 3(10) of the 2019 Tariff Regulations. He added that the MoEF&CC Notification dated 31.12.2021 only extended the timeline for carrying out obligations towards fly ash utilization and transportation by the Petitioner and therefore, the Petitioner cannot claim any subsequent Notification dated 31.12.2021 to be a Change in Law event, when there has been no material change, qua the responsibility of the Petitioner. The learned counsel sought permission of the Commission, to file its written submissions, in the matter.

12. The learned counsel for the Respondents Karnataka Escoms adopted the submissions made by the Respondents above. She, however added that power to relax/power to remove difficulty can only be exercised in case of difficulty in the implementation of the regulations and not due to difficulties faced by the Petitioner. The learned counsel also submitted that while the Petitioner, in its tariff petition (related to Kudgi STPS) has sought recovery of fly ash transportation expenses on a quarterly basis, it has sought recovery of the same expenses, on a monthly basis, in the present petition. The learned counsel sought permission of the Commission, to file its written submissions, in the matter.

13. The learned counsel for the Respondent TANGEDCO adopted the submissions of the above Respondents. He, however, submitted the following:

- (a) The petition is bereft of particulars which are required to be furnished in compliance to the MoEF&CC Notifications dated 25.1.2016, 22.4.2021 and 31.12.2021. The MOP, GOI notification dated 22.2.2022 has clearly formulated the procedure to be adopted by generating stations in fixing and claiming of ash transportation charges. Hence, the Petitioner is required to certify that the procedure





mentioned in the said notification was followed along with details.

(b) No documents have been submitted to show that transparent competitive bidding procedure was conducted by the Petitioner and there are no details of the scheduled rates of the respective State Governments, as applicable for transportation of fly ash. No details of the actual additional expenditure incurred on ash transportation after 25.1.2016, duly certified by auditors, have been submitted. No document has been placed on record to show that the details of the revenue generated from fly ash sales are maintained in a separate account as per the MoEF&CC Notification.

(c) While the Petitioner has relied on the order dated 5.11.2018 in Petition No. 172/MP/2016, to contend that the MOEF &CC notification is a change in law, for grant of relief in the present case, it has not complied with the conditions laid down in the said order.

(d) The Petitioner is under an obligation to submit station-wise claims, as each generating station will be different in respect to (i) the date of commercial operation (ii) variation in the technology used (iii) the quality of coal consumed and the potential of fly ash usage within the plant. Therefore, instead of a generic petition, the claims of the Petitioner may be considered on a case to case basis, for each generating station, separately.

14. The learned counsel for the Respondent MSEDCL and the Respondent Bihar Discoms adopted the submissions of the above Respondents and also prayed for liberty to file their written submissions. In response to the above, the learned counsel for the Petitioner made his rejoinder submissions, which are in line with the submissions made earlier.

15. The Commission, after hearing the parties, permitted the Petitioner to upload the note of arguments and also directed the Petitioner to file the following additional information:

(a) *Station wise and year wise audited details of Ash Utilisation Reserve Fund w.e.f. 3.11.2009 to 25.1.2016 and further till the end of the 2021-22, clearly showing all accruals and drawls from the said fund;*

(b) *Plant-wise details of income and expenses incurred against each sub head of ash utilisation (including quantities) as reported to CEA from 2019-20 onwards;*

(c) *Plant-wise detailed calculations for arriving at the amounts claimed for ash transportation giving details as per MOEF&CC Notifications and Commission's directions in order dated 5.11.2018 in Petition No. 172/MP/2016 namely:*

- (i) *Distance (km);*
- (ii) *Quantity (MT);*
- (iii) *End user details (type, project etc);*
- (iv) *Fly ash cost paid by the end user (if not on free of cost basis);*
- (v) *Fly ash transportation cost borne by end user (as per MoEF&CC notifications);*
- (vi) *End user certification for the quantity and distance;*
- (vii) *Mode of transportation (Rail/Road/Others)*



(viii) Details of competitively awarded transportation contract rates, in case of road contracts (per km);

(ix) Prevailing Schedule of Rates for the respective years in that State etc.

(d) Plant wise plan for improving utilisation of fly ash and reducing cost of transportation of fly ash.

16. Accordingly, the Commission after directing the parties to complete pleadings in the matter, reserved its order in the petition. In compliance to the abovesaid directions, the Petitioner has filed the additional information vide its affidavit dated 1.8.2022. The Respondent, BRPL has filed its written submissions on 2.8.2022 and the Respondent, BSPHCL has filed its counter affidavit vide affidavit dated 10.8.2022, to the additional submissions of the Petitioner. The Petitioner has also filed its written submissions on 12.8.2022. The submissions of the Petitioner and Respondents, in their written submissions/counter affidavit, are mainly on the lines of their respective contentions in the petition/replies, and therefore, the same are not set out herein, for the sake of brevity. We now, based on the submissions of the parties and the documents available on record, proceed to examine the issues raised by the parties, in the subsequent paragraphs.

### **Analysis and Decision**

17. Based on the submissions of the parties, the following issues emerge for consideration:

(a) **Issue No. A:** *Whether the Petitioner is entitled to seek additional cost towards fly ash transportation in terms of the MOEFCC Notifications dated 25.1.2016 and 31.12.2021?*

(b) **Issue No. B:** *Whether the Petitioner is entitled for reimbursement of the actual expenditure incurred on account of fly ash transportation for the period 2019-22 and thereafter for recovery of the same, by monthly billing from 2022 till 2024?*

**Issue No. A: Whether the Petitioner is entitled to seek the additional cost towards fly ash transportation in terms of the MOEF&CC Notifications dated 25.1.2016 and 31.12.2021?**

18. The Environment Protection Act, 1986 (herein referred to as "EP Act") was enacted by the Government of India on 23.5.1986 to provide for the protection and improvement of environment and for matters connected there with. Section 3(2)(v) of the EP Act provided





the power to the Central Government to take such measures which include the restriction of areas in which any industries, operations or processes or class of industries, operations or processes shall not be carried out or shall be carried out subject to certain safeguards. Thereafter, on 19.11.1986 the Central Government notified the Environment (Protection) Rules, 1986. Rule 5(3)(d) provides that the Central Government shall impose prohibition or restriction on location of such industries and the carrying on of any process or operation in any area after considering the objections received against such notification. Thereafter, the Ministry of Environment and Forests, Govt. of India in exercise of its powers under Section 3(2)(v) and Section 5 of the EP Act, issued directions for 'Utilisation of fly ash from coal or lignite based thermal power plants' vide Notification dated 14.9.1999. The said Notification prescribed amongst others the mechanism for utilisation of fly ash generated from coal or lignite based Thermal Power Plants and the achieve the target of fly ash utilisation. However, the said notification did not contain any provision for sharing of the transportation cost with the users of fly ash. Thereafter, the Ministry of Environment, Forests and Climate Change, Govt. of India vide Notification No. S.O. 254 (E) dated 25.1.2016, in exercise of its powers under the EP Act and EP Rules, made certain amendments to the Fly Ash Notification 1999, and incorporated, amongst others, the following provisions:

*"(8) Every coal or lignite based thermal power plants (including captive and or co-generating stations) shall, within three months from the date of notification, upload on their website the details of stock of each type of ash available with them and thereafter shall update the stock position at least once a Month.*

*(9) Every coal or lignite based thermal power plants shall install dedicated dry ash silos having separate access roads so as to ease the delivery of fly ash*

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

*(11) The coal or lignite based thermal power plants shall promote, adopt and set up (financial and other associated infrastructure) the ash-based product manufacturing facilities within their premises or in the vicinity of their premises so as to reduce the transportation of ash.*

*(12) The coal or lignite based thermal power plants in the vicinity of the cities shall promote, support and assist in setting up of ash-based product manufacturing units so as to meet the*



*requirements of bricks and other building construction materials and also to reduce the transportation.*

*(13) To ensure that the contractor of road construction utilizes the ash in the road, the Authority concerned for road construction shall link the payment of contractor with the certification of ash supply from the thermal power plants.*

*(14) The coal or lignite based thermal power plants shall within a radius of three hundred kilometres bear the entire cost of transportation of ash to the site of road construction projects under Pradhan Mantri Gramin Sadak Yojna and asset creation programmes of the Government involving construction of buildings, road, dams and embankments".*

19. The Petitioner had filed Petition No.172/MP/2016 before this Commission seeking the recovery of additional expenditure incurred due to fly ash transportation charges for the 2014-19 tariff period, pursuant to the MOEF&CC Notification dated 25.1.2016, as a 'change in law event' in terms of Regulation 8 of the 2014 Tariff Regulations. In the said case, the Petitioner had also sought the permission of the Commission to raise monthly bills for reimbursement of the said expenditure by the beneficiaries. The Commission vide its order dated 5.11.2018 recognized the MOEF&CC Notification dated 25.1.2016, as a 'change in law' event, allowed the recovery of the said expenditure and allowed the recovery of expenditure on such event, subject to prudence check of the claims of the Petitioner. The relevant portion of the order dated 5.11.2018 is extracted below:

*"22. It is also noticed that the Committee constituted by the Commission to examine the technical issues with regard to ash utilization in the light of the MOEFCC Notification dated 25.1.2016 has in its report dated 16.5.2018 suggested that the expenditure towards fly ash transportation is admissible under change in law and may be considered in terms of the Commission's order dated 19.12.2017 in Petition No. 101/MP/2016 (as stated above). 23. Based on the above discussion, we hold that the MOEFCC Notification dated 25.1.2016 which prescribes for sharing of the transportation cost by the coal and lignite based thermal power plants with the fly ash users is covered under Change in law in terms of Regulation 3(9)(ii) of the 2014 Tariff Regulations.*

*23. Based on the above discussion, we hold that the MOEFCC Notification dated 25.1.2016 which prescribes for sharing of the transportation cost by the coal and lignite based thermal power plants with the fly ash users is covered under Change in law in terms of Regulation 3(9)(ii) of the 2014 Tariff Regulations.*

XXXX

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

XXX





*32. The Petitioner is granted liberty to approach the Commission at the time of revision of tariff of the generating stations based on truing-up exercise for the period 2014-19 in terms of Regulation 8 of the 2014 Tariff Regulations, along with all details / information, duly certified by auditor"*

20. Accordingly, the Petitioner, in its petitions for truing-up of tariff for the 2014-19 tariff period, in respect of its generating stations, has placed on record the relevant information regarding fly ash transportation and the same are pending consideration of this Commission. During the pendency of these tariff petitions, the Petitioner, filed petitions for determination of tariff of its generating stations for the 2019-24 tariff period, in terms of the 2019 Tariff Regulations, wherein, a specific prayer was made for recovery of the fly ash transportation expenses incurred, directly from the beneficiaries. In some of the tariff petitions decided by the Commission for the 2014-19 tariff period, the fly ash transportation charges claimed by the Petitioner, were allowed, based on prudence check of the information furnished by the Petitioner. However, as the present petition was being heard on 'admissibility', the Commission, while determining tariff in some of the petitions filed by the Petitioner for the 2019-24 tariff period, disposed of the prayer of the Petitioner for recovery of fly ash transportation expenses, holding that the said expenses claimed shall be governed by the decision of the Commission, in this petition.

21. As stated, the Petitioner, in the present case has sought the recovery of additional expenditure towards fly ash transportation on account of change in law, on the ground that the Commission in its order dated 5.11.2018 in Petition No. 172/MP/2016 had already decided that the MOEF &CC Notification dated 25.1.2016, is a change in law event. It has therefore submitted that once the principle for the issue is decided, the natural sequitur is that any expenditure incurred on account of ash transportation ought to be allowed for recovery from the beneficiaries. The Petitioner has also submitted that the MOEF & CC Notification dated 31.12.2021 issued during the 2019-24 tariff period, has declared the statutory obligation of 100% fly ash utilization, as a change in law event in furtherance to the Notification dated 25.1.2016 and the same ought to be allowed as a pass through in tariff.



22. *Per contra*, the Respondent BRPL has submitted that there is no change in the responsibility of the Petitioner to bear the fly ash transportation cost in terms of the said notifications. It has also stated that the change in law event declared in order dated 5.11.2018 is in the context of the 2014-19 tariff period and cannot be considered as a change in law event under the 2019-24 tariff period. The Respondents MSEDCL and BRPL have submitted that the claim of the Petitioner has to be reviewed in the light of the directions passed by the Hon'ble Supreme Court its order dated 10.5.2022 in C.A. Nos. 1692-1693/2020. In response, the Petitioner has clarified that since the obligation for 100% fly ash utilization arises in furtherance of a statutory mandate vide notification dated 25.1.2016, the same ought to be allowed a pass through in tariff.

23. We have considered the submissions of the parties. Change in Law has been defined in Regulation 3(9) of the 2014 Tariff Regulations, applicable for the period 2014-19, as under:

*"3(9) 'Change in Law' means occurrence of any of the following events:*

*(a) enactment, bringing into effect or promulgation of any new Indian law; or*

*(b) adoption, amendment, modification, repeal or re-enactment of any existing Indian law; or*

*(c) change in interpretation or application of any Indian law by a competent court, Tribunal or Indian Governmental Instrumentality which is the final authority under law for such interpretation or application; or*

*(d) change by any competent statutory authority in any condition or covenant of any consent or clearances or approval or license available or obtained for the project; or*

*(e) coming into force or change in any bilateral or multilateral agreement/treaty between the Government of India and any other Sovereign Government having implication for the generating station or the transmission system regulated under these Regulations."*

24. Similar definition has been provided for 'change in law' under Regulation 3(10) of the 2019 Tariff Regulations, applicable for the period 2019-24. As per the said definition, 'adoption, amendment, modification, repeal or re-enactment of any existing Indian Law' is covered under change in law. The Environment (Protection) Rules, 1986 have been notified by the Central Government in exercise of the power vested under sections 6 and 25 of the





Environment Protection Act, 1986. Rule 3 of the Environment (Protection) Rules provides for Standards for emissions or discharge of environmental pollutants. The Commission vide its order dated 5.11.2018 in Petition No.172/MP/2016, had decided that since the additional cost towards fly ash transportation imposed by MOEF&CC Notification dated 25.1.2016, is on account of amendment to the Fly Ash Notification, 1999, issued by the MOEF, GOI, the said notification dated 25.1.2016 amounts to a 'change in law' and as such, the expenditure was held admissible under change in law. Even if the MOEF& CC Notification dated 25.1.2016 cannot be construed as a 'change in law' event during the 2019-24 tariff period, nevertheless, the Petitioner is required to comply with the provisions of these regulations relating to fly ash transportation, during this period. In other words, there is a continuing obligation on the part of the Petitioner, to comply with the said notification, during the 2019-24 tariff period. Further, it is observed that MOEF &CC, as amendment to notification dated 25.1.2016, issued notification dated 31.12.2021, casting a statutory obligation on the Petitioner, for 100% ash utilization, as under:

*"A. Responsibilities of thermal power plants to dispose fly ash and bottom ash-  
Xxx*

*(10) Statutory obligation of 100 percent utilization of ash shall be treated as change in law, wherever applicable."*

25. Thus, the MOEF & CC notifications dated 25.1.2016 and 31.12.2021, has created an absolute obligation on the Petitioner, for timely disposal of fly ash. In other words, while the notification dated 25.1.2016 (which was declared as a change in law event during the period 2014-19), was necessarily required to be complied by the Petitioner during the period from 1.4.2019 till 30.12.2021, the issuance of notification dated 31.12.2021, was also required to be complied by the Petitioner from 31.12.2021 till 31.3.2024, as the same is a change in law event in terms of the above provision. Though the Respondents MS&DCL and BRPL have submitted that the notification dated 31.12.2021 is required to be reviewed in terms of the order dated 10.5.2022 of the Hon'ble Supreme Court, we notice that the said notification is still valid and subsisting. In this background, we hold that



the Petitioner is entitled to seek additional cost towards fly ash transportation charges during the period 2019-24, in terms of compliance to MOEF&CC Notification dated 25.1.2016 and as a change in law in terms of the MOEF&CC Notification dated 31.12.2021.

***RE:-No provision under the 2019 Tariff Regulations***

26. Further, some of the Respondents namely, UPPCL, MPPMCL, TANGECO, BRPL, GRIDCO, KSEBL, MSEDCL, BSPHCL and Karnataka Escoms have submitted that there is no provision under the 2019 Tariff Regulations to permit the recovery of additional O&M expenditure, over and above the normative O&M expenses, specified thereunder. These Respondents have also submitted that the Commission, while framing the 2019 Tariff Regulations, after stakeholder consultation process, proceeded in its wisdom not to include any provision for recovery of such additional expenses in the said regulations. These Respondents have also submitted that the recovery of additional O&M expenses separately, on a monthly basis, is nothing but a particular component of tariff and can't be recovered separately, as the same needs to be considered at the time of tariff determination. It has also been contended that in case, the Commission allows the claims of the Petitioner, for additional O&M expenses, the same would mean undertaking truing-up of the normative O&M expenses specified under the 2019 Tariff Regulations, which is not permissible. Accordingly, these Respondents have submitted that the claims of the Petitioner, is liable to be dismissed. *Per contra*, the Petitioner has clarified that the fly ash transportation charges, though claimed under additional O&M expenses, has been claimed separately, as the said expenses are essential to prevent under recovery and that the deferment of this cost would lead to accumulation of carrying cost, which can be prevented only if recovery of the said expenses is done on a monthly basis. The Petitioner has also pointed out that despite the fact that fly ash transportation charges were not included in the 2014 Tariff Regulations, this Commission vide its order dated 5.11.2018, had allowed the said expenditure under





Regulation 3(9)(b) of the 2014 Tariff Regulations. It has further stated that in the absence of appropriate provision under the 2014 tariff Regulations for claiming fly ash transportation cost, this Commission, in the said order, had exercised its regulatory powers to allow the said cost under change in law. Accordingly, the Petitioner has stated that, if the Commission by way of an order, has taken a particular view under the 2014 Tariff Regulations, there exists no reason as to why the similar view ought not to be taken in the 2019 Tariff Regulations, as in the present case, the expenditure has not been included in the normative O&M expenses. Placing reliance on the APTEL judgment dated 21.3.2018 in Appeal Nos. 107 & 117/2015 (HPPC v HERC) and judgment dated 20.9.2012 in Appeal No. 189/2011 (TPCL v JSERC), the Petitioner has submitted that 'power to relax' can be invoked, if the Regulations, in any manner, cause hardship to a party in peculiar facts and circumstances.

27. The submissions have been considered. It is noticed that in Petition No.172/MP/ 2016, filed by the Petitioner seeking recovery of the fly ash transportation cost during the period 2014-19, some of the Respondents therein, had contended that the 2014 tariff Regulations do not permit the recovery of such expenditure and therefore the claim of the Petitioner is not maintainable. Placing reliance on the judgment of the Hon'ble Supreme Court in PTC India Limited v CERC & ors [(2010) 4 SCC 603], the Commission, vide order dated 5.11.2018, rejected the said contention of the Respondents and in exercise of the regulatory power, held that the actual additional expenditure incurred by the Petitioner towards transportation of fly ash in terms of the MOEFCC Notification dated 25.1.2016 is admissible under 'change in law' as additional O&M expenses. In the present case, the Petitioner has sought the recovery of fly ash transportation cost, on monthly basis, in terms of Section 61(b), (c) and (d) of the 2003 Act and in terms of the power vested with the Commission under Section 79(1)(a) of the Act. We have, in this order, decided that the Petitioner is entitled to seek the sharing of transportation cost of fly ash for compliance with the



MOEF&CC Notification dated 25.1.2016 and under change in law in terms of MOEF&CC notification dated 31.12.2021 as per Regulation 3(10)(b) of the 2019 Tariff Regulations. Change in law has been provided in the 2019 Tariff Regulations in the context of additional capitalization of the expenditure incurred/projected to be incurred by the generating company. The relief under 'change in law or compliance with the existing law' has been provided under additional capital expenditure in terms of Regulations 24, 25 and 26 of the 2019 Tariff Regulations. Relevant provisions of these Regulations are extracted as under:

*"24. Additional Capitalization within the original scope and upto the cut-off date*

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

*Xxxxx*

*(e) Change in law or compliance of any existing law.*

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

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

*Xxxx*

*(b) Change in law or compliance of any existing law.*

*26. Additional Capitalization beyond the original scope*

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

*Xxxx*

*(b) Change in law or compliance of any existing law.*

28. Thus, in case of an existing project or a new project, the additional capital expenditure on account of 'change in law or compliance with any existing law' is allowed. However, the additional expenditure towards transportation of fly ash from the generating station to the place of users is an expenditure of a revenue nature. We do not agree with the submissions of the Respondents that since the Commission in its wisdom did not include any provision for recovery of such additional expenses in the 2019 Tariff Regulations, the claim of the



Petitioner is not maintainable. In our view, the absence of a corresponding provision under the 2019 Tariff Regulations for allowing the additional revenue expenses /expenses of O&M nature under 'change in law or compliance with the existing law', cannot render the power of the Commission nugatory, as the word 'regulate' under Section 79(1)(a) of the 2003 Act, is wide enough to confer power on the Commission, to deal with the given situation. To reiterate, the Hon'ble Supreme Court in PTC India Limited v CERC & ors., has held that regulatory power can be exercised only when there is no provision in the regulations framed under section 178 of the Act. The relevant observations of the Hon'ble Supreme Court are extracted as under:

*"40. As stated above, the 2003 Act has been enacted in furtherance of the policy envisaged under the Electricity Regulatory Commissions Act, 1998 as it mandates establishment of an independent and transparent Regulatory Commission entrusted with wide ranging responsibilities and objectives inter alia including protection of the consumers of electricity. Accordingly, the Central Commission is set up under Section 76(1) to exercise the powers conferred on, and in discharge of the functions assigned to, it under the Act. On reading Sections 76(1) and 79(1) one finds that Central Commission is empowered to take measures/steps in discharge of the functions enumerated in Section 79(1) like to regulate the tariff of generating companies, to regulate the inter-State transmission of electricity, to determine tariff for inter-State transmission of electricity, to issue licenses, to adjudicate upon disputes, to levy fees, to specify the Grid Code, to fix the trading margin in inter-State trading of electricity, if considered necessary, etc.. These measures, which the Central Commission is empowered to take, have got to be in conformity with the regulations under Section 178, wherever such regulations are applicable. Measures under Section 79(1), therefore, have got to be in conformity with the regulations under Section 178. To regulate is an exercise which is different from making of the regulations. However, making of a regulation under Section 178 is not a pre-condition to the Central Commission taking any steps/measures under Section 79(1). As stated, if there is a regulation, then the measure under Section 79(1) has to be in conformity with such regulation under Section 178....."*

29. It is pertinent to mention that the Commission while fixing the O&M expense norms for the 2019-24 tariff period, had not considered/included the expenses incurred on account of transportation of fly ash. Accordingly, we, in exercise of the regulatory power under section 79(1)(a) of the Act, hold that the additional expenditure incurred by the Petitioner towards fly ash transportation cost for the period 2019-24, is admissible as additional O&M expenses, as the same is in terms of the MOEF&CC notifications dated 25.1.2016 and 31.12.2021, as stated in para 25 above.



**Issue No. B: Whether the Petitioner is entitled for the reimbursement of the actual expenditure incurred on account of fly ash transportation for the period 2019-22 and thereafter for recovery of the same, by monthly billing from 2022 till 20224:**

30. Some of the Respondents have submitted that the reliance placed by the Petitioner, in order dated 5.11.2018 in Petition No. 172/MP/2016 is erroneous. The Respondents BRPL, TANGEDCO and MSEDCL have submitted that even assuming that the notification dated 31.12.2021 is a change in law event, the claims of the Petitioner would still be untenable, as the Petitioner has failed to provide any information/documentary proof, as directed by this Commission in the said order dated 5.11.2018, for enabling prudence check. The Respondents BSPHCL, MSEDCL and KSEB have pointed out that the actual expenditure on account of transportation of fly ash is admissible under change in law as additional O&M expenses, subject to prudence check, on a case to case basis, for each generating station, with liberty to approach at the time of truing up of tariff. *Per contra*, the Petitioner has clarified that, it has, in compliance with the directions in order dated 5.11.2018 submitted all relevant documents /information in the truing up petitions for the 2014-19 tariff period and also in the additional affidavits filed in respect of the tariff petitions for the 2019-24 tariff period. It has been further stated that it has vide additional submissions dated 3.8.2022, filed the required information as sought by the Commissions vide ROP dated 7.7.2022. Also, the Petitioner, while pointing out that it has sought the reimbursement of fly ash transportation charges for the period 2019-22 and for the balance period (2022-24) to be recovered on monthly basis, on self-certification, has submitted that since the fly ash transportation charges are recurring in nature, the recovery of the said expenditure from the beneficiaries, will get accumulated and therefore, attract carrying cost.

31. We have examined the matter. It is observed that in order dated 5.11.2018, the Commission, in exercise of its regulatory powers, had held that the actual additional expenditure incurred by the Petitioner during the 2014-19 tariff period, towards





transportation of fly ash, in terms of the MOEF&CC Notification dated 25.1.2016, was admissible under 'change in law' as additional O&M expenses. However, in the said order, it was observed that the admissibility of the claims of the Petitioner, was subject to prudence check of the following conditions, on a case to case basis, for each generating station:

- a) Award of fly ash transportation contract through a transparent competitive bidding procedure. Alternatively, the schedule rates of the respective State Governments, as applicable for transportation of fly ash.*
- b) Details of the actual additional expenditure incurred on Ash transportation after 25.1.2016, duly certified by auditors.*
- c) Details of the Revenue generated from sale of fly ash/ fly ash products and the expenditure incurred towards Ash utilization up to 25.1.2016 and from 25.1.2016 to till date, separately.*
- d) Revenue generated from fly Ash sales maintained in a separate account as per the MoEF notification.*

32. In terms of the above, the Petitioner was granted liberty to approach the Commission, at the time of revision of tariff of the generating stations, based on truing-up exercise, for the 2014-19 tariff period, in terms of Regulation 8 of the 2014 Tariff Regulations, along with all details / information, duly certified by auditor. In compliance to the above, the Petitioner had filed the relevant information/documents, and the Commission, after prudence check of these documents /information, had allowed the ash transportation charges, in some of the generating stations of the Petitioner, for the 2014-19 tariff period. However, in cases where the recovery of fly ash transportation charges was not allowed for the 2014-19 tariff period, the Petitioner has been directed to approach the Commission by a separate petition, along with relevant data/ information for consideration. In our considered view, the Petitioner's reliance to the Commission's order dated 5.11.2018, is only for the recovery of the fly ash transportation charges for the 2019-24 tariff period, as a change in law event, subject to prudence check. The compliance or otherwise of the additional information sought from the Petitioner, in the order dated 5.11.2018, relating to the fly ash transportation cost claimed by the Petitioner, for the 2014-19 tariff period, cannot be the basis for the Respondents, to negate the claims of the Petitioner for the 2019-24 tariff period. Nevertheless, we notice,



that the Petitioner vide its affidavit dated 1.8.2022, has, in compliance to the directions of this Commission, furnished the additional information sought vide ROP dated 7.7.2022, in support of its prayer seeking reimbursement of ash transportation charges for the period 2019-22, which is subject to prudence check, and has also undertaken to furnish the relevant information, for the balance period (2022-24), at the end of the tariff control period. In the light of the above, the submissions of the Respondents that the claims of the Petitioner for the 2019-24 tariff period are in-admissible, is not acceptable.

33. The Petitioner has submitted that at the time of filing the petition, the accounts for 2019-20 and 2020-21 were finalized and submitted and accordingly, a prayer was made for reimbursement of actual ash transportation expenses for the said years. It has, however, submitted that subsequently, during the course of the proceedings in the present petition, the accounts for 2021-22 was finalized and details of the expenses incurred for the said year, has been submitted. Based on this, the Petitioner has submitted that the Commission may direct the beneficiaries to reimburse the actual ash transportation expenses incurred during the period 2019-22 and to further direct the beneficiaries to reimburse the said charges on a monthly basis, for the future period.

34. The Petitioner, in response to the directions of the Commission vide ROP of the hearing dated 7.7.2022, has, vide affidavit dated 1.8.2022 (filed on 3.8.2022) furnished the additional information, as sought by the Commission (as in para 15 above) along with the station wise claim for ash transportation charges for the period 2019-22. According to the Petitioner, the total expenditure incurred by the Petitioner towards transportation of fly ash is to the tune of Rs. 3097 crore upto 31.3.2022 and it continues to incur the said expenditure on a month to month basis. The admissibility of the claims for the period 2019-22 are examined in the subsequent paragraphs.

35. As stated, the Petitioner has placed on record the station-wise and year-wise audited





details of Ash Utilization Reserve Fund w.e.f. 3.11.2009 to 24.1.2016 and further, from 25.1.2016 till 31.3.2022. The Petitioner has also furnished the following details:

- a) Data for quantity of Plant-wise ash utilization as submitted to Central Electricity Authority (CEA).
- b) The data (Plant-wise and sub-head wise) as reported to CEA by the Petitioner for ash utilization for 2021-22.
- c) Plant-wise details of income against relevant sub-head of ash utilization (including quantities) and Plant-wise details of expenses (as claimed in instant Petition) against relevant sub-head of ash utilization (including quantities) for the 2019-20, 2020-21 and 2021-22..
- d) The Plant-wise detailed calculations for arriving at the expenditure incurred for ash transportation giving details as per MOEF&CC Notifications and Commission's directions in order dated 5.11.2018 in Petition No. 172/MP/2016 with respect to the years 2019-20, 2020-21 and 2021-22.
- e) xxx
- f) The details of ash transportation expenses incurred for 2019-20 and 2020-21
- g) The ash utilization infrastructure in Sipat STPS and Simhadri STPS has been funded from ash sale proceeds and accordingly station wise claim for ash transportation expenses for 2019-20, 2020-21 and 2021-22 has been provided.

36. The Petitioner has also submitted that it has been incurring the fly ash transportation expenditure in a recurring manner to the tune of Rs. 652 crore in 2019-20, Rs. 1004 crore in 2020-21 and Rs. 1440 crore in 2021-22. The Petitioner has also submitted the auditor certificates of the Ash transportation charges incurred by it along with the ash sale proceeds received during the relevant periods, in support of its claim for ash transportation charges, after adjusting the ash sale proceeds and end user certificates. Based on the auditor certificates submitted by the Petitioner, the station-wise Ash transportation charges claimed is as under:

Sl. No	Name of the Generating Station	Ash transportation Charges claimed (Rs in lakh)		
		2019-20	2020-21	2021-22
1	Singrauli Super Thermal Power Stations	0.00	6194.71	3441.27
2	Rihand Super Thermal Power Station	0.00	3125.20	7229.05
3	Unchahar Thermal Power Station	7486.43	14489.11	10363.48
4	Tanda Thermal Power Station	5732.44	0.00	9511.77
5	Korba Super Thermal Power Project	0.00	585.01	1396.61
6	Vindhyachal Super Thermal Power Project	0.00	2071.18	5872.97



7	Sipat Super Thermal Power Project	638.39	3832.75	3820.43
8	Farakka Super Thermal Power Project	21918.76	20265.11	28288.72
9	Kahalgaon Super Thermal Power Project	0.00	11303.56	21260.40
10	Talcher Super Thermal Power Project	7563.45	19106.50	19771.12
11	Talcher TPS	15.56	9.44	0.00
12	Barh Thermal Power Plant	0.00	0.00	1839.79
13	Ramagundam Super Thermal Power	0.00	0.00	2036.97
14	Simhadri Thermal Power Project	15291.23	7491.47	9449.58
15	Mauda Super Thermal Power Station	6524.83	3799.14	5883.51
16	Lara STPP	1.96	8214.75	5705.07
17	Gadarwara Super Thermal Power Plant	0.00	0.00	128.19
18	Darlipalli Super Thermal Power Plant	0.00	0.00	8044.13
	<b>Total</b>	<b>65173.05</b>	<b>100487.93</b>	<b>144043.06</b>

37. Further, as regard with the adjustment of revenue earned through sale of fly ash, Commission at para no. 26 of the order dated 5.11.2018 in petition no 172/MP/2016 has observed as under:

"26. Based on the details submitted by the Petitioner in the tables A & B above, the Committee in its report dated 16.5.2018 has observed the following:

"It could be observed from above tables A & B that the % age of ash utilization in NTPC stations has remained in the range of about 40% to 60% during the period 2009- 2017 and the average % age of ash utilization during the period 2009-17 has been about 50%. The average fly ash utilization had remained about 43% during the period 1999- 2017. Further it is observed that the % age of ash issued to Cement Ind. & other is 21.63% (Cement 15.13% and others 6.50%) of the total ash produced by NTPC. As per the directives of MOEF notification dated 25.1.2016 and for that matter NTPC has to incur transportation expenditure. NTPC has earned revenue of ₹474.20 Cr. from 2009- 10 to 2014-15 as given below. As per Para 6 of MOEF Notification no. 2804 (E) dated 03.11.09, this revenue can only be utilised for promoting fly ash utilisation, hence part of transportation expenditure, as above can be met from this revenue." "





38. On perusal of the details submitted by the Petitioner, it is noticed that the Petitioner has claimed ash transport expenses for the period 2016-17 to 2021-22 considering the sale of ash and related expenditure w.e.f. 25.1.2016 to 31.3.2022. In this regard, it is to mention that, for the 2014-19 tariff period, the Commission had in principle permitted the recovery of ash transportation expenditure vide its order dated 5.11.2018 in Petition No.172/MP/2016 under change in law. Based on this, the claims of the Petitioner for fly ash transportation expenses, in some of the truing-up of tariff petitions for the period 2014-19 were allowed on prudence check. In the present case, the actual expenses generating plant wise claimed by the Petitioner for the period from 2019-20 to 2021-22 after accounting for the revenue earned through sale of Ash Generating Station wise, as per the audited data submitted by the Petitioner, is as under:

(Rs. In Lakh)					
Name of the Generating Station		2019-20	2020-21	2021-22	Net Charges allowed for the period 2019-20 to 2021-22
Singrauli STPS	Ash transportation charges incurred (a)	0.00	6194.71	3441.27	9635.98
	Expenditure met out of Ash sale fund (b)	0.00	0.00	0.00	0.00
	<b>Net Expenditure allowed (c) =(a)-(b)</b>	<b>0.00</b>	<b>6194.71</b>	<b>3441.27</b>	<b>9635.98</b>
Rihand STPS	Ash transportation charges incurred (a)	11.90	3364.53	7229.05	10605.48
	Expenditure met out of Ash sale fund (b)	11.90	239.32	0.00	251.22
	<b>Net Expenditure allowed (c) =(a)-(b)</b>	<b>0.00</b>	<b>3125.21</b>	<b>7229.05</b>	<b>10354.26</b>
Unchahar TPS	Ash transportation charges incurred (a)	8926.42	15817.35	11831.86	36575.63
	Expenditure met out of Ash sale fund (b)	1439.99	1328.24	1468.37	4236.60
	<b>Net Expenditure allowed (c) =(a)-(b)</b>	<b>7486.43</b>	<b>14489.11</b>	<b>10363.49</b>	<b>32339.03</b>
Tanda TPS	Ash transportation charges incurred (a)	8916.32	474.06	15494.43	24884.81
	Expenditure met out of Ash sale fund (b)	3183.87	474.06	5982.67	9640.60
	<b>Net Expenditure allowed (c) =(a)-(b)</b>	<b>5732.45</b>	<b>0.00</b>	<b>9511.76</b>	<b>15244.21</b>
Korba STPS	Ash transportation charges incurred (a)	0.00	784.00	1441.61	2225.61
	Expenditure met out of Ash sale fund (b)	0.00	198.99	45.00	243.99
	<b>Net Expenditure allowed (c) =(a)-(b)</b>	<b>0.00</b>	<b>585.01</b>	<b>1396.61</b>	<b>1981.62</b>
Vindhyachal STPS	Ash transportation charges incurred (a)	153.97	2442.27	6073.48	8669.72
	Expenditure met out of Ash sale fund (b)	153.97	371.09	200.51	725.57
	<b>Net Expenditure allowed (c) =(a)-(b)</b>	<b>0.00</b>	<b>2071.18</b>	<b>5872.97</b>	<b>7944.15</b>
Sipat STPS	Ash transportation charges claimed (a)	638.39	3832.75	3944.23	8415.37



	Ash Fund Utilization for Assets during the period (b)	252.38	32.50	6.21	291.09
	Ash sale during the period (c)	252.38	32.50	130.01	414.89
	<b>Net Expenditure allowed (d) =(a)+(b)-(c)</b>	<b>638.39</b>	<b>3832.75</b>	<b>3820.43</b>	<b>8291.57</b>
Farakka STPS	Ash transportation charges incurred (a)	25303.56	21699.23	29584.82	76587.61
	Expenditure met out of Ash sale fund (b)	3384.79	1434.12	1296.11	6115.02
	<b>Net Expenditure allowed (c) =(a)-(b)</b>	<b>21918.77</b>	<b>20265.11</b>	<b>28288.71</b>	<b>70472.59</b>
Kahalgaon STPS	Ash transportation charges incurred (a)	3355.10	15011.72	23373.36	41740.18
	Expenditure met out of Ash sale fund (b)	3355.10	3708.16	2112.97	9176.23
	<b>Net Expenditure allowed (c) =(a)-(b)</b>	<b>0.00</b>	<b>11303.56</b>	<b>21260.39</b>	<b>32563.95</b>
Talcher STPS	Ash transportation charges incurred (a)	7563.45	19106.50	19771.12	46441.07
	Expenditure met out of Ash sale fund (b)	0.00	0.00	0.00	0.00
	<b>Net Expenditure allowed (c) =(a)-(b)</b>	<b>7563.45</b>	<b>19106.50</b>	<b>19771.12</b>	<b>46441.07</b>
Talcher TPS	Ash transportation charges incurred (a)	15.56	9.44	0.00	25.00
	Expenditure met out of Ash sale fund (b)	0.00	0.00	0.00	0.00
	<b>Net Expenditure allowed (c) =(a)-(b)</b>	<b>15.56</b>	<b>9.44</b>	<b>0.00</b>	<b>25.00</b>
Barh TPS	Ash transportation charges incurred (a)	0.00	0.00	3183.29	3183.29
	Expenditure met out of Ash sale fund (b)	0.00	0.00	1343.51	1343.51
	<b>Net Expenditure allowed (c) =(a)-(b)</b>	<b>0.00</b>	<b>0.00</b>	<b>1839.78</b>	<b>1839.78</b>
Ramagundam STPS	Ash transportation Charges incurred (a)	0.00	29.80	4858.42	4888.22
	Expenditure met out of Ash sale fund (b)	0.00	29.80	2821.45	2851.25
	<b>Net Expenditure allowed (c) =(a)-(b)</b>	<b>0.00</b>	<b>0.00</b>	<b>2036.97</b>	<b>2036.97</b>
Simhadri TPS	Ash transportation charges claimed (a)	15291.23	7491.47	9449.58	32232.28
	Ash Fund Utilization for Assets during the period (b)	163.69	76.00	131.29	370.98
	Ash sale during the period (c)	163.69	76.00	131.29	370.98
	<b>Net Expenditure allowed (d) =(a)+(b)-(c)</b>	<b>15291.23</b>	<b>7491.47</b>	<b>9449.58</b>	<b>32232.28</b>
Mauda STPS	Ash transportation charges incurred (a)	6561.04	3824.72	5913.83	16299.59
	Expenditure met out of Ash sale fund (b)	36.21	25.58	30.32	92.11
	<b>Net Expenditure allowed (c) =(a)-(b)</b>	<b>6524.83</b>	<b>3799.14</b>	<b>5883.51</b>	<b>16207.48</b>
Lara STPP	Ash transportation charges incurred (a)	1.96	8319.75	5823.57	14145.28
	Expenditure met out of Ash sale fund (b)	0.00	105.00	118.50	223.50
	<b>Net Expenditure allowed (c) =(a)-(b)</b>	<b>1.96</b>	<b>8214.75</b>	<b>5705.07</b>	<b>13921.78</b>
Gadarwara STPS	Ash transportation charges incurred (a)	0.00	0.00	136.26	136.26
	Expenditure met out of Ash sale fund (b)	0.00	0.00	8.07	8.07
	<b>Net Expenditure allowed (c) =(a)-(b)</b>	<b>0.00</b>	<b>0.00</b>	<b>128.19</b>	<b>128.19</b>
Darlipalli STPS	Ash transportation charges incurred (a)	0.00	0.00	8044.13	8044.13
	Expenditure met out of Ash sale fund (b)	0.00	0.00	0.00	0.00
	<b>Net Expenditure allowed (c) =(a)-(b)</b>	<b>0.00</b>	<b>0.00</b>	<b>8044.13</b>	<b>8044.13</b>
	<b>Total Net Charges allowed after adjusting the available revenue generated from sale of Ash</b>	<b>65173.07</b>	<b>100487.94</b>	<b>144043.03</b>	<b>309704.04</b>

39. Petitioner has furnished the details of the distance to which fly ash has been transported from the generating station, schedule rates applicable for transportation of fly





ash, as notified by the State Governments along with details, including Auditor certified accounts. These documents have been examined and accordingly, the total fly ash transportation expenditure allowed to the Petitioner generating station wise for the period 2019-22 is as per the table in para 38 above totalling to Rs.309704.03 lakh and the same shall be recovered from the beneficiaries of the respective generating stations in 6 (six) equal monthly installments. However, the Petitioner is directed to submit details regarding award of transportation contracts, distance to which fly ash has been transported along with duly reconciled statements of expenditure incurred on ash transportation at the time of filing petitions for truing up of tariff for the 2019-24 tariff period of the generating stations.

#### **Monthly billing**

40. As stated, the Petitioner has sought the reimbursement of the actual fly ash transportation charges for the years 2019-20, 2020-21 and 2021-22 under change in law and for the balance period (2022-24), it has prayed for the billing and recovery of the said expenses, on a monthly basis, based on self-certification. Per contra, the Respondents have submitted that the Commission in its order dated 5.11.2018 had deemed it fit not to grant the recovery of monthly billing of the additional expenditure incurred on account of fly ash transportation. They have also submitted that the Petitioner cannot shift the burden on the beneficiaries to bear the expenses towards ash transportation due to its failure to comply with the MOEF &CC notifications dated 25.1.2016 and 31.12.2021. Accordingly, the Respondents have prayed that the cost towards Fly ash transportation, may not be permitted to be recovered.

41. The matter has been examined. It is noticed that the Petitioner in Petition No.172/MP/2016 had sought the permission of the Commission to recover the fly ash transportation expenses, through monthly billing, from the various beneficiaries of the generating stations of the Petitioner. However, the Commission vide its order dated



5.11.2018, while observing that the admissibility of the claims of the Petitioner are subject to prudence check of the additional information to be filed by the Petitioner, granted liberty to claim the same at the time of truing up of tariff of the generating stations of the Petitioner (see para 19 above). Though the prayer of the Petitioner for monthly billing of the expenses was not specifically rejected by order dated 5.11.2018, the non-consideration of the said prayer, therein, appear to be only on account of the fact that the said petition was being disposed of during the fag end of the control period 2014-19, and that the Petitioner was entitled to file truing-up petitions in respect of its generating stations for the period 2014-19, in terms of Regulation 8(1) of the 2014 Tariff Regulations. This is not so in the present case. In the present case, though the Petitioner had claimed the recovery of fly ash expenditure in all petitions for determination of tariff for the period 2019-24, it has, considering the Covid-19 pandemic and the delay in the recovery of the said expenditure from tariff petitions, and the cash flow problems, has filed the present petition also with a prayer for interim relief. Accordingly, the claims of the Petitioner in the tariff petitions was not considered and was made subject to the final decision in this petition. Since the Petitioner has been incurring the said expenditure, which is subject to adjustment at the time of truing-up of tariff of the generating stations of the Petitioner, for the period 2019-24, no prejudice will be caused to the Respondents herein, by allowing the monthly billing, as prayed for.

42. Further, the Petitioner has relied upon the Commission's order dated 22.3.2021 in Petition No. 405/MP/2019 (GKEL & anr v DHBVNL & ors) to submit that the issue of monthly recovery and procedure for recovery of cost is no more res integra, as the Commission, has put in place a robust mechanism of monthly recovery with annual reconciliation. It has been objected to by some of the Respondents stating that there is no similarity in the present petition and the order dated 22.3.2021 towards recovery of the expenditure. This submission of the Respondents is also not acceptable. Though the order dated 22.3.2021 relate to the recovery of expenditure incurred on transportation of fly ash





by the Petitioner therein (whose project is covered under Section 63 of the Act), pursuant to the MoEF&CC Notification dated 25.1.2016, the same would be applicable to the present case of the Petitioner (whose project is covered under Section 62 of the Act), as in the said case, the notification dated 25.1.2016, was declared as 'change in law event' and the recovery of the charges for transportation of fly ash was found to be admissible.

43. In the light of the above discussion and keeping in view that the Petitioner is entitled for recovery of fly ash transportation charges, under change in law, as additional O&M expenses, we permit the provisional billing at 90% of the fly ash transportation charges incurred by the Petitioner, in respect of its generating stations, for the balance period (i.e. 2022-24), on a monthly basis, based on self -certification, and the beneficiaries shall pay the same accordingly. This is, however, subject to prudence check of the claims, at the time of truing-up of tariff for the period 2019-24, in respect of the generating stations of the Petitioner, in terms of Regulation 13 of the 2019 Tariff Regulations.

44. We direct that the fly ash transportation cost incurred by the Petitioner, shall be recovered, in proportion to the coal consumed corresponding to the scheduled generation at normative parameters in accordance with the 2019 Tariff Regulations or at actuals, whichever is lower, for the supply of electricity to the respective Discoms. If the actual generation is less than the scheduled generation, the coal consumed for actual generation shall be considered for the purpose of computation of transportation of fly ash. The Petitioners are directed to furnish along with its monthly regular and/or supplementary bill(s), computations duly certified by the auditor, to the Respondent Discoms. The Petitioners and the Respondent Discoms are also directed to carry out reconciliation in respect of the claims, annually and the same is subject to truing-up, in terms of Regulation 13 of the 2019 Tariff Regulations.



### ***Carrying cost***

45. The Petitioner has submitted that it is entitled to carrying cost from the day the expenses have been incurred, but not have been recovered. Referring to the judgment of the Hon'ble Supreme Court in UHBVN v Adani Power & ors [2019 (5) SCC 325], the Petitioner has contended that it is entitled to carrying cost from the beneficiaries and any deferment shall have a time value of money attached to it. It has further submitted that the prayer for monthly recovery of fly ash transportation expense will prevent the burden of carrying cost/interest on the beneficiaries and delay in recovery could lead to carrying cost in terms of Regulation 13 of the 2019 Tariff Regulations. *Per contra*, some of the Respondents have contended that the concept of carrying cost does not arise, in as much as, the additional O&M expenses cannot be determined in isolation of other components as claimed in the tariff petition.

46. The matter has been considered. As stated, the Petitioner, in this order, has been granted the relief for recovery of fly ash transportation expenditure for the period 2019-22 and for monthly billing of such charges for the period 2022-24 (based on self-certification), in exercise of the regulatory powers under Section 79(1)(a) of the Act. Also, the monthly billing of the charges incurred for the period 2022-24 is subject to truing up in terms of Regulation 13 of the 2019 Tariff Regulations. It is however observed that in respect of the claim of the Petitioner for recovery of fly ash transportation charges for the period 2014-19, the Commission, had, in exercise of the regulatory powers, allowed the reimbursement of the said expenses in 6 (six) monthly installments, to some of the generating stations, after prudent check. The Petitioner has claimed carrying cost in respect of fly ash transportation charges for the period 2019-24, placing reliance on the judgment of the Hon'ble Supreme Court in UHBVN v Adani Power case. In this case, the Hon'ble Supreme Court has observed that since the funds arranged by the developer are based on interest rate framework followed by scheduled commercial banks, the affected developer ought to be





compensated in the same way. The relevant portion of the said judgment is extracted hereinbelow:

*"10. A reading of Article 13 as a whole, therefore, leads to the position that subject to restitutionary principles contained in Article 13.2, the adjustment in monthly tariff payment, in the facts of the present case, has to be from the date of the withdrawal of exemption which was done by administrative orders dated 06.04.2015 and 16.02.2016. The present case, therefore, falls within Article 13.4.1(i). This being the case, it is clear that the adjustment in monthly tariff payment has to be effected from the date on which the exemptions given were withdrawn. This being the case, monthly invoices to be raised by the seller after such change in tariff are to appropriately reflect the changed tariff. On the facts of the present case, it is clear that the respondents were entitled to adjustment in their monthly tariff payment from the date on which the exemption notifications became effective. This being the case, the restitutionary principle contained in Article 13.2 would kick in for the simple reason that it is only after the order dated 04.05.2017 that the CERC held that the respondents were entitled to claim added costs on account of change in law w.e.f. 01.04.2015. This being the case, it would be fallacious to say that the respondents would be claiming this restitutionary amount on some general principle of equity outside the PPA. Since it is clear that this amount of carrying cost is only relatable to Article 13 of the PPA, we find no reason to interfere with the judgment of the Appellate Tribunal."*

47. In line with the above decision and since the Petitioner has been permitted to recover the fly ash transportation cost as 'additional O&M expenses', for the period 2019-24, in exercise of the regulatory powers under Section 79(1)(a) of the Act, we permit the recovery of these charges, along with carrying cost, at the rate of interest as specified, in terms of Regulation 10 (7) of the 2019 Tariff Regulations.

#### ***Failure of the Petitioner to comply with the notifications***

48. Some of the Respondents have submitted that the additional expenditure incurred by the Petitioner is wholly attributable to the Petitioner due to their failure to comply with the MOEF & CC notifications issued under the Environment Protection Act. They have also submitted that the Petitioner is attempting to shift the burden on the beneficiaries to bear the expenses towards ash transportation which are clearly due to the failure of the Petitioner to comply with the said notifications, which is against the interest of the consumers' and therefore, the claims are liable to be rejected. Also, few Respondents have submitted that the MOEF&CC notification dated 25.1.2016, is the consequence of failure of the Petitioner to attain 100% fly ash utilization within the time lines stated in the notifications dated



14.9.2009 and 3.11.2009. Accordingly, these Respondents have submitted that the claims of the Petitioner may be rejected. *Per contra*, the Petitioner has clarified that while the MOEF & CC notification dated 3.11.2009, does not provide for any provision for sharing of transportation cost with the users, the notification dated 25.1.2016 mandate the bearing of ash transportation charges by coal/lignite based thermal generating stations. It has also submitted that the issue of non-utilization of fly ash in terms of the said notification, raised by some of the beneficiaries, were disregarded by the commission in its order dated 5.11.2018, and therefore, the same issue cannot be agitated again, as it would be barred by the principles of *res judicata*. The Petitioner has also pointed out that the compliance of environmental norms including MOEF&CC notification dated 25.1.2016 is a subject matter of the Environment Protection Act, and in case of violation of any of terms and conditions prescribed thereunder, action for non-compliance would have been taken by the appropriate authorities under the said Act.

49. The matter has been considered. The contention of the Respondents that the notification dated 25.1.2016 is on account of the failure of the Petitioner to attain 100% fly ash utilization within the timelines stated in the earlier notifications and therefore, the burden has been shifted on the beneficiaries to bear the said expenses, is misconceived and is not acceptable. It is noticed that though the notification dated 3.11.2009 allowed the sale of fly ash by the generating stations to the user agencies and also mandated the generating stations to utilize 100% ash in a phased manner, it did not provide for any provision for sharing of transportation cost with the users of fly ash. As rightly contended by the Petitioner, any non-compliance to the terms and conditions prescribed under the EP Act or the notification thereunder, would have invited action against the Petitioner for non-compliance, by the appropriate authorities. The Petitioner has submitted that it would follow the procedure laid down in the notifications. Be that as it may, it is noticed that the Petitioner, in response to the directions of the Commission vide ROP dated 7.7.2022, has,

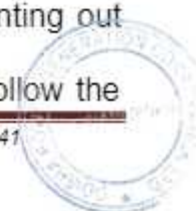




vide its affidavit dated 1.8.2022, detailed the measures and initiatives implemented and explored, across all its generating stations for improving the utilization of fly ash and reducing cost of transportation of fly ash. In our view, the prayer of the Petitioner, in the present petition, is for the recovery of additional expenditure incurred towards fly ash transportation, in terms of the MOEF&CC notifications dated 25.1.2016 and 31.12.2021, and once the principle, that the said expenditure is 'admissible' as additional O&M expenses has been decided, the Petitioner is entitled to recover the same from the beneficiaries.

### **Others**

50. Some of the Respondents like BSPHCL, TANGEDCO and MSEDCL have submitted that fly ash transportation charges can be claimed only after fulfilment of the conditions laid down in the Ministry of Power notifications dated 25.9.2021 and 22.2.2022. According to the Respondents, the Petitioner, in terms of the said notifications, has to follow the steps namely (i) The power plant shall first attempt to sell fly ash by a transparent bidding process (ii) if some quantity is left un-bided, then the station can attempt to give free of cost, if the user agency is willing to bear the transportation cost and (ii) in case of non-fulfillment of the above conditions, then only the thermal power plant shall bear the cost of transportation of fly ash to be provided free to eligible projects. As regards the recovery of transportation cost, in terms of the said notifications, the (i) said cost shall be discovered on competitive bidding basis only (ii) thermal power plants shall prepare a panel of transportation agencies ever year based on competitive bidding for transportation in slabs of 50 km, which may be used for the period (ii) the thermal power plants shall call for bids well in advance so that the transportation panel is in place as soon as the previous panel expires and (iv) and fly ash will be offered to end users on competing demand basis. Accordingly, these Respondents have submitted that the Petitioner may be directed to follow the above said procedure laid down in the said notifications. *Per contra*, the Petitioner while pointing out that the said notifications are prospective in nature, has submitted that it would follow the



procedure laid down in these notifications. It has, however, submitted that the present petition is not for the determination of procedures that must be followed, but solely for timely recovery of the expenses incurred on account of fly ash transportation to avoid any financial implication on the stakeholders involved.

51. The submissions have been considered. As stated in para 15 above, the Commission vide ROP of the hearing dated 7.7.2022, had directed the Petitioner, to submit, amongst others, *'the plant-wise plan for improving utilization of fly ash and reducing the cost of transportation of fly ash'*. In response, the Petitioner vide affidavit dated 1.8.2022, has submitted that it is implementing and exploring a number of measures and initiatives across all its plants to improve utilization of fly ash and reduce the cost of transportation of fly ash, as detailed below:

- (a) Exploring further tie-ups for dry fly ash/ pond ash utilization with nearby Cement Industries, Traders, Brick Manufacturers, Tile manufacturers;
- (b) Serving notice to Mines authorities for allocation of abandoned mines as per provision of MoEF&CC Notification dated 31.12.2021.
- (c) Planning for utilization of pond ash in Road, embankment construction, shoreline protection measures, etc. as per provision of MoEF&CC Notification dated 31.12.2021.
- (d) Continued Ash Utilization process as per stipulations of MOP advisory:
  - Auction of Ash through Open and transparent bidding process
  - Inviting Expression of Interest from User agencies for balance of Ash after auction process for free issue free of cost and transportation to be borne by User agencies
  - Inviting EoI for free of cost issue of ash while also bearing part or full transportation cost for Pond Ash / Dry Fly ash / Bottom Ash for eligible projects.
- (e) Allocating Pond ash / dry fly ash invariably through a transparent bidding process to achieve rates even below SOR of State wherever possible. Pond ash / dry fly ash is being offered to bidders through a process on competing demand basis i.e. priority is given to bidders who offer the highest price for Ash and thereafter to the bidders who seek minimum support for transportation cost;
- (f) Survey and follow up with concerned authorities for development of low-lying area as per provisions of MoEF&CC notification dated 31.12.2021;
- (g) Developing facilities for enhancing Ash Utilization viz. installation of Ash Bagging machine, Hydrobins, Ash brick Plant, Dry Ash Extraction System (DAES),





creation of storage space and direct Ash loading facility from Ash Silos to Railway wagons for bulk transportation of Ash at cheap transportation rates;

- (h) Use of Pond ash in raising/buttreassing of ash dyke to enhance dyke capacity;
- (i) Efforts are being made for utilization of ash through New Initiatives viz. LWA (Light Weight Aggregate), GPC Road (Geopolymer concrete road), Ash Bricks & tiles, Fly ash-based sand, pond ash foam concrete blocks, ash to sand plant, etc. In-house research activities are being carried out and Pilot projects are being taken up to establish new products;
- (j) Going for BIS certification of Brick plant which will allow selling of bricks in open market resulting into higher revenue as well as higher ash utilization;
- (k) Exploring utilization of Pond / fly Ash in Stone Quarries available near to station;
- (l) Auctioning/sale of Bottom ash as substitute of sand in market;
- (m) Improving efficiency of Dry Ash Extraction System;
- (n) Construction of all-weather RCC Road to Ash Dyke resulting into enhanced ash disposal;
- (o) Maximizing availability & supply of fly ash from silos thereby minimizing the ash being sent to ash dyke resulting into reduced transportation cost;
- (p) Exploring export of ash; and
- (q) Awareness creation by advertisements and workshops for use of ash/ash-based products.

52. Accordingly, we direct the Petitioner to ensure the strict compliance of the notifications issued by the statutory authority and implement measures to improve the utilization of fly ash in all its thermal generating stations, thereby reducing the cost of fly ash transportation. The Petitioner is further advised to indicate its plan to improve the utilization of fly ash, on its website, to provide information to prospective users of fly ash.

53. Petition No.205/MP/2021 is disposed of in terms of the above discussion and findings.

**Sd/  
(Pravas Kumar Singh)  
Member**

**Sd/  
(Arun Goyal)  
Member**

**Sd/  
(I.S Jha)  
Member**



## MINISTRY OF POWER

## NOTIFICATION

New Delhi, the 22nd October, 2021

**G.S.R. 751(E).**—In exercise of the power conferred by sub-section (1), read with clause (z) of sub-section (2), of section 176 of the Electricity Act, 2003 (36 of 2003), the Central Government hereby makes the following rules, namely:—

**1. Short title, commencement and application.**—(1) These rules may be called the Electricity (Timely Recovery of Costs due to Change in Law) Rules, 2021.

(2) They shall come into force on the date of their publication in the Official Gazette.

(3) These rules shall apply to a generating company and transmission licensee.

**2. Definitions.**—(1) In these rules, unless the context otherwise requires,—

(a) “Act” means the Electricity Act, 2003 (36 of 2003);

(b) “agreement” means an agreement for the purchase, supply or transmission of electricity entered into under the Act;

(c) “change in law”, in relation to tariff, unless otherwise defined in the agreement, means any enactment or amendment or repeal of any law, made after the determination of tariff under section 62 or section 63 of the Act, leading to corresponding changes in the cost requiring change in tariff, and includes—

(i) a change in interpretation of any law by a competent court; or

(ii) a change in any domestic tax, including duty, levy, cess, charge or surcharge by the Central Government, State Government or Union territory administration leading to corresponding changes in the cost; or

(iii) a change in any condition of an approval or license obtained or to be obtained for purchase, supply or transmission of electricity, unless specifically excluded in the agreement for the purchase, supply or transmission of electricity, which results in any change in the cost,

but does not include—

(A) any change in any withholding tax on income or dividends distributed to the shareholders of the generating company or transmission licensee; or

(B) change in respect of deviation settlement charges or frequency intervals by an Appropriate Commission;

(d) “law” includes any Act, Ordinance, order, bye-law, rule, regulation, notification, for the time being in force, in the territory of India.

(2) The words and expressions used and not defined herein but defined in the Act shall have the meaning respectively assigned to them in the Act.

**3. Adjustment in tariff on change in law.**—(1) On the occurrence of a change in law, the monthly tariff or charges shall be adjusted and be recovered in accordance with these rules to compensate the affected party so as to restore such affected party to the same economic position as if such change in law had not occurred.

(2) For the purposes of sub-rule (1), the generating company or transmission licensee, being the affected party, which intends to adjust and recover the costs due to change in law, shall give a three weeks prior notice to the other party about the proposed impact in the tariff or charges, positive or negative, to be recovered from such other party.

(3) The affected party shall furnish to the other party, the computation of impact in tariff or charges to be adjusted and recovered, within thirty days of the occurrence of the change in law or on the expiry of three weeks from the date of the notice referred to in sub-rule (2), whichever is later, and the recovery of the proposed impact in tariff or charges shall start from the next billing cycle of the tariff.

(4) The impact of change in law to be adjusted and recovered may be computed as one time or monthly charges or per unit basis or a combination thereof and shall be recovered in the monthly bill as the part of tariff.

(5) The amount of the impact of change in law to be adjusted and recovered, shall be calculated—

(a) where the agreement lays down any formula, in accordance with such formula; or





(b) where the agreement does not lay down any formula, in accordance with the formula given in the Schedule to these rules;

(6) The recovery of the impacted amount, in case of the fixed amount shall be,—

(a) in case of generation project, within a period of one-hundred eighty months; or

(b) in case of recurring impact, until the impact persists.

(7) The generating company or transmission licensee shall, within thirty days of the coming into effect of the recovery of impact of change in law, furnish all relevant documents along with the details of calculation to the Appropriate Commission for adjustment of the amount of the impact in the monthly tariff or charges.

(8) The Appropriate Commission shall verify the calculation and adjust the amount of the impact in the monthly tariff or charges within sixty days from the date of receipt of the relevant documents under sub-rule (7).

(9) After the adjustment of the amount of the impact in the monthly tariff or charges under sub-rule (8), the generating company or transmission licensee, as the case may be, shall adjust the monthly tariff or charges annually based on actual amount recovered, to ensure that the payment to the affected party is not more than the yearly annuity amount.

### THE SCHEDULE

[See rule 5(b)]

#### FORMULA FOR DETERMINATION OF IMPACT IN TARIFF OR CHARGES DUE TO CHANGE IN LAW

Formula to calculate adjustment in the monthly tariff due to the impact of Change in Law, which is non-recurring in nature—

For Generation Project:—

Let financial impact of change in law = P;

then the modification in the monthly tariff (MT) for compensating the financial impact is given by—

$$MT = \frac{Y}{X}$$

where X = estimated monthly electricity generation (in kWh) =  $(1/12) \times$  [contracted capacity of the power plant as per the Agreement (in MW)  $\times$  Normative Plant Load Factor (PLF) or Availability factor\* or Capacity Utilisation Factor (CUF) (in case of RE), as per the Agreement (in %)  $\times$  8760 hours  $\times$  10];

(\* in case PLF and CUF is not provided, the availability factor mentioned in the agreement may be considered. However, it will be true up with reference to the actual generation on annual basis.)

$$\text{and } Y = \frac{(P \times M_r)(1 + M_r)^n}{(1 + M_r)^n - 1},$$

where,—

n = No. of months over which the financial impact has to be paid (subject to a maximum of 180 months in case of the non-recurring fixed amount but in case of recurring impact it will be till the impact persists); and

$$M_r = \text{monthly rate of interest} = \frac{R}{12 \times 100};$$

where R = annual rate of interest on loan component (in %) as considered by the Central Electricity Regulatory Commission in its Order for Tariff determination from Conventional or Renewable Energy Sources (whichever is applicable) for the year in which the project is commissioned. In absence of relevant Orders of the Central Electricity Regulatory Commission for the concerned year, the interest rate shall be average interest rate plus 200 basis points above the average State Bank of India Marginal Cost of Funds based leading rate, of one year tenor, prevalent during the last available six months for such period.

Further, generating company or intermediary procurer or the trading licensee shall true up the MT annually based on actual generation of the year so as to ensure that the payment to the affected party is capped at the yearly annuity amount.

[F. No. 23/18/2020-R&R]

GHANSHYAM PRASAD, Jt. Secy.



No. 23/18/2020-R&R  
Government of India  
Ministry of Power

\*\*

Shram Shakti Bhawan, Rafi Marg,  
New Delhi, 21<sup>st</sup> February, 2022

To

1. Secretary, CERC/FOR, New Delhi.
2. Secretary, SERCs/JERCs

**Subject: Clarification on Electricity (Timely Recovery of Costs due to Change in Law) Rules, 2021.**

Sir/Madam,

Some of the stakeholders such as Association of Power Producers (APP) and Transmission licensees have raised concerns on the manner in which the Electricity (Timely Recovery of Costs due to Change in Law) Rules, 2021 is being interpreted by the Central Electricity Regulatory Commission (Central Commission). They have informed that after notification of the Change in Law Rules, 2021, the Central Commission has disposed of certain Petitions filed by the Transmission Licensees whereby the Central Commission has directed the Developer and other parties i.e. the Respondents to settle the Change in Law claims amongst themselves and approach the Central Commission only in terms of Rule 3(8) of the CIL Rules, 2021. The petitions were filed to the Central Commission before the date of notification of the Electricity (Timely Recovery of Costs due to Change in Law) Rules, 2021 and the Central Commission had reserved the order after hearing the matter. This has caused further difficulty to the stakeholders of the power sector. Thus, the Central Commission which has the mandate to adjudicate the matters under section 79 (f) of the Electricity Act 2003, must act in accordance/consistent with the Electricity Act 2003.

2. The matter has been examined in this Ministry and the following is clarified with respect to the applicability of the Electricity (Timely Recovery of Costs due to Change in Law) Rules, 2021:

- i. The Electricity (Timely Recovery of Costs due to Change in Law) Rules, 2021 were notified by Ministry of Power, vide notification dated 22nd October, 2021 in Gazette of India. As per sub-rule (2) of Rule 1, these Rules shall come into force on the date of their publication in the Official Gazette. These Rules have not stated to have been given any retrospective operation.

  
- 1 -





- ii. The aforesaid Rules are applicable on the change in law events occurred on or after the date of notification of these Rules in the Official Gazette i.e. 22<sup>nd</sup> October, 2021. The change in law events occurred prior to the notification of these Rules shall be dealt in accordance with the prevalent dispensation/rule position at the time of occurrence of the event.
  - iii. The proceedings in the petitions, related to change in law matters, pending before the Appropriate Commissions, shall be dealt in accordance with stipulations made in para (ii) above.
3. This issues with the approval of Competent Authority.

Yours faithfully



(Ghanshyam Prasad)

Joint Secretary to the Govt. of India

Tel: 2371 0389



**1b Thermal Power Station**

**Banharipalli, Dist.: Jharsuguda, Odisha - 768 234, India**

Plant Manager : (+916645) 289266, Fax: (+916645) 222-230

Factory Manager : (+916645) 222224, Fax: (+916645) 222-230



**OPGC**  
Power For Progress

Letter No. ITPS/1963/WE

April 05, 2017

✓ The Chief Engineer  
Thermal Civil Design Division  
Central Electricity Authority  
9<sup>th</sup> Floor (North), Sewa Bhawan  
RK Puram, New Delhi-110066

Kind Attention: Mr. Neeraj Kumar

Sub.: **Annual data on fly ash generation and utilization of OPGC at ITPS for the period from April 2016 to March 2017.**

Ref.: i. your office Letter No. 1/8/1/Data/2013/TCD/331-60, dated 10.10.2016  
ii. MOEF & CC notification on 3<sup>rd</sup> November, 2009


Dear Sir,

This has reference to the above subject and cited reference.

Kindly find the fly ash generation and utilization data for FY-2016-17 i.e. from April'16 to March'17 for Odisha Power Generation Corporation (2X210 MW ITPS) duly filled in format.

Thanking You.

Yours sincerely,

  
**Sitaram Sahu**  
Head-EHS

Enlc: As above





Ministry of Power  
Central Electricity Authority  
Thermal Civil Design Division

General Information on Power Stations, Coal Mines and Quality of Coal

NAME OF POWER UTILITY: ODISHA POWER GENERATION CORPORATION LTD  
NAME OF THERMAL POWER PLANT: IB THERMAL POWER STATION (2x210 MW ITPS)

PERIOD OF REPORT: 1<sup>st</sup> April 2016 to 31<sup>st</sup> March 2017

(A) Thermal Power Station								(B) Coal				
Sl. NO	Name of Thermal Power Station	District	State	Environmental Zone	Unit. No	Installed Capacity (MW)	Date of Commissioning	Name of Mines & Its Location	Distance of mine from TPS (Km)	Quantity of Coal Received (MT)	Average Calorific Value of Coal (Kcal)	Average ash content in Coal (%)
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	1b Thermal Power Station	Jharsuguda	Odisha	Eastern Region	Unit-1 Unit-2	210 210	21.12.94 20.06.96	Lakhanpur Open Cast Mine	12 Km (approx) Up to loading point	2912904	2685 (Weighted Average)	42.48 (Weighted Average)

**Abbreviations:-**

MW- Mega Watt  
TPS: Thermal Power Station  
Km: Kilometer  
MT: Metric Ton  
Kcal: Kilocalories

  
**Sitaram Sahu**  
Head-EHS



Ministry of Power  
Central Electricity Authority  
Thermal Civil Division  
Monthly Abstract of Ash Generation & Utilization  
(For the Period from 1st April, 2016 to 31st March 2017)

NAME OF THE POWER UTILITY: Odisha Power Generation Corporation  
NAME OF THE THERMAL POWER PLANT: 2X210 MW ITPS  
INSTALLED CAPACITY: 420 MW ( 2X210MW)

ASH GENERATION & UTILIZATION								MODE OF UTILIZATION & UTILIZATION IN EACH MODE											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
Sl.No	Month	Coal Consumed (MT)	Ash Content of Coal (%)	Ash Generation (MT)	Ash Utilized (MT)	Ash Utilization in %	In making of Fly Ash based Bricks/Blocks/Tiles (MT)	In manufacture of Portland Pozzolanas Cement (MT)	In Construction of Highways & Roads including Flyover (MT)	Part replacement of cement in concrete (MT)	replacement of cement or in roller compacted concrete dam (MT)	In Ash Dyke raising (MT)	Asbestos Manufacturing (MT)	In Reclamation of Low Lying area (MT)	In Mine filling (MT)	In Agriculture/ Waste land Development (MT)	Others (MT)		
1	Apr'16	257452	42.93	110524	42992.1	38.90	2655	0	0	0	0	36800	1140	2390	0	0	0	7.10	
2	May'16	180711	43.12	77923	52377	67.22	2280	0	0	0	0	48800	1290	0	0	0	0	7.00	
3	Jun'16	230373	41.91	96549	35362	36.63	1380	0	42	0	0	32254	1680	0	0	0	0	6.00	
4	Jul'16	260546	43.14	112400	6551.5	5.83	1171	0	3905	0	0	0	1470	0	0	0	0	5.50	
5	Aug'16	254281	42.51	108095	6499.5	6.01	1743	0	3520	0	0	0	1230	0	0	0	0	6.50	
6	Sep'16	253081	44.71	113153	3024.6	2.67	1404	0	896	0	0	0	720	0	0	0	0	4.60	
7	Oct'16	255976	43.97	112553	5404.5	4.80	3196	0	822	0	0	0	1380	0	0	0	0	6.50	
8	Nov'16	231567	43.82	101473	14577	14.37	3545	0	10065	0	0	0	960	0	0	0	0	7.00	
9	Dec'16	255721	42.34	108272	33701.5	31.13	2242	0	15647	0	0	0	750	15056	0	0	0	6.50	
10	Jan'17	245818	38.81	95402	68526.5	71.83	2542	0	23134	0	0	0	990	41854	0	0	0	6.50	
11	Feb'17	229319	40.01	91751	76544.5	83.43	2953	0	26463	0	0	0	1230	45892	0	0	0	6.50	
12	Mar'17	258059	42.34	109262	89164.5	81.61	1616	0	32166	0	0	0	1260	54115	0	0	0	7.50	
	YTD	2912904	42.48	1237357	434725	35.13	26727	0	116660	0	0	117854	14100	159307	0	0	0	77.20	

Sd/-  
5/4/17  
Sitaram Sahu  
Head-EHS





Ministry of Power  
Central Electricity Authority  
Thermal Civil Division

For the Period from 1st April, 2016 to 31st March 2017  
NAME OF THE POWER UTILITY: Odisha Power Generation Corporation  
NAME OF THE THERMAL POWER PLANT: 2X210 MW ITPS

Sl.No	Thermal Power Station	Existing Facility for Ash Disposal		Location & Distance of Ash Disposal area from TPS	Area acquired for Ash Disposal (Ha)	Design Life of Disposal Area (Years)	Additional Area if any proposed (Ha)	Ash Disposal	
		Dry	Wet					Dry Ash (MT)	Wet Ash (Mil MT)
1	1b Thermal Power Station ( 2X210 MW ITPS)	3 Ash Pond-B	4 Ash Pond-A	5 Ash Pond A-7.5 Km Ash Pond B-6 km	6 Ash Pond A-60 Ha Ash Pond B-98 Ha	7 Ash Pond A with wet disposal-March'18 Ash Pond B with dry disposal-March'18 * Exact life span will vary depending upon ash utilization %.	8	9	10
							47	0	0.803

\* MT- Metric Ton  
Mil MT- Million Metric Ton  
Ha-Hacter  
Km-Kilometer

*Sitaram Sahu*  
5/4/17  
Sitaram Sahu  
Head-EHS



**ODISHA POWER GENERATION CORPORATION LTD.**

(A Government Company of the State of Odisha)

CIN: U40104OR1984SG001429

**1b Thermal Power Station**

Banharipali, Dist.: Jharsuguda, Odisha - 768 234, India

Plant Manager : (+916645) 289266, Fax: (+916645) 222-230

Factory Manager : (+916645) 222224, Fax: (+916645) 222-230

Letter No. ITPS/3036/WE

April 20, 2018

 Director  
 Thermal Civil Division  
 Central Electricity Authority  
 9<sup>th</sup> Floor (North), Sewa Bhawan  
 RK Puram, New Delhi-1100066

 Kind Attention: **Mr. Neeraj Kumar**

Sub.: Ash generation &amp; utilization data of Odisha Power Generation Corporation (2X210 MW ITPS) for the year 2017-18 i.e. from April'17 to March'18.

Ref.: CEA Letter No. 1/8/1/DATA/2018/TCD/203-307 dated 03.04.2018

Dear Sir,

This has reference to the above subject and cited reference

Kindly find enclosed the Ash generation &amp; utilization data of Odisha Power Generation Corporation (2X210 MW ITPS) for the year 2017-18 i.e. from April'17 to March'18.

Thanking You,

Sincerely yours,


**UK Pahi**  
 Head-EHS




Ministry of Power  
Central Electricity Authority  
Thermal Civil Design Division

General Information on Power Stations, Coal Mines and Quality of Coal

NAME OF POWER UTILITY: ODISHA POWER GENERATION CORPORATION LTD  
NAME OF THERMAL POWER PLANT: IB THERMAL POWER STATION (2x210 MW ITPS)

PERIOD OF REPORT: 1<sup>ST</sup> April 2017 to 31<sup>ST</sup> March 2018

Sl. NO	(A) Thermal Power Station							(B) Coal				
	Name of Thermal Power Station	District	State	Environmental Zone	Unit, No	Installed Capacity (MW)	Date of Commissioning	Name of Mines & Its Location	Distance of mine from TPS (km)	Quantity of Coal Received (MT)	Average Calorific Value of Coal (Kcal)	Average ash content in Coal (%)
1.	1b Thermal Power Station	Jharsuguda	Odisha	Eastern Region	Unit-1 Unit-2	210 210	21.12.94 20.06.96	Lakhanpur Open Cast Mine	12 Km (approx) Up to loading point	1283102	2710 (Weighted Average)	42.44 (Weighted Average)

**Abbreviations:-**

MW- Mega Watt  
TPS: Thermal Power Station  
Km: Kilometer  
MT: Metric Ton  
Kcal: Kilocalories



*UK Pahi*  
UK Pahi  
Head-EHS

Ministry of Power  
Central Electricity Authority  
Thermal Civil Division

Ash Disposal Facility Available at Thermal Power Station, Mode of Disposal (Dry & Wet) and Ash Stock Available (Fly Ash, Bottom Ash & Pond ash)

NAME OF THE POWER UTILITY: Odisha Power Generation Corporation

NAME OF THE THERMAL POWER PLANT: 2X210 MW ITPS

PERIOD OF REPORT: 1st April, 2017 to 31st March, 2018

Sl No	Thermal Power Station	Existing Facility for Ash Disposal		Location & Distance of Ash Disposal area from TPS	Area acquired for Ash Disposal (Ha)	Design Life of Disposal Area (Years)	Additional Area if any proposed	Ash Disposal			Ash Stock Available as on 30.09.2017		
		Dry	Wet					Dry Ash (MT)	Wet Ash (MT)	Fly Ash (MT)	Bottom Ash (MT)	Pond Ash (MT)	
1	10 Thermal Power Station ( 2X210 MW ITPS)	Ash Pond B	Ash Pond A Ash Pond C	5 Ash Pond A: 7.5 Km Ash Pond B: 6 km Ash Pond C: 7.5 Km	6 Ash Pond A: 62 Ha Ash Pond B: 58 Ha Ash Pond C: 47 Ha	7 Ash Pond A with wet disposal- March 19 Ash Pond B with dry disposal- March 19 Ash Pond C with wet disposal- March 2025 *Exact life spans will vary depending upon ash utilization %.	8	9	10	11	12	13	Ash Pond A: 5.57 Ash Pond B: 12.82 Ash Pond C: 0.23

Abbreviations:

MW- Mega Watt  
TPS- Thermal Power Station  
Km- kilometer  
MT- Million Tonne  
Ha- Hectare

*Long*  
UK Power  
Head-EHS





Ministry of Power  
Central Electricity Authority  
Thermal Civil Division  
Monthly Abstract of Ash Generation & Utilization  
(For the Period from 1st April, 2017 to 31st March, 2018)

NAME OF THE POWER UTILITY: Odisha Power Generation Corporation  
NAME OF THE THERMAL POWER PLANT: 2X210 MW ITPS  
INSTALLED CAPACITY: 420 MW ( 2X210MW)  
PERIOD OF REPORT-1st April, 2017 to 31st March, 2018

Sl.No		ASH GENERATION & UTILIZATION					MODE OF UTILIZATION & UTILIZATION IN EACH MODE											
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Month	Coal Consumed (MT)	Ash Content of Coal (%)	Ash generation (MT)	Ash Utilized (MT)	Ash Utilization in %	In making of Fly Ash based Bricks/Blocks/Tiles (MT)	In manufacture of Portland Pozzolanas Cement (MT)	In Construction of Highways & Roads including Flyover (MT)	Part replacement of cement in concrete (MT)	replacement of cement or in roller compacted concrete dam (MT)	In Ash Dyke raising (MT)	In Reclamation of Low Lying area (MT)	In Mine filling (MT)	In Agriculture/ Waste land Development (MT)	Others (MT) Cenosphere	Others (MT) Asbestos Manufacturing	
1	Apr'17	253827	45.65	115872	57751	49.84	280	0	4226	0	0	0	51378	0	0	6.50	1860	
2	May'17	247361	43.60	107849	61407	56.94	195	0	211	0	0	0	59585	0	0	6.00	1410	
3	Jun'17	238128	38.88	92584	26557	28.68	161	0	0	0	0	0	25100	0	0	6.00	1290	
4	Jul'17	257062	42.46	109149	13647	12.50	397	0	0	0	0	0	11894	0	0	6.00	1350	
5	Aug'17	177950	43.89	78102	15063	19.29	357	0	0	0	0	0	13590	0	0	6.00	1110	
6	Sep'17	108774	40.64	44208	15395	34.82	567	0	0	0	0	0	13892	0	0	6.00	930	
7	Oct'17	236169	44.28	104576	76605	73.25	1606	0	0	0	0	0	74332	0	0	6.50	660	
8	Nov'17	134491	39.86	53608	87278	162.81	1735	0	0	0	0	0	84366	0	0	6.50	1170	
9	Dec'17	234442	42.60	99872	82796	82.90	1336	0	1026	0	0	0	79377	0	0	6.50	1050	
10	Jan'17	247640	45.92	113716	73558	64.69	1194	0	594	0	0	0	70593	0	0	6.50	1170	
11	Feb'17	220435	39.88	87909	42730	48.61	1177	0	1110	0	0	0	39536	0	0	6.50	900	
12	Mar'17	226440	39.17	88697	54560	61.51	1410	0	3870	0	0	0	48253	0	0	7.00	1020	
Total		1283102	42.44	1096142	607344	55.41	10415	0	11037	0	0	0	571896	0	0	76.00	13920	



*UK Pahi*  
UK Pahi  
Head-EHS

## ODISHA POWER GENERATION CORPORATION LTD.

(A Government Company of the State of Odisha)

CIN: U40104OR1984SG001429

## 1b Thermal Power Station

Bantarpali, Dist.: Jharsuguda, Odisha - 768 234, India

Plant Manager : (+916645) 289286, Fax: (+916645) 222-230

Factory Manager : (+916645) 222724, Fax: (+916645) 222-230



Letter No. ITPS/2721/WE

May 04, 2019

Deputy Director  
Thermal Civil Division  
Central Electricity Authority  
Ministry of Power  
9<sup>th</sup> Floor (North Wing), Sewa Bhawan  
RK Puram, New Delhi-110006

Kind Attention: **Mr. Sudipto Mondal**

Sub.: Ash generation & utilization data of Odisha Power Generation Corporation (2X210 MW ITPS) for the year 2018-19 i.e. from 1<sup>st</sup> April'18 to 31<sup>st</sup> March'19.

Ref.: CEA Letter No. 1/8/1/DATA/2019/TCD/262-369 dated 01.04.2019

Dear Sir,

This has reference to the above subject and cited reference

Kindly find enclosed the Ash generation & utilization data of Odisha Power Generation Corporation (2X210 MW ITPS) for the year 2018-19 i.e. from 1<sup>st</sup> April'18 to 31<sup>st</sup> March'19.

Thanking You.

Sincerely yours,

**UK Pahi**  
Head-EHS

Encl: As above.





Ministry of Power  
Central Electricity Authority  
Thermal Civil Design Division

General Information on Power Stations, Coal Mines and Quality of Coal

NAME OF POWER UTILITY: ODISHA POWER GENERATION CORPORATION LTD  
NAME OF THERMAL POWER PLANT: B THERMAL POWER STATION (2x210 MW /TPS)  
Period of Report: 1<sup>st</sup> April, 2018 to 31<sup>st</sup> March 2019

(A) Thermal Power Station								(B) Detail of Nodal Officer				(C) Coal				
Sl. No	Name of Thermal Power Station	District	State	Emulsion ental Zone	Unit. No	Installed Capacity (MW)	Date of Commenc ing	Name	Designation	Contact No. (Landline & Mobile)	E Mail	Name of Mines & Its Location	Distance of mine from TPS (KM)	Quantity of coal received (MT)	Average Calorific Value of Coal (kcal)	Average Ash Content of Coal (%)
1.	B Thermal Power Station	Bargarh	Odisha	Eastern Region	Unit-1 Unit-2	210 210	21.12.84 20.06.96	U.P. Patil	Head-EMS	06645-289258 9338715425	umpatil.pu@ opga.co.in	Lekhanpur Open Cast Mine	12 Km (approx) to loading point	2584283	3047	30.55

Abbreviations:-  
MW-Mega Watt  
TPS-Thermal Power Station  
Km-Kilometer  
Kcal-Kilocalories



Ministry of Power  
Central Electricity Authority  
Thermal Civil Division

Ash Disposal Facility Available at Thermal Power Station, Mode of Disposal (Dry & Wet) and Ash Stock Available (Fly Ash, Bottom Ash & Pond ash)

NAME OF THE POWER UTILITY: Odisha Power Generation Corporation

NAME OF THE THERMAL POWER PLANT: 2X210 MW ITPS

PERIOD OF REPORT: 1<sup>st</sup> April, 2018 to 31<sup>st</sup> March, 2019

PERIOD OF REPORT-1. AETS, AQIS & 24. IMPRIS, 2019														
Sl.No	Thermal Power Station	Existing facility for Ash Disposal		Location & Distance of Ash Disposal area from TPS	Area acquired for Ash Disposal	Design Life of Disposal Area	Additional Area if any proposed	Ash Disposal			Ash Stock Available as on 31.03.2019			
		Dry	Wet					Km	(Ha)	(Years)	(Ha)	Dry Ash (MT)	Wet Ash (MT)	Fly Ash (MT)
1	10 Thermal Power Station ( 2X210 MW (TPS)	Ash Pond-B	Ash Pond-A Ash Pond-C	Ash Pond A-7.5 Km Ash Pond B-6 km Ash Pond C-7.5 Km	Ash Pond A-60 Ha Ash Pond B-98 Ha Ash Pond C-47 Ha	7 March'20 March'20 March'20 March'20 March'20		0	0	10	11	12	13	
2														

Abbreviations:-

MW- Mega Watt  
TPS- Thermal Power Station  
Km-Kilometer  
MT- Million Tonne  
Ha-Hectare

UK Pahl  
Head-CHS





Ministry of Power  
Central Electricity Authority  
Thermal Civil Division  
Monthly Abstract of Ash Generation & Utilization  
(For the Period from 1<sup>st</sup> April, 2018 to 31<sup>st</sup> March, 2019)

NAME OF THE POWER UTILITY: Odisha Power Generation Corporation

NAME OF THE THERMAL POWER PLANT: 2X210 MW ITPS

INSTALLED CAPACITY: 420 MW ( 2X210MW)

PERIOD OF REPORT: 1<sup>st</sup> April, 2018 to 31<sup>st</sup> March, 2019

Sl.No	ASH GENERATION & UTILIZATION						MODE OF UTILIZATION & UTILIZATION IN EACH MODE										
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Month	Coal Consumed (MT)	Ash Content of Coal (%)	Ash generation (MT)	Ash Utilized (MT)	Ash Utilization in %	In making of Fly Ash based Bricks/Blocks/Tiles (MT)	In manufacture of Portland Pozzolanas Cement (MT)	In Construction of Highways & Roads including Flyover (MT)	Part replacement of cement in concrete (MT)	replacement of cement or in roller compacted concrete dam (MT)	In Ash Dyke raising (MT)	In Reclamation of Low Lying area (MT)	In Mine filling (MT)	In Agriculture/ Waste land Development (MT)	Others (MT) Cenosphere	Others (MT) Asbestos Manufacturing
1	Apr'18	205965	39.77	81912	33409	40.79	1872	0	4190	0	0	0	26080	0	0	7.00	1260
2	May'18	236644	39.84	94279	39592	41.99	1406	0	3088	0	0	0	33441	0	0	7.00	1650
3	Jun'18	212502	40.77	86637	40880	47.19	615	0	1552	0	0	0	37446	0	0	7.00	1260
4	Jul'18	163810	39.25	64295	22387	34.82	200	0	0	0	0	0	20500	0	0	7.00	1680
5	Aug'18	184505	37.41	69023	14296	20.71	408	0	0	0	0	0	12051	0	0	7.00	1830
6	Sep'18	219271	38.26	83893	35250	42.02	955	0	0	0	0	0	32878	0	0	7.00	1410
7	Oct'18	238136	39.70	94540	12851	13.59	2011	0	0	0	0	0	10293	0	0	7.00	540
8	Nov'18	223011	40.61	90565	55367	61.14	1521	0	0	0	0	0	52789	0	0	7.00	1050
9	Dec'18	226192	38.58	87265	58516	67.06	1965	0	0	0	0	0	55104	0	0	7.00	1440
10	Jan'19	224757	38.33	86149	12745	14.79	1806	0	0	0	0	0	10062	0	0	7.00	870
11	Feb'19	203288	42.49	86377	14901	17.25	1139	0	0	0	0	0	12495	0	0	7.00	1260
12	Mar'19	226212	39.41	89150	3217	3.61	1380	0	0	0	0	0	0	0	0	7.00	1830
	Total	2564293	39.55	1014085	343411	33.86	15278	0	8830	0	0	0	303139	0	0	84.00	16080



UK Pahi  
Head-EHS

**ODISHA POWER GENERATION CORPORATION LTD.**

(A Government Company of the State of Odisha)

CIN: U40104OR1984SG001429

**Ib Thermal Power Station**

Banharipali, Dist.: Jharsuguda, Odisha - 768 234, India

Plant Manager : (+916645) 289266, Fax: (+916645) 222-230

Factory Manager : (+916645) 222224, Fax: (+916645) 222-230



Letter No. ITPS/Eng Eff-174/WE

April 30, 2020

Director  
Thermal Civil Division  
Central Electricity Authority  
Ministry of Power  
9<sup>th</sup> Floor (North Wing), Sewa Bhawan  
RK Puram, New Delhi-110066

Kind Attention: **Mr. Baleshwar Thakur**

Sub.: Ash generation & utilization data of Odisha Power Generation Corporation (2X210 MW ITPS) for the year 2019-20 i.e. from 1<sup>st</sup> April'19 to 31<sup>st</sup> March'20.

Ref.: CEA Letter No. 1/8/1/DATA/2020/TCD dated 29.04.2020

Dear Sir,

This has reference to the above subject and cited reference

Kindly find enclosed the Ash generation & utilization data of Odisha Power Generation Corporation (2X210 MW ITPS) for the year 2019-20 i.e. from 1<sup>st</sup> April'19 to 31<sup>st</sup> March'20.

Thanking You.

Sincerely yours,

  
**UK Pahi**  
Head-EHS





**Ministry of Power**  
**Central Electricity Authority**  
**Thermal Civil Design Division**

General Information on Power Stations, Coal Mines and Quality of Coal

NAME OF POWER UTILITY: ODISHA POWER GENERATION CORPORATION LTD  
NAME OF THERMAL POWER PLANT: IB THERMAL POWER STATION (2x210 MW TPPs)  
Period of Report: 1<sup>st</sup> April, 2019 to 31<sup>st</sup> March 2020

(A) Thermal Power Station										(B) Detail of Nodal Officer			(C) Coal				percentage
Sl. NO	Name of Thermal Power Station	District	State	Environmental Zone	Unit No	Installed Capacity (MW)	Date of Commissioning	Name	Designation	Contact No. (Landline & Mobile)	E Mail	Name of Mines & Its Location	Distance of mine from TPS (KM)	Quantity of coal received (MT)	Average Calorific Value of Coal ( Kcal)	Ash Content of Coal (%)	
1	IB Thermal Power Station	Jharsuguda	Odisha	Eastern Region	Unit-1 Unit-2	210 210	21.12.94 20.06.96	UK Pahi	Head-EHS	06645-289258 9338715425	umishant.pahil@opgc.co.in	Lakhampur Open Cast Mine	12 Km (approx) Up to loading point	2294455	2953	40.93	

Abbreviations:

MW-Mega Watt

TPS-Thermal Power Station

Km-Kilometer

Kcal-Kilocalories



UK Pahi

Head-EHS



Ministry of Power  
Central Electricity Authority  
Thermal Civil Division

Ash Disposal Facility Available at Thermal Power Station, Mode of Disposal (Dry & Wet) and Ash Stock Available (Fly Ash, Bottom Ash & Pond ash)

NAME OF THE POWER UTILITY- Odisha Power Generation Corporation

NAME OF THE THERMAL POWER PLANT: 2X210 MW ITPS

PERIOD OF REPORT- 1<sup>st</sup> April, 2019 to 31<sup>st</sup> March, 2020

NAME OF THE THERMAL POWER PLANT: 2X210 MW ITPS													
PERIOD OF REPORT: 1 <sup>st</sup> April, 2019 to 31 <sup>st</sup> March, 2020													
Sl No	Thermal Power Station	Existing Facility for Ash Disposal		Location & Distance of Ash Disposal area from TPS	Area acquired for Ash Disposal (Ha)	Design Life of Disposal Area (Years)	Additional Area if any proposed (Ha)	Ash Disposal				Ash Stock Available as on 31.03.2020	
		Dry	Wet					Dry Ash (MT)	Wet Ash (MT)	Fly Ash (MT)	Bottom Ash (MT)		
1	1 <sup>st</sup> Thermal Power Station ( 2x210 MW ITPS)	3	4	5	6	7	8	9	10	11	12	13	Ash Pond A-6.79 Ash Pond B-12.82 Ash Pond C-1.135 (Including 0.102 million MT Ash from Unit 2 & Unit 4)
		Ash Pond-B											
1													

Abbreviations

MW- Mega Watt

TPS- Thermal Power Station

Km- Kilometer

MT- Million Tonne

Ha- Hectare



T.K. Pahl

Head EMS





Ministry of Power  
Central Electricity Authority  
Thermal Civil Division  
Monthly Abstract of Ash Generation & Utilization  
(For the Period from 1<sup>st</sup> April, 2018 to 31<sup>st</sup> March, 2019)

NAME OF THE POWER UTILITY: Odisha Power Generation Corporation

NAME OF THE THERMAL POWER PLANT: 2X210 MW ITPS

INSTALLED CAPACITY: 420 MW ( 2X210MW)

PERIOD OF REPORT: 1<sup>st</sup> April, 2018 to 31<sup>st</sup> March, 2019

ASH GENERATION & UTILIZATION							MODE OF UTILIZATION & UTILIZATION IN EACH MODE											
Sl.No	Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			Coal Consumed (MT)	Ash Content of Coal (%)	Ash generation (MT)	Ash Utilized (MT)	Ash Utilization in %	In making of Fly Ash based Bricks/Blocks/Tiles (MT)	In manufacture of Portland Pozzolanas Cement (MT)	In Construction of Highways & Roads including Flyover (MT)	Part replacement of cement in concrete (MT)	replacement of cement or in roller compacted concrete dam (MT)	In Ash Dyke raising (MT)	In Reclamation of low lying area (MT)	In Mine filling (MT)	In Agriculture/ Waste land Development (MT)	Others (MT) Cenosphere	Others (MT) Asbestos Manufacturing
1	Apr'19		217572	38.12	82938	15062	18.16	1465	0	2660	0	0	0	8830	0	0	7.00	2100
2	May'19		224916	40.10	90191	53522	59.34	928	0	60	0	0	0	50547	0	0	7.00	1980
3	Jun'19		204487	40.02	81836	47506	58.05	1113	0	0	0	0	0	44526	0	0	7.00	1860
4	Jul'19		186844	40.09	74906	24486	32.69	124	0	0	0	0	0	22975	0	0	7.00	1380
5	Aug'19		108524	39.55	42921	16943	39.47	986	0	0	0	0	0	15500	0	0	7.00	450
6	Sep'19		182283	38.50	70179	36197	51.58	660	0	0	0	0	0	35500	0	0	7.00	30
7	Oct'19		181975	41.46	75447	33473	44.37	1126	0	0	0	0	0	32100	0	0	7.00	240
8	Nov'19		193889	39.82	77207	67013	86.80	1292	0	0	0	0	0	65444	0	0	7.00	270
9	Dec'19		206396	41.05	84726	78199	92.30	1289	0	0	0	0	0	76663	0	0	7.00	240
10	Jan'20		203015	44.89	91133	88464	97.07	852	0	0	0	0	0	87335	0	0	7.00	270
11	Feb'20		176133	43.70	76970	76259	99.08	1372	0	0	0	0	0	74580	0	0	7.00	300
12	Mar'20		208421	43.54	90747	87471	96.39	774	0	0	0	0	0	86510	0	0	7.00	180
	Total		2294455	40.93	939201	624595	66.50	11981	0	2720	0	0	0	600510	0	0	84.00	9300



*UK Pahi*  
UK Pahi  
Head-EHS

**ODISHA POWER GENERATION CORPORATION LTD.**

(A Government Company of the State of Odisha)

CIN: U40104OR1984SG001429

**1b Thermal Power Station**

Banharipalli, Dist.: Jharsuguda, Odisha - 768 234, India

Plant Manager : (+916645) 289266, Fax: (+916645) 222-230

Factory Manager : (+916645) 222224, Fax: (+916645) 222-230

138



Letter No. ITPS/2420/WE

April 29, 2021

Director

Thermal Civil Division

Central Electricity Authority

Ministry of Power

9<sup>th</sup> Floor (North Wing), Sewa Bhawan

RK Puram, New Delhi-110066

Kind Attention: **Mr. Baleshwar Thakur**

Sub.: Ash generation & utilization data of Odisha Power Generation Corporation (2X210 MW ITPS) for the year 2020-21 i.e., from 1<sup>st</sup> April'20 to 31<sup>st</sup> March'2021.

Ref.: CEA letter vide mail, dated 27.04.2021

Dear Sir,

This has reference to the above subject and cited reference

Kindly find enclosed the Ash generation & utilization data of Odisha Power Generation Corporation (2X210 MW ITPS) for the year 2020-21 i.e., from 1<sup>st</sup> April'20 to 31<sup>st</sup> March'21.

Thanking You.

Sincerely yours,

*AS Rao*  
29/09/2021  
(AS Rao)

AS Rao  
Head-EHS





**Ministry of Power**  
**Central Electricity Authority**  
**Thermal Civil Design Division**

General Information on Power Stations, Coal Mines and Quality of Coal

NAME OF POWER UTILITY: ODISHA POWER GENERATION CORPORATION LTD  
NAME OF THERMAL POWER PLANT: IB THERMAL POWER STATION (2x210 MW ITPS)  
Period of Report: 1<sup>st</sup> April, 2020 to 31<sup>st</sup> March 2021

Sl. NO	(A) Thermal Power Station				(B) Detail of Nodal Officer				(C) Coal				Average Ash Content of Coal (%)			
	Name of Thermal Power Station	District	State	Environmental Zone	Unit No	Installed Capacity (MW)	Date of Commissioning	Name	Designation	Contact No. (Landline & Mobile)	E Mail	Name of Mines & its Location		Distance of mine from TPS (KM)	Quantity of coal received (MT)	Average Calorific Value of Coal ( Kcal)
1	IB Thermal Power Station	Bhadrakuta	Odisha	Eastern Region	Unit-1 Unit-2	210 210	21.12.94 20.06.96	AS Rao	Head-EHS	06645-289258 9335715417	as.rao@opgsscs.in	Lakhanpur Open Cast Mine	12 Km (approx) Up to loading point	2468005	2725	44.42

Abbreviations:-

MW-Mega Watt  
TPS-Thermal Power Station

Km-Kilometer

Kcal-Kilocalories

AS Rao

Head-EHS



Ministry of Power  
Central Electricity Authority  
Thermal Civil Division

Ash Disposal Facility Available at Thermal Power Station, Mode of Disposal (Dry & Wet) and Ash Stock Available (Fly Ash, Bottom Ash & Pond ash)  
NAME OF THE POWER UTILITY: Odisha Power Generation Corporation  
NAME OF THE THERMAL POWER PLANT: 2x210 MW ITPS  
PERIOD OF REPORT: 1<sup>st</sup> April, 2020 to 31<sup>st</sup> March, 2021

PERIOD OF REPORT:- 1 <sup>st</sup> April, 2020 to 31 <sup>st</sup> March, 2021													
Sl.No	Thermal Power Station	Existing Facility for Ash Disposal		Location & Distance of Ash Disposal area from TPS	Area acquired for Ash Disposal (Ha)	Design Life of Disposal Area (Years)	Additional Area if any proposed (Ha)	Ash Disposal			Ash Stock Available as on 31.03.2021		
		Dry	Wet					Km	(Ha)	Dry Ash (MT)	Wet Ash (MT)	Fly Ash (MT)	Bottom Ash (MT)
1	15 Thermal Power Station ( 2x210 MW ITPS)	Ash Pond-B	Ash Pond-A Ash Pond-C	Ash Pond A-7.5 Km Ash Pond B-6 km Ash Pond C-7.5 Km	Ash Pond A-60 Ha Ash Pond B-98 Ha Ash Pond C-47 Ha	Ash Pond A with wet disposal- December'21 Ash Pond B with dry disposal- June'21 Ash Pond C with wet disposal & Height Raising by 6m- December 2025 *Exact life span will vary depending upon ash utilization %	0	0	0.365	11	12	13	Ash Pond A-6.78 Ash Pond B-12.82 Ash Pond C-3.14 Including 0.2 million wet ash from Unit 1 & over, Ash from Unit 2 & Unit 3 disposed to Ash Pond C has been engaged since August 2018
1													Reasons for not utilising the Legacy Ash may also be provided:- It may be noted that Ash Pond "A" & Ash Pond "B" has been already stabilised by soil capping and will be declared as reclaimed shortly. Utilization of Ash from Ash Pond-C is not feasible at this point as it is operational.

Abbreviations:-

MW- Mega Watt  
TPS- Thermal Power Station  
Km- Kilometer  
MT- Million Tonne  
Ha- Hectare

*[Signature]*  
29/9/21

AS Rao  
Head-EHS





Ministry of Power  
Central Electricity Authority  
Thermal Civil Division  
Monthly Abstract of Ash Generation & Utilization  
(For the Period from 1<sup>st</sup> April, 2020 to 31<sup>st</sup> March, 2021)

NAME OF THE POWER UTILITY: Odisha Power Generation Corporation

NAME OF THE THERMAL POWER PLANT: 2X210 MW (TPS)

INSTALLED CAPACITY: 420 MW ( 2X210MW)

PERIOD OF REPORT-1<sup>st</sup> April, 2020 to 31<sup>st</sup> March, 2021

PERIOD OF REPORT-1 <sup>st</sup> April, 2020 to 31 <sup>st</sup> March, 2021																		
ASH GENERATION & UTILIZATION				MODE OF UTILIZATION & UTILIZATION IN EACH MODE														
Sl.No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
	Month	Coal Consumed (MT)	Ash Content of Coal (%)	Ash Generation (MT)	Ash Utilized (MT)	Ash Utilization in %	In making of Fly Ash based Bricks/Blocks/Tiles (MT)	In manufacture of Portland Pozzolanas Cement (MT)	In Construction of Highways & Roads including Flyover (MT)	Part replacement of cement in concrete (MT)	replacement of cement or in roller compacted concrete dam (MT)	In Ash Dyke raising (MT)	In Reclamation of Low Lying areas (MT)	In Mine filling (MT)	In Agriculture/ Waste land Development (MT)	Others (MT) Cenosphere	Others (MT) Asbestos Manufacturing	
1	Apr'20	194843	43.05	83880	14681	17.50	1186	0	0	0	0	0	13488	0	0	7.00	0	
2	May'20	218787	45.37	99264	56736	57.16	518	0	0	0	0	0	55611	0	0	7.00	600	
3	Jun'20	205146	42.85	87905	38048	43.28	31	0	0	0	0	0	37500	0	0	7.00	510	
4	Jul'20	218093	44.07	96114	34704	36.11	1037	0	0	0	0	0	33000	0	0	7.00	660	
5	Aug'20	224115	45.32	101599	16648	16.39	781	0	0	0	0	0	15500	0	0	7.00	360	
6	Sep'20	155828	45.78	71338	41532	58.22	910	0	0	0	0	0	40195	0	0	7.00	420	
7	Oct'20	242672	44.37	107674	71975	66.85	901	0	0	0	0	66367	4250	0	0	7.00	450	
8	Nov'20	228910	44.18	101132	81886	80.97	1369	0	0	0	0	75500	4980	0	0	7.00	30	
9	Dec'20	231553	44.68	103458	88325	85.37	948	0	0	0	0	80500	6690	0	0	7.00	180	
10	Jan'21	166243	44.00	73147	98348	134.45	1266	0	0	0	0	89200	7335	0	0	7.00	540	
11	Feb'21	164484	44.44	73097	93664	128.14	577	0	0	0	0	92600	0	0	0	7.00	480	
12	Mar'21	217331	44.99	97777	94443	96.59	546	0	0	0	0	93320	0	0	0	7.00	570	
	Total	2468005	44.42	1096385	730990	66.67	10070	0	0	0	0	497487	218549	0	0	84.00	4800	



*AS Rao*  
27/4/21

AS Rao  
Head-EHS

**Ministry of Power  
Central Electricity Authority  
Thermal Civil Design Division**

General Information on Power Stations, Coal Mines and Quality of Coal

NAME OF POWER UTILITY: ODISHA POWER GENERATION CORPORATION LTD

NAME OF THERMAL POWER PLANT: 18 THERMAL POWER STATION (2x210 MW TPPs)

Period of Report: 1<sup>st</sup> April, 2023 to 31<sup>st</sup> March 2022

(A) Thermal Power Station				(B) Detail of Head Officer			(C) Coal		Average Ash Content of Coal (%)						
Sl. No	Name of Thermal Power Station	District	State	Emerson Unit No	Installed Capacity (MW)	Date of Commissioning	Name	Designation	Contact No. (Landline & Mobile)	E Mail	Name of Mines & its Location	Distance (km) from TPP (km)	Quantity of coal received (MT)	Average Calorific Value of Coal (Kcal)	
1	18 Thermal Power Station	Bamanguda	Odisha	Unit-1 Unit-2	210 210	21.12.94 20.09.96	AS Rao	Head-EHS	98645-289278 9338215417	asr@opgcl.co.in	Lakshman Open Cast Mine	11 km (approx) to loading point	258424	2920	44.9

Abbreviations:-

MT: Mega Watt

TPP: Thermal Power Station

km: Kilometer

Head Office/Division

AS Rao

Head EHS

Complete address of Corporate Office / Head Office / Registered Office	
Name of Head of Office	PK Mohapatra
Designation	Managing Director
Address :	Zone-A, 7th Floor, Fortune Tower, Chandrasekharpur, Bhubaneswar-751023 Odisha
Email ID :	pmo@opgcl.co.in
Telephone No.	0674-2303765-66

Complete address of Thermal Power Plant	
Name of Head of TPP	Manish Paragon Rout
Designation	Director (Operations)
Address :	18 Thermal Power Station, Bamanguda, Bhubaneswar-751023 Odisha
Email ID :	manish.prou@opgcl.co.in
Telephone No.	977296075-00





Ministry of Power  
Central Electricity Authority  
Thermal Civil Division

Ash Disposal Facility Available at Thermal Power Station, Mode of Disposal (Dry & Wet) and Ash Stock Available (Fly Ash, Bottom Ash & Pond ash)

NAME OF THE POWER UTILITY: Odisha Power Generation Corporation

NAME OF THE THERMAL POWER PLANT: 2x210 MW TPS

PERIOD OF REPORT: 1<sup>st</sup> April, 2021 to 31<sup>st</sup> March, 2022

Sl.No	Thermal Power Station	Existing Facility for Ash Disposal		Location & Distance of Ash Disposal area from TPS	Area acquired for Ash Disposal (Ha)	Design Life of Disposal Area (Years)	Additional Area if any proposed (Ha)	Ash Disposal			Ash Stock Available as on 31.03.2021
		Dry	Wet					Dry Ash (MT)	Wet Ash (MT)	Fly Ash (MT)	
1	2	3	4	5	6	7	8	9	10	11	12
	Its Thermal Power Station (2x210 MW TPS)	Ash Pond-B	Ash Pond-A Ash Pond-C	Ash Pond A-7.5 km Ash Pond B-6 km Ash Pond C-7.5 km	Ash Pond A-60 Ha Ash Pond B-98 Ha Ash Pond C-47 Ha	Ash Pond A & B exhausted and capped Ash Pond C with wet disposal & Height Raising by 6m-December 2025 *Exact life span will vary depending upon ash utilization %	0	0	0.761		
1											

Reasons for not Utilizing the Legacy Ash may also be provided:- It may be noted that Ash Pond "A" & Ash Pond "B" has been already stabilized by soil capping and has been declared as reclaimed. Utilization of Ash from Ash Pond-C is not feasible at this point as it is operational.

Abbreviations:-

MW- Mega Watt

TPS- Thermal Power Station

Km-Kilometer

MT- Million Tonne

Ha- Hectare

AS Ratio

Head-EHS



Ministry of Power  
Central Electricity Authority  
Thermal Civil Division  
Monthly Abstract of Ash Generation & Utilization  
(For the Period from 1<sup>st</sup> April, 2021 to 31<sup>st</sup> March, 2022)

NAME OF THE POWER UTILITY: Odisha Power Generation Corporation  
NAME OF THE THERMAL POWER PLANT: 2X210 MW ITPS  
INSTALLED CAPACITY: 420 MW ( 2X210MW)

PERIOD OF REPORT: 1<sup>st</sup> April, 2021 to 31<sup>st</sup> March, 2022

Sl.No	ASH GENERATION & UTILIZATION					MODE OF UTILIZATION & UTILIZATION IN EACH MODE											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Month		Coal Consumed (MT)	Ash Content of Coal (%)	Ash generation (MT)	Ash Utilized (MT)	Ash Utilization in %	In making of Fly Ash based Bricks/Blocks/Tiles (MT)	In manufacture of Portland Pozzolanas Cement (MT)	In Construction of Highways & Roads including Flyover (MT)	Part replacement of cement in concrete (MT)	replacement of cement or in roller compacted concrete dam (MT)	In Ash Dyke raising (MT)	In Reclamation of Low Lying area (MT)	In Mine filling (MT)	In Agriculture/ Waste land Development (MT)	Others (MT) Cenosphere	Others (MT) Asbestos Manufacturing
1	Apr'21	208926	44.51	93001	66229	71.21	532	0	0	0	0	65000	0	0	0	7.00	690
2	May'21	226366	44.26	100189	67753	67.63	266	0	0	0	0	67000	0	0	0	7.00	480
3	Jun'21	183909	47.01	86456	43885	50.76	248	0	0	0	0	43000	0	0	0	7.00	630
4	Jul'21	171656	46.09	79124	46634	58.94	457	0	0	0	0	45600	0	0	0	7.00	570
5	Aug'21	236991	46.83	110994	22569	20.33	382	0	0	0	0	12000	10000	0	0	7.00	180
6	Sep'21	229048	47.78	109444	13175	12.04	158	0	0	0	0	12500	420	0	0	7.00	90
7	Oct'21	230497	43.94	101277	21859	21.58	142	0	0	0	0	21200	300	0	0	7.00	210
8	Nov'21	226528	43.35	98204	21862	22.26	495	0	0	0	0	0	21000	0	0	7.00	360
9	Dec'21	235900	43.82	103361	22283	21.56	626	0	0	0	0	0	21500	0	0	7.00	150
10	Jan'22	218559	43.74	95605	22857	23.91	520	0	0	0	0	0	22000	0	0	7.00	330
11	Feb'22	206429	43.56	89918	24457	27.20	470	0	0	0	0	0	23500	0	0	7.00	480
12	Mar'22	220615	44.10	97291	29637	30.46	3560	0	0	0	0	0	25500	0	0	7.00	570
Total		2595424	44.9	1164864	403200	34.61	7856	0	0	0	0	266300	124220	0	0	84.00	4740



AS Rao  
Head-EMS



**Ministry of Power  
Central Electricity Authority  
Thermal Civil Design Division**

General Information on Power Stations, Coal Mines and Quality of Coal

NAME OF POWER UTILITY: ODISHA POWER GENERATION CORPORATION LTD  
NAME OF THERMAL POWER PLANT: IB THERMAL POWER STATION (2423.8 MW TPS)  
Period of Report: 1<sup>st</sup> April, 2022 to 31<sup>st</sup> March 2023

(A) Thermal Power Station							(B) Detail of Nodal Officer			(C) Coal						
S. NO	Name of Thermal Power Station	District	State	Environmental Zone	Unit. No	Installed Capacity (MW)	Date of Commissioning	Name	Designation	Contact No. (Landline & Mobile)	E Mail	Name of Mines & its Location	Distance of mine from TPS (KM)	Quantity of coal received (MT)	Average Calorific Value of Coal (Kcal)	Average Ash Content of Coal (%)
1	1b Thermal Power Station	Jharsuguda	Odisha	Eastern Region	Unit-1 Unit-2	210 210	21.12.84 20.06.86	Parthasarathi Head-EHS		06645-289258 79828144112	parthasarathi.eh@opgpc.co.in	Lakhanpur Open Cast Mine	12 km (approx) to loading point	2469573	2901	46.6

Abbreviations:-  
MW-Mega Watt  
TPS-Thermal Power Station  
km-Kilometer

Kcal-Kilocalories

AS Rao  
Head-EHS

Complete address of Corporate Office / Head Office / Registered Office	
Name of Head of Office	PK Mohapatra
Designation	Managing Director
Address :	Zone-A, 7th Floor, Fortune Tower, Chandrasekharpur, Bhubaneswar-751023 Odisha
email ID :	pkm@opgpc.co.in
Telephone No.	0674-2303745-66

Complete address of Thermal Power Plant	
Name of Head of TPP	Manas Ranjan Rout
Designation	Director (Operations)
Address :	IB Thermal Power Station, Bahherpali, Jharsuguda-768234 Odisha
email ID :	manas.rout@opgpc.co.in
Telephone No No.	9777296075.00



Ministry of Power  
Central Electricity Authority  
Thermal Civil Division

Ash Disposal Facility Available at Thermal Power Station, Mode of Disposal (Dry & Wet) and Ash Stock Available (Fly Ash, Bottom Ash & Pond ash)

NAME OF THE POWER UTILITY: Odisha Power Generation Corporation

NAME OF THE THERMAL POWER PLANT: 2X210 MW ITPS

PERIOD OF REPORT- 1<sup>st</sup> April, 2022 to 31<sup>st</sup> March, 2023

Sl.No	Thermal Power Station	Existing Facility for Ash Disposal		Location & Distance of Ash Disposal area from TPS	Area acquired for Ash Disposal (Ha)	Design Life of Disposal Area (Years)	Additional Area if any proposed (Ha)	Ash Disposal			Ash Stock Available as on 31.03.2023		
		Dry	Wet					Km	(Ha)	Dry Ash (MT)	Wet Ash (MT)	Fly Ash (MT)	Bottom Ash (MT)
1	15 Thermal Power Station ( 2X210 MW ITPS)	Ash Pond-B	4	5	6	7	8	9	10	11	12	13	Ash Pond A - 67(MT)(Stabilized) Ash Pond B- 128(MT)(Stabilized) Ash Pond C- 70.3(MT)(Active)
2							0	0	685504				Reasons for not Utilising the Legacy Ash may also be provided:- It may be noted that Ash Pond "A" & Ash Pond "B" has been already stabilised by soil capping and has been declared as reclaimed. Utilization of Ash From Ash Pond C is not feasible at this point as it is operational.

Abbreviations:-

MW- Mega Watt  
TPS- Thermal Power Station  
Km-Kilometer  
MT- Million Tonne  
Ha-Hectare

AS Rao  
Head-EHS





Ministry of Power  
Central Electricity Authority  
Thermal Civil Division  
Monthly Abstract of Ash Generation & Utilization  
(For the Period from 1<sup>st</sup> April, 2022 to 31<sup>st</sup> March, 2023)

NAME OF THE POWER UTILITY: Odisha Power Generation Corporation  
NAME OF THE THERMAL POWER PLANT: 2X210 MW ITPS  
INSTALLED CAPACITY: 420 MW ( 2X210MW)

PERIOD OF REPORT-1<sup>st</sup> April, 2022 to 31<sup>st</sup> March, 2023

ASH GENERATION & UTILIZATION					MODE OF UTILIZATION & UTILIZATION IN EACH MODE													
Sl.No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
	Month	Coal Consumed (MT)	Ash Content of Coal (%)	Ash generation (MT)	Ash Utilized (MT)	Ash Utilization in %	In making of Fly Ash based Bricks/Blocks/Tiles (MT)	In manufacture of Portland Pozzolanas Cement (MT)	In Construction of Highways & Roads including Flyover (MT)	Part replacement of cement in concrete (MT)	replacement of cement or in roller compacted concrete dam (MT)	In Ash Dyke raising (MT)	In Reclamation of Low Lying area (MT)	In Mine filling (MT)	In Agriculture/ Waste land Development (MT)	Others (MT) Cenosphere	Others (MT)Asbestos Manufacturing	
1	Apr'22	231164	47.13	108940	24488	22.48	161	0	0	0	0	0	24200	0	0	7.00	120	
2	May'22	227383	46.42	105542	26799	25.39	732	0	0	0	0	0	25100	0	0	7.00	960	
3	Jun'22	211240	45.49	96084	19961	20.77	124	0	0	0	0	0	19500	0	0	7.00	330	
4	Jul'22	165437	48.68	80536	21762	27.02	155	0	0	0	0	0	21000	0	0	7.00	600	
5	Aug'22	93599	47.98	44911	23832	53.06	105	0	0	0	0	0	23000	0	0	7.00	720	
6	Sep'22	187317	49.01	91795	21567	23.49	30	0	0	0	0	0	21200	0	0	7.00	330	
7	Oct'22	244151	48.23	117751	22517	19.12	120	0	0	0	0	0	22000	0	0	7.00	390	
8	Nov'22	222159	47.63	105823	50937	48.13	480	0	0	0	0	15000	35000	0	0	7.00	450	
9	Dec'22	237085	46.49	110213	52572	47.70	495	0	0	0	0	21500	30000	0	0	7.00	570	
10	Jan'23	228104	44.23	100880	51552	51.10	255	0	0	0	0	30200	21000	0	0	7.00	90	
11	Feb'23	201287	43.85	88268	72577	82.22	540	0	0	0	0	36500	35200	0	0	7.00	330	
12	Mar'23	220649	45.14	99610	76285	76.58	964	0	0	0	0	39200	35754	0	0	7.00	360	
	Total	2469575	44.9	1150353	464849	40.41	4161	0	0	0	0	142400	312954	0	0	84.00	5250.00	



AS Rao  
Head-EHS

**ODISHA POWER GENERATION CORPORATION LTD.**

(A Government Company of the State of Odisha)

CIN: U40104OR1984SG001429

**1b Thermal Power Station**

Banharipali, Dist.: Jharsuguda, Odisha - 768 234, India

Plant Manager : (+916645) 289266, Fax: (+916645) 222-230

Factory Manager : (+916645) 222224, Fax: (+916645) 222-230



Letter No. ITPS/175 Eng &amp; Eff/WE

April 29, 2020

Director  
Thermal Civil Division  
Central Electricity Authority  
Ministry of Power  
9<sup>th</sup> Floor (North Wing), Sewa Bhawan  
RK Puram, New Delhi-110066

Kind Attention: **Mr. Baleshwar Thakur**

Sub.: Ash generation & utilization data of Odisha Power Generation Corporation (2X660 MW ITPS) for the year 2019-20 i.e. from 1<sup>st</sup> April'19 to 31<sup>st</sup> March'20.

Ref.: CEA Letter No. 1/8/1/DATA/2020/TCD dated 29.04.2020

Dear Sir,

This has reference to the above subject and cited reference

Kindly find enclosed the Ash generation & utilization data of Odisha Power Generation Corporation (2X660 MW ITPS) for the year 2019-20 i.e. from 1<sup>st</sup> April'19 to 31<sup>st</sup> March'20.

Thanking You.

Sincerely yours,

**UK Pahi**  
Head-EHS





Ministry of Power  
Central Electricity Authority  
Thermal Civil Design Division

General Information on Power Stations, Coal Mines and Quality of Coal

NAME OF POWER UTILITY: ODISHA POWER GENERATION CORPORATION LTD  
NAME OF THERMAL POWER PLANT: IB THERMAL POWER STATION (2x660 MW TPPS)  
Period of Report: 1<sup>st</sup> April, 2019 to 31<sup>st</sup> March 2020

Period of Report: 1 <sup>st</sup> April, 2019 to 31 <sup>st</sup> March 2020																
Sl. NO	(A) Thermal Power Station				(B) Detail of Nodal Officer				(C) Coal							
	Name of Thermal Power Station	District	State	Environmental Zone	Unit. No	Installed Capacity (MW)	Date of Commissioning	Name	Designation	Contact No. (Landline & Mobile)	E Mail	Name of Mines & Its Location	Distance of mine from TPS (KM)	Quantity of coal received (MT)	Average Calorific Value of Coal ( Kcal)	Average Ash Content of Coal (%)
1	It Thermal Power Station	Jharsuguda	Odisha	Eastern Region	Unit-3 Unit-4	660 660	01.07.2019 21.08.2019	UK Pahi	Head EHS	06645-289258 9338715425	umishantibargarh@opgc.co.in	Lakhanpur Open Cast Mine	12 Km (approx) Up to loading point	2906481	2900	42.44

Abbreviations:-

MW - Mega Watt  
TPS - Thermal Power Station  
Km - Kilometer  
Kcal - Kilocalories

*U.K. Pahi*  
U.K. Pahi  
Head(EHS)



Ministry of Power  
Central Electricity Authority  
Thermal Civil Division

Ash Disposal Facility Available at Thermal Power Station, Mode of Disposal (Dry & Wet) and Ash Stock Available (Fly Ash, Bottom Ash & Pond ash)

NAME OF THE POWER UTILITY: Odisha Power Generation Corporation  
NAME OF THE THERMAL POWER PLANT: 2x210 MW TPPS  
PERIOD OF REPORT: 1<sup>st</sup> April, 2019 to 31<sup>st</sup> March, 2020

NAME OF THE THERMAL POWER PLANT: 2X210 MW TPPS PERIOD OF REPORT- 1 <sup>st</sup> April, 2019 to 31 <sup>st</sup> March, 2020																			
Sl.No	Thermal Power Station	Existing Facility for Ash Disposal		Location & Distance of Ash Disposal area from TPS	Area acquired for Ash Disposal (Ha)	Design life of Disposal Area (Years)	Additional Area if any proposed	Ash Disposal				Ash Stock Available as on 31.03.2020							
		Dry	Wet					Km	(Ha)	(Years)	(Ha)				Dry Ash (MT)	Wet Ash (MT)	Fly Ash (MT)	Bottom Ash (MT)	Pond Ash (MT)
1	10 Thermal Power Station ( 2X660 MW TPPS)	Nil	4	5	Ash Pond C-47 Ha (For Temporary Disposal) Tilla Ash Ponds: 125 Ha (All final stage of disposal location)	7 Ash Pond C with wet disposal- March 2025 Exact life span will vary depending upon ash utilization %.	0	9	30	11	12	13	Ash Pond C-0 1.135 (Including 1.034 Million MT of ash disposed from Disposal & Lines 2 till 31.03.2019)						
1							0	0											

Abbreviations:

MW - Mega Watt

TPS- Thermal Power Station

Km-Kilometer

MT- Million Tonne

Ha- Hectare

  
 LK Pahi  
 Head EHS




Ministry of Power  
Central Electricity Authority  
Thermal Civil Division  
Monthly Abstract of Ash Generation & Utilization  
(For the Period from 1<sup>st</sup> April, 2018 to 31<sup>st</sup> March, 2019)

NAME OF THE POWER UTILITY: Odisha Power Generation Corporation

NAME OF THE THERMAL POWER PLANT: Odisha Power Generation Corporation (2X560 MW (TPS))

INSTALLED CAPACITY: 1320 MW ( 2X660 MW)

PERIOD OF REPORT: 1<sup>st</sup> April, 2019 to 31<sup>st</sup> March, 2020

ASH GENERATION & UTILIZATION										MODE OF UTILIZATION & UTILIZATION IN EACH MODE									
Sl.No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
	Month	Coal Consumed (MT)	Ash Content of Coal (%)	Ash generation (MT)	Ash Utilized (MT)	Ash Utilization in %	In making of Fly Ash based Bricks/Blocks/Tiles (MT)	In manufacture of Portland Pozzolanas Cement (MT)	In Construction of Highways & Roads including Flyover (MT)	Part replacement of cement in concrete (MT)	replacement of cement or in roller compacted concrete dam (MT)	In Ash Dyke raising (MT)	In Reclamation of Low Lying area (MT)	In Mine filling (MT)	In Agriculture/ Waste land Development (MT)	Others (MT) Cenosphere	Others (MT)Asbestos Manufacturing		
1	Apr'19																		
2	May'19																		
3	Jun'19																		
4	Jul'19	45297	40.00	18119	18000	99.34	0	0	0	0	0	0	18000	0	0	0	0		
5	Aug'19	83649	40.00	33460	31000	92.65	0	0	0	0	0	0	31000	0	0	0	0		
6	Sep'19	334372	38.44	128533	37738	29.36	0	0	0	0	0	0	37738	0	0	0	0		
7	Oct'19	409572	39.57	162068	6500	4.01	0	0	0	0	0	0	6500	0	0	0	0		
8	Nov'19	462043	40.28	186111	15130	8.13	0	0	0	0	0	0	15130	0	0	0	0		
9	Dec'19	339501	45.27	153692	17486	11.38	0	0	0	0	0	0	17486	0	0	0	0		
10	Jan'20	457938	47.60	217978	11124	5.10	0	0	0	0	0	0	11124	0	0	0	0		
11	Feb'20	371242	44.24	164237	62000	37.75	0	0	0	0	0	0	62000	0	0	0	0		
12	Mar'20	402857	42.08	169526	15000	8.85	0	0	0	0	0	0	15000	0	0	0	0		
	Total	2906481	42.45	1233724	213978	17.34	0	0	0	0	0	0	213978	0	0	0	0		



*UK Paini*  
Head-EHS

**ODISHA POWER GENERATION CORPORATION LTD.**

(A Government Company of the State of Odisha)

CIN: U40104OR19845G001429

**Ib Thermal Power Station**

Banharipalli, Dist.: Jharsuguda, Odisha - 768 234, India

Plant Manager : (+916645) 289266, Fax: (+916645) 222-230

Factory Manager : (+916645) 222224, Fax: (+916645) 222-230

152



Letter No. ITPS/2421/WE

April 29, 2021

Director  
Thermal Civil Division  
Central Electricity Authority  
Ministry of Power  
9<sup>th</sup> Floor (North Wing), Sewa Bhawan  
RK Puram, New Delhi-1100066

Kind Attention: Mr. Baleshwar Thakur

Sub.: Ash generation & utilization data of Odisha Power Generation Corporation (2X660 MW ITPS) for the year 2020-21 i.e., from 1<sup>st</sup> April'20 to 31<sup>st</sup> March'21.

Ref.: CEA Letter vide mail, dated 27.04.2021

Dear Sir,

This has reference to the above subject and cited reference

Kindly find enclosed the Ash generation & utilization data of Odisha Power Generation Corporation (2X660 MW ITPS) for the year 2020-21 i.e., from 1<sup>st</sup> April'20 to 31<sup>st</sup> March'21.

Thanking You.

Sincerely yours,

*AS Rao*  
29/04/2021  
(AS Rao)  
AS Rao  
Head-EHS





**Ministry of Power**  
**Central Electricity Authority**  
**Thermal Civil Design Division**

General Information on Power Stations, Coal Mines and Quality of Coal

NAME OF POWER UTILITY: ODISHA POWER GENERATION CORPORATION LTD

NAME OF THERMAL POWER PLANT: IB THERMAL POWER STATION (2x660 MW TPS)

Period of Report: 1<sup>st</sup> April, 2020 to 31<sup>st</sup> March 2021

Sl. NO	(A) Thermal Power Station				(B) Detail of Nodal Officer				(C) Coal				Average Ash Content of Coal (%)			
	Name of Thermal Power Station	District	State	Environmental Zone	Unit: No	Installed Capacity (MW)	Date of Commissioning	Name	Designation	Contact No. (Landline & Mobile)	E Mail	Name of Mines & Its Location		Distance of mine from TPS (KM)	Quantity of coal received (MT)	Average Calorific Value of Coal ( Kcal)
1	Itb Thermal Power Station	Bharsuguda	Odisha	Eastern Region	Unit-3 Unit-4	660 660	03.07.2019 21.08.2019	AS Rao	Head-EHS	06645-289258 9338715417	as.rao@opgc.co.in	Lakhangpur Open Cast Mine	12 Km (approx) Up to loading point	4762144	2855	44.53

Abbreviations:-  
 MW-Mega Watt  
 TPS-Thermal Power Station  
 Km-Kilometer  
 Kcal-Kilocalories

AS Rao  
 Head EHS



Ministry of Power  
Central Electricity Authority  
Thermal Civil Division

Ash Disposal Facility Available at Thermal Power Station, Mode of Disposal (Dry & Wet) and Ash Stock Available (Fly Ash, Bottom Ash & Pond ash)

NAME OF THE POWER UTILITY: Odisha Power Generation Corporation

NAME OF THE THERMAL POWER PLANT: 2X210 MW TPS

PERIOD OF REPORT: 1<sup>st</sup> April, 2020 to 31<sup>st</sup> March, 2021

Sl.No	Thermal Power Station	Existing Facility for Ash Disposal		Location & Distance of Ash Disposal area from TPS	Area acquired for Ash Disposal (Ha)	Design Life of Disposal Area (Years)	Additional Area if any proposed (Ha)	Ash Disposal				Ash Stock Available as on 31.03.2020			
		Dry	Wet					Dry Ash (MT)	Wet Ash (MT)	Fly Ash (MT)	Bottom Ash (MT)	Fly Ash (MT)	Bottom Ash (MT)	Pond Ash (MT)	
1	2	3	4	5	6	7	8	9	10	11	12	13			
1	1b Thermal Power Station ( 2X660 MW (TPS)	NB	Tilla Ash Pond	14 km	Tilla Ash Pond- 126 Ha	September 2024 *Exact life span will vary depending upon ash utilization %.	0	0	0.164	-	-	-	-	Tilla Ash Pond-0.128	
															Reasons for not Utilising the Legacy Ash may also be provided:- Not applicable as Tilla Ash Pond started operating from August '20

Abbreviations:-

MW- Mega Watt

TPS- Thermal Power Station

Km-Kilometer

MT- Million Tonne

Ha-Hectare

*Signature*  
21.04.21

As Rao

Head-EHS





Ministry of Power  
Central Electricity Authority  
Thermal Civil Division  
Monthly Abstract of Ash Generation & Utilization  
(For the Period from 1<sup>st</sup> April, 2020 to 31<sup>st</sup> March, 2021)

NAME OF THE POWER UTILITY: Odisha Power Generation Corporation  
NAME OF THE THERMAL POWER PLANT: Odisha Power Generation Corporation (2X660 MW ITPs)  
INSTALLED CAPACITY: 1320 MW (2X660 MW)

PERIOD OF REPORT: 1<sup>st</sup> April, 2020 to 31<sup>st</sup> March, 2021

ASH GENERATION & UTILIZATION								MODE OF UTILIZATION & UTILIZATION IN EACH MODE										
Sl.No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
	Month	Coal Consumed (MT)	Ash Content of Coal (%)	Ash generation (MT)	Ash Utilized (MT)	Ash Utilization in %	In making of Fly Ash based Bricks/Blocks/Tiles (MT)	In manufacture of Portland Pozzolana Cement (MT)	In Construction of Highways & Roads including Flyover (MT)	Part replacement of cement in concrete (MT)	replacement of cement or in roller compacted concrete dam (MT)	In Ash Dyke raising (MT)	In Reclamation of Low Lying area (MT)	In Mine filling (MT)	In Agriculture/ Waste land Development (MT)	Others (MT) Cenosphere	Others (MT) Asbestos Manufacturing	
1	Apr'20	368263	42.46	156364	12000	7.67	0	0	0	0	0	0	12000	0	0	0	0	
2	May'20	464475	44.50	206691	15000	7.26	0	0	0	0	0	0	15000	0	0	0	0	
3	Jun'20	454740	42.81	194674	15500	7.96	0	0	0	0	0	0	15500	0	0	0	0	
4	July'20	492037	43.23	212708	15000	7.05	0	0	0	0	0	0	15000	0	0	0	0	
5	Aug'20	404054	45.48	183764	32000	17.41	0	0	0	0	0	0	32000	0	0	0	0	
6	Sep'20	211380	45.06	95248	43000	45.15	0	0	0	0	0	0	43000	0	0	0	0	
7	Oct'20	202444	45.54	92193	44700	47.94	0	0	0	0	0	0	44200	0	0	0	0	
8	Nov'20	231507.5	44.13	102164	45670	44.70	0	0	0	0	0	0	45670	0	0	0	0	
9	Dec'20	443046	46.05	204023	65870	32.29	0	0	0	0	0	0	65870	0	0	0	0	
10	Jan'21	498238	44.79	223161	66210	29.67	0	0	0	0	0	0	66210	0	0	0	0	
11	Feb'21	483099	46.73	225752	65229	28.89	0	0	0	0	0	0	65229	0	0	0	0	
12	Mar'21	508860	44.97	228834	64898	28.36	0	0	0	0	0	0	64898	0	0	0	0	
	Total	4762144	44.635	2125576	484577	22.80	0	0	0	0	0	0	484577	0	0	0	0	



AS Rao  
Head-EHS

**Ministry of Power  
Central Electricity Authority  
Thermal Civil Design Division**

General information on Power Stations, Coal Mines and Quality of Coal

NAME OF POWER UTILITY: ODISHA POWER GENERATION CORPORATION LTD.  
NAME OF THERMAL POWER PLANT: IB THERMAL POWER STATION (2660 MW TPS)  
Period of Report: 1<sup>st</sup> April, 2021 to 31<sup>st</sup> March 2022

Sl. No	(A) Thermal Power Station				(B) Detail of Nodal Officer				(C) Coal							
	Name of Thermal Power Station	District	State	Environmental Zone	Unit No	Installed Capacity (MW)	Date of Commissioning	Name	Designation	Contact No. (Landline & Mobile)	E Mail	Name of Mines & its Location	Distance of mine from TPS (KM)	Quantity of coal received (MT)	Average Calorific Value of Coal (Kcal)	Average Ash Content of Coal (%)
1	Ib Thermal Power Station	Jharsuguda	Odisha	Eastern Region	Unit-3 Unit-4	560 660	03.07.2019 21.08.2019	AS Rao	Head-ETS	06645-289248 9338759417	as.rao@opgc.co.in	Lakhanpur Open Cast Mine	12 Km (approx) Up to loading point	4763234	2961	44.24

Abbreviations:-  
MW-Mega Watt  
TPS-Thermal Power Station  
Km-Kilometer  
Kcal-Kilocalories

AS Rao  
Head-ETS

Complete address of Corporate Office / Head Office / Registered Office	
Name of Head of Office	PK Mohapatra
Designation	Managing Director
Address	Zone-A, 7th Floor, Fortune Tower, Chandrasekharpur, Bhubaneswar-751023 Odisha
email ID	pkm@opgc.co.in
Telephone No.	0674-2303765-66

Complete address of Thermal Power Plant	
Name of Head of TPP	Manas Ranjan Rout
Designation	Director (Operational)
Address	IB Thermal Power Station, Banharipali, Jharsuguda-768234 Odisha
email ID	manas.rout@opgc.co.in
Telephone No.	9777260075





Ministry of Power  
Central Electricity Authority  
Thermal Civil Division

Ash Disposal Facility Available at Thermal Power Station, Mode of Disposal (Dry & Wet) and Ash Stock Available (Fly Ash, Bottom Ash & Pond ash)

NAME OF THE POWER UTILITY: Odisha Power Generation Corporation  
PERIOD OF REPORT- 1<sup>st</sup> April, 2021 to 31<sup>st</sup> March, 2022

Sl.No	Thermal Power Station	Existing Facility for Ash Disposal		Location & Distance of Ash Disposal area from TPS	Area acquired for Ash Disposal (Ha)	Design Life of Disposal Area (Years)	Additional Area if any proposed	Ash Disposal			Ash Stock Available as on 31.03.2020		
		Dry	Wet					Dry Ash (MT)	Wet Ash (MT)	Fly Ash (MT)	Bottom Ash (MT)	Pond Ash (MT)	
1	2	3	4	5	6	7	8	9	10	11	12	13	
1	1b Thermal Power Station ( 2X660 MW (TPS)	Nil	Tilla Ash Pond	3.4 Km	Tilla Ash Pond- 126 Ha	September 2024 "Exact life span will vary depending upon ash utilization %"	0	0	1.84	-	-	Tilla Ash Pond-0.3.61	
												Reasons for not Utilising the Legacy Ash may also be provided:- Not applicable as Tilla Ash Pond started operating from August'20	

Abbreviations:-

MW- Mega Watt  
TPS- Thermal Power Station  
Km-Kilometer  
MT- Million Tonne  
Ha-Hectare

As Per  
Head-EHS



Ministry of Power  
Central Electricity Authority  
Thermal Civil Division  
Monthly Abstract of Ash Generation & Utilization  
(For the Period from 1<sup>st</sup> April, 2021 to 31<sup>st</sup> March, 2022)

NAME OF THE POWER UTILITY: Odisha Power Generation Corporation  
NAME OF THE THERMAL POWER PLANT: Odisha Power Generation Corporation (2X660 MW ITPS)  
INSTALLED CAPACITY: 1320 MW ( 2X660 MW)

PERIOD OF REPORT: 1<sup>st</sup> April, 2021 to 31<sup>st</sup> March, 2022

Sl.No		ASH GENERATION & UTILIZATION					MODE OF UTILIZATION & UTILIZATION IN EACH MODE											
		1 Month	2 Coal Consumed (MT)	3 Ash Content of Coal (%)	4 Ash generation (MT)	5 Ash Utilized (MT)	6 Ash Utilization in %	7 In making of Fly Ash based Bricks/Blocks/Tiles (MT)	8 In manufacture of Portland Pozzolanas Cement (MT)	9 In Construction of Highways & Roads including Flyover (MT)	10 Part replacement of cement in concrete (MT)	11 replacement of cement or in roller compacted concrete dam (MT)	12 In Ash Dyke raising (MT)	13 In Reclamation of Low Lying area (MT)	14 In Mine filling (MT)	15 In Agriculture/ Waste land Development (MT)	16 Others (MT) Cenosphere	17 Others (MT)Asbestos Manufacturing
1.		Apr'21	355142	44.66	158606	12500	7.88	0	0	0	0	0	0	12500	0	0	0	0
2		May'21	530079	43.98	233129	17300	7.42	0	7099.8	0	0	0	0	10200	0	0	0	0
3		Jun'21	449939	48.39	217725	26137	12.00	0	14136.8	0	0	0	0	12000	0	0	0	0
4		July'21	494628	46.08	227925	45707	20.05	0	33706.6	0	0	0	0	12000	0	0	0	0
5		Aug'21	494316	45.32	224024	53542	23.90	0	41542.3	0	0	0	0	12000	0	0	0	0
6		Sep'21	495560	45.86	227264	62933	27.69	0	41432.9	0	0	0	0	21500	0	0	0	0
7		Oct'21	377962	43.16	163128	62648	38.40	0	39247.8	0	0	0	0	23400	0	0	0	0
8		Nov'21	387741	43.69	169404	55674	32.86	0	34674.3	0	0	0	0	21000	0	0	0	0
9		Dec'21	386158	43.70	168751	51833	30.72	0	28832.6	0	0	0	0	23000	0	0	0	0
10		Jan'22	447310	43.59	194982	64564	33.11	0	41563.8	0	0	0	0	23000	0	0	0	0
11		Feb'22	476067	43.07	205061	50421	24.59	0	24420.8	0	0	0	0	26000	0	0	0	0
12		Mar'22	523019	44.10	230651	74788	32.42	0	46288	0	0	0	0	28500	0	0	0	0
Total			5417921	44.63	2420650	578046	23.88	0	0	0	0	0	0	225100	0	0	0	0



AS Rao  
Head-EHS



**Ministry of Power  
Central Electricity Authority  
Thermal Civil Design Division**

General Information on Power Stations, Coal Mines and Quality of Coal

NAME OF POWER UTILITY: ODISHA POWER GENERATION CORPORATION LTD.  
NAME OF THERMAL POWER PLANT: IB THERMAL POWER STATION (2x660 MW TPPS)  
Period of Report: 1<sup>st</sup> April, 2022 to 31<sup>st</sup> March 2023

(A) Thermal Power Station										(B) Detail of Nodal Officer			(C) Coal			
Sl. NO	Name of Thermal Power Station	District	State	Environmental Zone	Unit, No	Installed Capacity (MW)	Date of Commissioning	Name	Designation	Contact No. (Landline & Mobile)	E Mail	Name of Mines & Its Location	Distance of mine from TPS (KM)	Quantity of coal received (MT)	Average Calorific Value of Coal ( Kcal)	Average Ash Content of Coal (%)
1	Ib Thermal Power Station	Jharsuguda	Odisha	Eastern Region	Unit-3 Unit-4	660 660	01.07.2019 21.08.2019	Parthasarathi Panda	Manager (Environment)	06645-289258 7682854512	parthasarathi.panda@opgc.co.in	Lathampur Open Cast Mine	11 Km (approx) to loading point	6244081	3088	43.07

Abbreviations:-  
MW-Mega Watt  
TPS-Thermal Power Station  
Km-Kilometer  
Kcal-KiloCalories

AS Rao  
Head-Env

Complete address of Corporate Office / Head Office / Registered Office	
Name of Head of Office	PK Mohapatra
Designation	Managing Director
Address :	Zone-A, 7th Floor, Fortune Tower, Chandrasekharpur, Bhubaneswar-751023 Odisha
email ID :	pkm@opgc.co.in
Telephone No.	0674-2303765-66

Complete address of Thermal Power Plant	
Name of Head of TPP	Manas Ranjan Rout
Designation	Director (Operations)
Address :	IB Thermal Power Station, Baharipali, Jharsuguda-768234 Odisha
email ID :	manasrout@opgc.co.in
Telephone No.	9777296075



Ministry of Power  
Central Electricity Authority  
Thermal Civil Division

Ash Disposal Facility Available at Thermal Power Station, Mode of Disposal (Dry & Wet) and Ash Stock Available (Fly Ash, Bottom Ash & Pond ash)

NAME OF THE POWER UTILITY: Odisha Power Generation Corporation

NAME OF THE THERMAL POWER PLANT: 2X210 MW ITPS

PERIOD OF REPORT: 1<sup>st</sup> April, 2022 to 31<sup>st</sup> March, 2023

Sl.No	Thermal Power Station	Existing Facility for Ash Disposal		Location & Distance of Ash Disposal area from TPS	Area acquired for Ash Disposal (Ha)	Design Life of Disposal Area (Years)	Additional Area if any proposed (Ha)	Ash Disposal				Ash Stock Available as on 31.03.2023	
		Dry	Wet					Dry Ash (MT)	Wet Ash (MT)	Fly Ash (MT)	Bottom Ash (MT)		
1	2	3	4	5	6	7	8	9	10	11	12	13	
1	Is Thermal Power Station (2X660 MW ITPS)	Nil	Tilla Ash Pond	14 Km	Tilla Ash Pond- 126 Ha	September 2024 *Exact life span will vary depending upon ash utilization %	0	0	2166218	-	-	Tilla Ash Pond Phase I- 27.51MT Phase II- 34.521MT	
										Reasons for not Utilising the Legacy Ash may also be provided:- Not applicable as Tilla Ash Pond started operating from August'20			

Abbreviations:-

MW- Mega Watt  
TPS- Thermal Power Station  
Km- Kilometer  
MT- Million Tonne  
Ha- Hectare

As Rao  
Head-EHS





Ministry of Power  
Central Electricity Authority  
Thermal Civil Division  
Monthly Abstract of Ash Generation & Utilization  
(For the Period from 1<sup>st</sup> April, 2022 to 31<sup>st</sup> March, 2023)

NAME OF THE POWER UTILITY: Odisha Power Generation Corporation  
NAME OF THE THERMAL POWER PLANT: Odisha Power Generation Corporation (2X660 MW ITPS)  
INSTALLED CAPACITY: 1320 MW ( 2X660 MW)

PERIOD OF REPORT-1<sup>st</sup> April, 2022 to 31<sup>st</sup> March, 2023

		ASH GENERATION & UTILIZATION					MODE OF UTILIZATION & UTILIZATION IN EACH MODE											
Sl.No	Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			Coal Consumed (MT)	Ash Content of Coal (%)	Ash generation (MT)	Ash Utilized (MT)	Ash Utilization in %	In making of Fly Ash based Bricks/Blocks/Tiles (MT)	In manufacture of Portland Pozzolanas Cement (MT)	In Construction of Highways & Roads including Flyover (MT)	Part replacement of cement in concrete (MT)	replacement of cement or in roller compacted concrete dam (MT)	In Ash Dyke raising (MT)	In Reclamation of Low Lying area (MT)	In Mine filling (MT)	In Agriculture/ Waste land Development (MT)	Others (MT) Cenosphere	Others (MT)Asbestos Manufacturing
1	Apr'22		307576	45.91	141208	34939	24.74	0	14439	0	0	0	0	20500	0	0	0	0
2	May'22		530481	45.40	240838	34064	14.14	0	11764	0	0	0	0	22300	0	0	0	0
3	Jun'22		541165	45.08	243957	42742	17.52	0	19242	0	0	0	0	23500	0	0	0	0
4	July'22		511338	44.92	229693	41705	18.16	0	10705	0	0	0	0	31000	0	0	0	0
5	Aug'22		578319	44.45	257063	53416	20.78	0	22916	0	0	0	0	30500	0	0	0	0
6	Sep'22		563612	46.01	259318	59593	22.98	0	30093	0	0	0	0	29500	0	0	0	0
7	Oct'22		588789	46.52	273905	51156	18.68	0	19956	0	0	0	0	31200	0	0	0	0
8	Nov'22		520742	45.47	236778	50881	21.49	0	16381	0	0	0	0	34500	0	0	0	0
9	Dec'22		602941	45.02	271474	66996	24.68	0	6896	0	0	0	21200	38900	0	0	0	0
10	Jan'23		437410	43.55	190492	70567	37.04	0	4067	0	0	0	25300	41200	0	0	0	0
11	Feb'23		486675	43.44	211412	67850	32.09	0	0	0	0	0	35400	32450	0	0	0	0
12	Mar'23		595033	44.97	267586	83597	31.24	0	9397	0	0	0	41000	33200	0	0	0	0
Total			6264081	44.63	2823724	657506	23.29	0	165856	0	0	0	122900	368750	0	0	0	0



AS Rao  
Head-EHS



## Ash Utilization Policy of OPGC at ITPS



*OPGC understands the importance of the utilization of the regular ash as well as the legacy ash generated from its Units and the penal provisions pronounced by the MOEF&CC, Government of India. OPGC endeavours to adopt following to make optimum generation and utilization of ash as an environmentally sustainable and economically viable product:*

**To achieve this, the objectives envisaged for commitment are to:**

1. To consider ash utilization as an integral process of power generation and to make all out efforts so as to maximize ash utilization with a target to achieve 100% on a sustainable basis;
2. Encourage and incentivise Ash utilization by setting up appropriate systems for collection of ash at plant site by installation of adequate Silos, transport of ash by providing adequate rail and road infrastructures.
3. Adherence to applicable statutory / regulatory norms on ash utilization / storage and handling.
4. To bring about broad-based public awareness and acceptance for ash and ash-based products by wide publicity of merits of ash and ash-based products and demerits/environment hazards of clay/bricks.
5. Participating in ash exhibitions and conferences including hosting of various programmes to promote ash utilisation.
6. To comply with guidelines issued by MoEF & CC, CPCB, SPCB & FARC or any other statutory authorities related to ash handling & utilization.
7. To facilitate R & D for utilization of ash in fly ash based products.
8. To develop a data base for ash off-takers for facilitating utilisation.
9. Communicate this policy to all persons working at ITPS, contractors, suppliers, visitors, auditors and other interested parties.
10. Enhance awareness and actively engage with experts for deploying innovative solutions to enhance gainful ash utilization, and explore successful market linkages.



**Manas Ranjan Rout**

Occupier & Director (Operations), OPGC

Date: 26.06.2023



**ODISHA POWER GENERATION CORPORATION LTD.**

(A Government Company of the State of Odisha)

CIN : U40104OR1984SGC001429

**Regd. Off :** Zone - A, 7th Floor, Fortune Towers, Chandrasekharpur, Bhubaneswar - 751 023, Odisha.**Ph. :** 0674-2303765 - 66, **Fax :** 0674 - 2303755 / 56**Web :** www.opgc.co.in

Ref: OPGC/ Units 1&amp;2/R&amp;M n FGD/2021-22/ 1443

November 24, 2021

**To****The Secretary,**

Odisha Electricity Regulatory Commission,

Plot No. 4, Chunokoli, Sailashree Vihar

Bhubaneswar – 751 021

**Sub:** Authorisation of Mr Haresh Kumar Satapathy, DGM (R&C) for filing of Review Petition in OERC Order in Case No. 66/2021 dated 3<sup>rd</sup> November 2021**Sir,**

This is to certify that Mr Haresh Kumar Satapathy, functioning as Deputy General Manager (Regulatory & Commercial), posted at the corporate office at Zone-A, 7<sup>th</sup> Floor, Fortune Towers, Chandrasekharpur, Bhubaneswar – 751 023, Odisha, India (Review Petitioner/Original Petitioner), is hereby authorised to file the review petition in Hon'ble OERC Order in Case No 66 of 2021 dated 3<sup>rd</sup> November 2021 and appear on behalf of the review petitioner for the hearing and other procedure before OERC.

Thanking You.

Yours faithfully,

(P. K. Mohapatra)

Managing Director

Managing Director

Odisha Power Generation Corporation Ltd.  
Bhubaneswar



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

File No. \_\_\_\_

Case No. \_\_\_\_ of 2021

**IN THE MATTER OF:**

Review Petition under Section 94(1)(f) of the Electricity Act, 2003 read with Regulations 70, 76, 78 and 79 of the Orissa Electricity Regulatory Commission (Conduct of Business) Regulations, 2004 and Regulation 13 of the Odisha Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 seeking review and modification of the order dated 03.11.2021 passed by this Hon'ble Commission in Case No. 66 of 2021.

**AND**

**IN THE MATTER OF:**

Odisha Power Generation Corporation Ltd. (OPGC Ltd.),  
Zone-A, 7th Floor, Fortune Towers, Chandrasekharapur,  
Bhubaneswar-751023, Odisha, India ..... **Review Petitioner**

**Affidavit verifying the Petition**

I, Haresh Kumar Satapathy, son of Shri. Kailash Chandra Satapathy, aged 53 years do solemnly affirm and say as follows:

1. That I am Deputy General Manager (Regulatory & Commercial) in Odisha Power Generation Corporation Ltd. at its Corporate Office at Zone-A, 7<sup>th</sup> Floor, Fortune Towers, Chandrasekharapur, Bhubaneswar-751023, the Petitioner in the above matter and am duly authorised by the competent authority of the said Petitioner to make this affidavit on its behalf.
2. The statements made in paragraphs 1 to 8 of the Petition herein now shown to me are true to my knowledge and the statements made in paragraphs 1 to 8 are based on information provided 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 24<sup>th</sup> day of November 2021.

*Harish Kumar Satapathy*  
Deponent



November 24, 2021



*Puskar Sahoo*  
24.11.21

**PUSKAR SAHOO**  
NOTARY, BHUBANESWAR  
GOVT. OF ODISHA  
Mob:-9337129137

**BEFORE THE ODISHA ELECTRICITY REGULATORY COMMISSION  
AT BHUBANESWAR, ODISHA**



**REVIEW PETITION NO. \_\_\_\_\_ OF 2021**

**IN**

**CASE NO. 66/2021**

**IN THE MATTER OF:**

Review Petition under Section 94(1)(f) of the Electricity Act, 2003 read with Regulations 70, 76, 78 and 79 of the Orissa Electricity Regulatory Commission (Conduct of Business) Regulations, 2004 and Regulation 13 of the Odisha Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 seeking review and modification of the order dated 03.11.2021 passed by this Hon'ble Commission in Case No. 66 of 2021.

**AND**

**IN THE MATTER OF:**

Odisha Power Generation Corporation Limited  
Zone-A, 7<sup>th</sup> Floor, Fortune Towers,  
Chandrasekharapur,  
Bhubaneswar, Odisha – 751023.  
Ph: 0674-2303752 / 2303760  
Fax: 0674-2303755/2303756  
Email: md@opgc.co.in

... Review Petitioner

*Versus*

1. The Chairman-cum-Managing Director  
GRIDCO Limited,  
Bhoi Nagar, Janpath,  
Bhubaneswar, Odisha – 751022.
2. Tata Power Central Odisha Distribution Limited  
(formerly Central Electricity Supply Utility of Odisha)  
2nd Floor, IDCO TOWER,  
Janpath, Bhubaneswar, Odisha– 751022.
3. Tata Power Western Odisha Distribution Limited  
(formerly Western Electricity Supply Company of Odisha)  
Corporate Building Burla,  
Besides Burla Police Station,  
Burla, Sambalpur, Odisha – 768017.



Chandrasekhar Kumar Satapathy



4. Tata Power Northern Odisha Distribution Limited  
(formerly North Eastern Electricity Supply Company of Odisha)  
Januganj, Remuna Golei,  
Balasore, Odisha – 756019.
5. Tata Power Southern Odisha Distribution Limited  
(formerly Southern Electricity Supply Company of Odisha Limited)  
Courtpet, Berhampur,  
Ganjam, Odisha – 760004.
6. Shri R. P. Mahapatra  
Retd. Chief Engineer & Member (Gen. OSEB),  
Plot No.775(Pl.), Lane-3, Jayadev Vihar,  
Bhubaneswar, Odisha – 751013.
7. The Principal Secretary to Govt.  
Department of Energy, Govt. of Odisha.  
Bhubaneswar, Odisha – 751001.

...Respondents



### REVIEW PETITION

MOST RESPECTFULLY SHOWETH THAT:

#### 1. *Brief Overview*

- 1.1 The Review Petitioner has filed the present review petition under Section 94(1)(f) of the Electricity Act, 2003 ("Act") seeking a limited review and modification of the Order dated 03.11.2021 ("Order") passed by this Hon'ble Commission in Case No. 66 of 2021 ("Original Petition").
- 1.2 The Review Petitioner had filed Case No. 66 of 2021 on 27.07.2021 seeking in-principle approval of capital cost for renovation and modernization work ("R&M") and installation of Flue-gas Desulphurization system ("FGD") & FGC for Units 1 and 2 (2x210 MW) of its thermal power station at Banharpalli, Jharsuguda ("Plant").
- 1.3 By the above Order, this Hon'ble Commission was pleased to grant in-principle approval of capital cost for R&M works and installation of FGD and FGC, to extend the life of the Plant and supply power to GRIDCO for an additional 15 years beyond the present Bulk Power Supply Agreement dated 13.08.1996 ("PPA") valid till 30.06.2026.
- 1.4 However, the proposed capital expenditure of INR 140 crore claimed by the Review Petitioner towards construction of a new ash pond as a part of R&M work has been disallowed by this Hon'ble Commission's Order. In this regard, the relevant extracts of the Order are set out below (emphasis supplied):



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"40. The Commission observed that OPGC is now a State generator and GRIDCO is the State designated entity to procure power from all sources on behalf of DISCOMs for State's requirements. As per the submission of GRIDCO there will be a shortfall in peak availability of power from the year 2026 onwards after end of the term of PPA with OPGC. Further, due to non-application of CTU charges and losses, availing power from OPGC will be cost effective to GRIDCO. 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 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. GRIDCO should take care that there should not be any redundant capacity charge payable on account of this R&M works. GRIDCO must take adequate precaution while signing fresh PPA with OPGC for the extended period of its life. It must be ensured that OPGC power comes within the merit order after renovation and modernisation including installation of FGD and FGC. GRIDCO should avoid at all cost crowding of PPAs with power stations who are beyond the merit order."



- 1.5 It is submitted that the present petition seeks the review and modification of the Order with regard to the said disallowance which appears to have been occasioned by the mistaken oversight of the Petitioner's averments, public information and records, various orders of the Hon'ble Apex Court and the OERC tariff regulations.
- 1.6 It is submitted that the viability of the Review Petitioner's proposal for R&M is contingent upon the new ash pond. The Plant cannot be operated at all without a new ash pond as the existing ash pond will be exhausted before June 2026. Therefore, the entire R&M of the Plant will become impossible and the Order will be rendered wholly futile, if the proposed capital expenditure towards construction of the new ash pond is not allowed by this Hon'ble Commission. On the other hand, even with the capital cost of the new ash pond, the power generated after the R&M of the Plant will remain cost-effective.
- 1.7 It is submitted that the Order suffers from errors apparent on the face of the record to the extent of the above disallowance, warranting the exercise of this Hon'ble Commission's jurisdiction.

A certified copy of the order dated 03.11.2021 passed by this Hon'ble Commission in Case No. 66 of 2021, received on 11.11.2021, is annexed herewith as ANNEXURE P-1.

- 1.8 For the sake of brevity, the Review Petitioner is setting out below only the relevant facts that are necessary to adjudicate the present Review Petition. The Review



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Petitioner craves leave to refer to and rely upon additional facts and/ or pleadings from the Original Petition, if required.

## 2. Brief Facts

2.1 It is submitted that a Bulk Power Supply Agreement dated 13.08.1996 was executed between the Review Petitioner and GRIDCO Limited ("GRIDCO") for supply of power from Units 1 and 2 (2x210 MW) of the Plant to GRIDCO. Units 1 and 2 of the Plant were first commissioned in the years 1994-95 and 1996-97, respectively. Subsequently, the parties executed a Supplementary Agreement to the BPSA dated 19.12.2012 ("PPA"), in accordance with the settlement by the task force in relation to the disputes pending before Hon'ble Supreme Court. The Original PPA along with its amendment was approved by the Hon'ble Commission vide its Order dated 27.04.2015 in Case No 13/2002. As per the terms of the approved PPA, the parties agreed to operate the present Plant as per the terms and conditions under the PPA up to June 2026.

2.2 It is submitted that Regulation 13 of the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 ("Tariff Regulations") provides for a generating company to incur expenditure on renovation and modernization of its existing generating station for the purpose of extension of life beyond the useful life of the said generating station. In this regard, the relevant extracts of Regulation 13 of the Tariff Regulations are set out below:

### "13. RENOVATION AND MODERNIZATION

(1) The generating company, for meeting the expenditure on renovation and modernization (R&M) for the purpose of extension of life beyond the useful life of the generating station or a unit thereof, shall make an application before the Commission for approval of the proposal with a Detailed Project Report giving complete scope, justification, cost-benefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure, schedule of completion, reference price level, estimated completion cost including foreign exchange component, if any, record of consultation with beneficiaries and any other information considered to be relevant by the generating company

(2) Where the generating company, makes an application for approval of its proposal for renovation and modernization, the approval shall be granted after due consideration of reasonableness of the cost estimates, financing plan, schedule of completion, interest during construction, use of efficient technology, cost-benefit analysis, and such other factors as may be considered relevant by the Commission.

(3) Any expenditure incurred or projected to be incurred and admitted by the Commission after prudence check based on the estimates of renovation and modernization expenditure and life extension, and after deducting the



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*accumulated depreciation already recovered from the original project cost, shall form the basis for determination of tariff."*

- 2.3 With a view to extend the life of the present Plant for a period of at least 15 years beyond June 2026, the Review Petitioner filed the Original Petition seeking inter alia an in-principle approval of the capital cost for R&M works and installation of FGD&FGC to comply with the revised emission standards as prescribed by the Ministry of Environment and Forests and Climate Change ("MoEF") for Units 1 and 2 of the Plant.
- 2.4 During the R&M assessment, initially an internal team assessed the monetary investment and technical upgradation required and the proposal was shared with GRIDCO. In OPGC's 204<sup>th</sup> Board Meeting (held in May 2018), the Board approved the proposal to engage an external consultant through open tendering process. M/s IRC Engineering Services India Private Limited ("IRC Engineering") was selected on the basis of open tendering, whereafter it carried out the R&M assessment and submitted the report in May 2019. One of the unequivocal observations in the IRC Engineering Report is that the existing ash pond is going to be exhausted by December 2024 and can be stretched further by one and a half years with higher ash utilisation. Further, the need for a new ash pond is categorized as a high priority item in the IRC Engineering Report, and is therefore critical to facilitate life extension of the Plant.

The Petitioner craves leave to refer to and rely upon the IRC Engineering's Final Detailed Project Report on R&M of Units 1 and 2 at Annexure-2 of Case No. 66/2021 (Filing No. 1 dated 27.07.2021).

- 2.5 In the Original Petition, the Review Petitioner claimed capital expenditure for various R&M works such as Boiler and Turbine, Electrical System, C&I, CHP and AHP, Ash Pond, *et al.* – which are considered necessary for the extension of the life of Units 1 and 2.
- 2.6 By the Order passed in the Original Petition, this Hon'ble Commission was pleased to grant in-principle approval for the capital cost of the R&M works and installation of FGD and FGC for the Plant. However, the proposed capital expenditure of INR 140 crore claimed by the Review Petitioner towards construction of a new ash pond as part of R&M was disallowed by this Hon'ble Commission. Instead, the Review Petitioner was directed to use the existing ash pond and comply with the mandate of 100% ash utilization notified by the MoEF.
- 2.7 It is submitted that this Hon'ble Commission in the Order referred above has proceeded on the evidently incorrect basis that a new ash pond is not required for the Plant in case it is able to utilize 100% of the ash generated from its Plant in terms of the directions of the MoEF. Here, it is relevant to mention that the MoEF has issued periodic



attorney name Subodh



notifications, such as notifications dated 14.09.1999, 27.08.2003, 03.11.2009 and 25.01.2016 ("MoEF Notifications"), concerning *inter alia* the utilization of fly ash generated by thermal power plants in India. The MoEF Notifications contemplate that the ash generated by thermal plants should be utilized by the cut-off date of 31.12.2017.

Copies of the MoEF Notifications dated 14.09.1999, 27.08.2003, 03.11.2009 and 25.01.2016 are annexed herewith as ANNEXURE P-2(Colly.).

- 2.8 It is submitted that contrary to the facts and averments on record, this Hon'ble Commission in the Order has erroneously conflated the 100% ash utilization mandate of the MoEF with the requirement to establish a new ash pond to extend the life of the instant Project by 15 years. The said observations are also contrary to the clear import of the OERC Tariff Regulations as well as various orders passed by the Hon'ble Supreme Court of India. Further, the impugned observations are contrary to the principles of the cost-plus regime envisaged under Section 62 of the Act. It is submitted that owing to the above disallowance caused on account of errors apparent on the face of record, the Review Petitioner is severely prejudiced as it has been denied legitimate claims towards R&M works that ought to have been granted otherwise in terms of the Tariff Regulations.

- 2.9 In view of the above, it is clarified that the present Review Petition has been preferred on the limited issue relating to the disallowance by this Hon'ble Commission of the capital expenditure towards construction of a new ash pond. In this regard, the various averments and contentions based on which the Review Petitioner has sought a modification of the Order are discussed in detail below.

### 3. *Grounds for Review*

- 3.1 It is humbly submitted that the following errors have crept into the Impugned Order, thereby necessitating its review:
- mistakenly overlooked the fact that ash pond necessity is separate and unconnected with 100% utilization of fly ash, in contravention of Section 62 of the Act and Regulation 13 of the Tariff Regulations;
  - overlooking Orders of the Hon'ble Supreme Court of India and erroneously exceeding its jurisdiction;
  - averments regarding OPGC's best efforts to achieve 100% fly ash utilization ignored; and
  - overlooking the fact that ash utilisation is beyond OPGC's control and achieving 100% ash utilisation is impossible for OPGC.



Haren Kumar Satapathy

Ash pond necessity is separate and unconnected with 100% utilization of fly ash

- 3.2 It is submitted that an ash pond is an integral part of a thermal generating station as it is required to store the ash that is generated as a by-product in the process of electricity generation. A thermal generating station cannot operate without an ash pond. In this regard, the Central Electricity Authority's (CEA) Report on the Land Requirement of Thermal Power Stations (published in December 2007) states as follows:



*"Fly ash constitute(sic) about 80% of the total ash generated in a power plant. Fly ash utilization not only depends on the location of the power station but also on the agencies who are involved in this business. Since the power stations have no control over the agencies in the field of fly ash utilization, the task of 100% fly ash utilization is difficult in most of the cases. Therefore, the power station authorities have no alternative except to keep sufficient space for the ash disposal without which the power plant might have to be shut down after a few years of operation."*

- 3.3 In addition to 80% fly ash, the remaining 20% of the total ash constitute bottom ash and is predominantly utilized as a land fill material in case of availability of low land or void mines. In absence of any avenues for low land filling, the bottom ash needs to be disposed in the ash pond in slurry form.
- 3.4 Therefore, the requirement for a new ash pond ought to be assessed independent of the Review Petitioner's ash utilization status by this Hon'ble Commission. It is submitted that conflating the two is an error apparent on the face of record.
- 3.5 Ash is generated on a continuous basis during power generation. However, its utilization occurs over an extended period of time as the demand for ash is neither available readily nor on a continuous basis. For instance, the limited demand for ash even in cement manufacturing and construction is irregular and seasonal. Therefore, ash is required to be kept in an ash pond. In fact, even plants that achieve 100% ash utilization require an ash pond for storage of such ash in the interim period. That is why, the MOEF Notifications contemplate 100% ash utilization on an annual basis. Thus, even the MOEF Notifications factor that the 100% utilization of fly ash is unconnected with the necessity of having an ash pond to store the ash generated from the Plant.
- 3.6 As aforesaid, during the R&M assessment, initially an internal team assessed the monetary investment and technical upgradation required and the proposal was shared with GRIDCO. In OPGC's 204<sup>th</sup> Board Meeting (held in May 2018), the Board approved the proposal to engage an external consultant through open tendering process.

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3.7 Pursuant to the open tendering, IRC Engineering was selected. IRC Engineering is a leading consultancy company dealing in complete cycle of R&M (i.e., Remaining Life Assessment (RLA), CA, DPR preparation, bid preparation, *et al.*) and also in the fields of testing, inspection and training. The company has a strong presence in India and employ experts with a proven track record of working with several PSUs including NTPC, BHEL, and PDIL.

3.8 After its selection, IRC Engineering carried out the R&M assessment and submitted its report in May 2019. The R&M study was carried out basis RLA, thermal performance tests, condition assessment studies and energy audit through various agencies. The R&M study indicates the measures necessary to extend Units 1 and 2's life by 15 years beyond 2026. One of the unequivocal observations in the IRC Engineering Report is that the existing ash pond is going to be exhausted by December 2024 and can be stretched further by one and a half years with higher ash utilisation. Further, the need for a new ash pond is categorized as a high priority item in the IRC Engineering Report. Therefore, the provision of a new ash pond is critical to facilitate life extension of the Plant.

3.9 It is submitted that the existing ash ponds for Units 1 and 2 were built for a period of 30 years (i.e., the tenure of the existing PPA) to accommodate ash generation from the Plant. The said ash ponds are likely to be exhausted before 2026 (when the PPA expires). While the present Order has allowed life extension by 15 years and various costs associated with R&M work, it does not consider the genuine need for a new ash pond if the Plant is to generate electricity till 2041.

3.10 In order to assist this Hon'ble Commission in determining the prayers herein, the Review Petitioner has prepared a detailed report on the life of existing ash ponds of Units 1 and 2. Importantly, the said report concludes that Ash Pond #B is already exhausted, while Ash Ponds #A will be exhausted by FY 2022-23. For Ash Pond #C, the present life is up to 01.01.2024 and may be extended to 01.03.2026 by raising bund height.

A copy of the report on the life of ash pond for Units 1 and 2 is annexed herewith as **ANNEXURE P-3**.

3.11 It may be appreciated that a new ash pond is a necessary and integral element of the Plant's R&M. The Review Petitioner will not be able to carry out the R&M at all if the cost for a new ash pond is not allowed.

Orders of Hon'ble Apex Court overlooked



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3.12 Thermal generating stations do not use ash and can only ensure that it is available for the industries that use it. There is a large deficit in its utilization by the industries that have use for it. There has been exponential thermal generation capacity addition during the 12<sup>th</sup> Five Year Plan (2012-2017). The said capacity addition created a large surplus in fly ash generation. However, the user industries which are obligated as per the MoEF Notifications to use such fly ash did not grow at the same pace. Therefore, thermal generating stations cannot be penalized for the non-achievement of 100% ash utilization.

3.13 In these circumstances, the genuine difficulties faced by thermal generators in complying with the 100% fly ash utilization mandate has been recognized even by the Hon'ble Supreme Court. Thus, the Hon'ble Supreme Court has stayed the penalty imposed by the Ld. National Green Tribunal ("Ld. NGT") for non-compliance of the 100% ash utilization contemplated in the MoEF Notifications.

3.14 In this regard, it is pertinent to note that several thermal power plants (including OPGC) were constrained to approach the Hon'ble Supreme Court of India challenging the levy of Environmental Compensation ("EC") imposed by the Ld. NGT for failure to achieve 100% fly ash utilization. The Hon'ble Supreme Court (in Civil Appeal Nos. 1690-1691 of 2019 (Diary No. 2959 of 2019)) stayed the recovery of EC and had further directed the Ld. NGT to do a case-to-case analysis of the breach by each of the non-compliant thermal generators. The relevant excerpts of the Order dated 04.02.2019 passed in the above batch of Civil Appeals is set out below:

"6. The basic issue which has to be addressed by the Tribunal, on a case to case basis, is as to whether there has been a breach in complying with the obligations which have been imposed by the Notifications of the MoEF&CC on 25 January 2016 and the earlier notification(s). This issue has not been addressed either in the earlier order dated 20 November 2018 or in the subsequent order dated 3 January 2019 of the Tribunal. The Tribunal will have to determine what is the nature of the obligation imposed and the steps required to be taken and in that context determine the nature of the breach.

7. Since a batch of other matters has been set down by this Court for consideration afresh by the Tribunal, we are of the view that the same course of action should be followed in the present appeal. We are not inclined to issue notice to Sandplast (India) Ltd., the first respondent, who is the original applicant before the National Green Tribunal having regard to the above directions and since there is no adversarial interest of the first respondent which is affected by the present directions. We keep all the rights and contentions of the parties open.

8. For the above reasons, we set aside the impugned order of the Tribunal dated 3 January 2019 and request the Tribunal to specifically consider the submissions which may be urged on behalf of the appellants in regard to the steps taken to comply with the Notification dated 25 January 2016 as also the earlier Notifications on the subject. Following the order dated 25 January 2016 passed



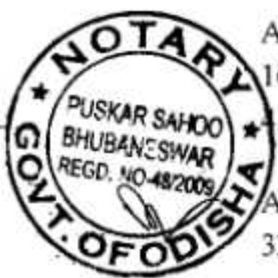
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Kumar  
Chandra





in Civil Appeal No.650 of 2019, we direct that until the Tribunal takes a decision on the application that may be moved on behalf of the appellants, the interim direction for deposit shall not be enforced against the appellants and no coercive steps for non-compliance shall be taken. We grant permission to the appellants to move an appropriate application before the Tribunal within a period of three weeks from today placing on affidavit the steps taken individually by the Thermal Power Plants represented by the appellants for effecting compliance with the Notifications.

9. The civil appeal and all pending applications stand disposed of accordingly. There shall be no order as to costs."



A copy of Hon'ble Supreme Court's Order dated 04.02.2019 in Civil Appeal Nos. 1690-1691 of 2019 (Diary No. 2959 of 2019) is annexed herewith as ANNEXURE P-

A copy of the Hon'ble Supreme Court's Order dated 15.03.2019 in Civil Appeal No. 3250 of 2019 (Dairy No. 6716 of 2019) is annexed herewith as ANNEXURE P-5.

- 3.15 The Ld. NGT by its Order dated 12.02.2020, issued a blanket direction to all thermal generators that could not achieve 100% ash utilisation, including OPGC, to deposit EC. The Review Petitioner was made liable to pay purported EC amounting to (a) approximately INR 1.79 Crores for its 420 MW (2x210 MW) plant; and (b) approximately INR 4.67 Crores for its 1320 MW (2x660 MW) plant. Against the above levy by the Ld. NGT, OPGC filed Civil Appeal No. 3038-3039 of 2020, and the recovery was stayed by the Hon'ble Supreme Court *qua* OPGC vide Order dated 24.08.2020.

A copy of Hon'ble Supreme Court's Order dated 24.08.2020 is annexed herewith as ANNEXURE P-6.

- 3.16 The Hon'ble Supreme Court's orders thus bear out that thermal generating stations such as the Petitioner's that cannot achieve of 100% ash utilization cannot be penalized for the same, on the basis of such generators' plea that their reasons for not achieving 100% utilisation are *bona fide* and uncontrollable. It is further submitted that the MoEF Notifications neither contemplate any penalty for inability to achieve 100% fly ash utilisation, nor does it stipulate that no ash pond may be built by non-compliant generators. When the Ld. NGT imposed a penalty on such generators, the Hon'ble Supreme Court stayed recovery of any such penalty. The Hon'ble Supreme Court is presently seized of the question whether 100% fly ash utilisation is feasible. Thus, the disallowance of OPGC's proposed ash pond expenditure basis OPGC's inability to achieve 100% fly ash utilisation is contrary to the letter and spirit of various orders of the Hon'ble Supreme Court. It is submitted that the Hon'ble Commission has

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inadvertently failed to consider any of the said orders of the Hon'ble Supreme Court necessitating the present Petition.

- 3.17 Further, the disallowance of the proposed expenditure for a new ash pond, on account of OPGC's inability to comply with the MOEF's Notifications, is a jurisdictional error. All the more so since the issue of 100% ash utilisation by OPGC is pending before the Hon'ble Supreme Court, where OPGC has been protected from any penalty on this account by the Hon'ble Supreme Court in the meantime. In the circumstances, it is submitted that the Ld. OERC's order disallowing OPGC's costs toward the ash pond on account of the MOEF Notifications is an error apparent on the face of the record which it is humbly prayed may be rectified now.

OPGC's best efforts to achieve 100% fly ash utilization

- 3.18 It is submitted that the Review Petitioner has made bona fide efforts to facilitate 100% fly ash utilization. However, despite its best efforts, the practical impediments beyond OPGC's control have made it impossible for the Review Petitioner to achieve 100% fly ash utilization. In this regard, the various steps taken by the Review Petitioner towards utilization of fly ash are set out below:

- a) OPGC has installed its own fly ash brick plant with production capacity of 10,000 bricks per day, and steps have been taken to utilize the bricks so manufactured in all the ongoing and upcoming construction activities of the Review Petitioner.
- b) The Review Petitioner supplied fly ash during FY 2016-17 for construction of fly over in Belpahar, by extending transportation subsidy of INR 150/- per MT.
- c) OPGC has entered into an agreement with Visveswariya National Institute of Technology, Nagpur to devise technological advancements for enhancing ash percentage up to 90% in brick production and for geopolymetric use of ash in road construction.
- d) OPGC has made provisions for adequate quantity of dry ash and supplying ash free of cost.
- e) Transportation subsidy of INR 150/- per MT has been extended for enhancing ash utilisation in areas of manufacturing of ash brick, other Fly Ash based products, cement/ asbestos manufacturing and road construction.
- f) OPGC has been conducting various ash utilisation awareness campaigns in the nearby community.



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- g) Strong initiative has been taken to identify stone quarries in the vicinity.
- h) Using ash in construction of embankment for ash pond as well for rising of bund height for ash pond in place of precious earth.
- i) OPGC has also awarded a consultancy order to C-FARM (Centre For Fly Ash Research & Management) headed by Dr. Vimal Kumar (Former Mission Director & Head, Fly Ash Unit, DST, GoI) for scientific and technical advice for obtaining "Consent for mine void filling with Fly Ash". C-FARM is continuously deliberating with MCL, as well as with CMPDI, on behalf of the Appellant for allotment of mine void for stowing with ash.
- j) OPGC is also deliberating with ZAAK Technology, Berlin for establishment of Fly Ash to sand conversion plant at its Project site for utilizing ash as one of the inputs.

3.19 It is submitted that mine voids are the only long-term sustainable ash utilisation solution available to OPGC given its Plant's location. OPGC has diligently pursued mine void allotment since 2006 first for the Lilari mine and then for Belpahar Open Cast Mines ("BOCM"). In fact, a High-Level Meeting under the Chairmanship of the Chief Secretary, Government of Odisha directed Mahanadi Coalfields Limited ("MCL", a Coal India Limited subsidiary) to expeditiously allot the BOCM mine void to OPGC back in December 2013. However, in both instances, for reasons beyond OPGC's control and despite its best efforts, OPGC was unable to obtain allocation of a suitable mine void.

The Review Petitioner craves leave to rely on facts, circumstances and documents related to OPGC's efforts towards ash utilisation.

3.20 From the above, it is evident that the Review Petitioner has taken all reasonable steps to ensure compliance with the MoEF Notifications. However, despite its best efforts, certain factors are beyond the Review Petitioner's control. Therefore, till the time the aforesaid uncontrollable issues highlighted by the Review Petitioner are not resolved, the Review Petitioner's Plant is bound to generate significant fly ash over a period of 15 years between June 2026 – June 2041. Such fly ash necessarily requires adequate storage space, the costs for which are being claimed vide the instant Petition.

Ash utilization is beyond OPGC's control

3.21 OPGC suffers from additional constraints with regard to achieving 100% ash utilization. The Review Petitioner's Plant is situated in the remote location of Village Banharpalli in Jharsuguda District, Odisha, where there is a heavy concentration of

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thermal generating stations and therefore a high availability of fly ash but very few industries that use fly ash.

3.22 Further, the Review Petitioner's Plant is situated in the extreme end of the Hirakud reservoir. The Plant is situated at a remote location approximately 30 kms. away from the nearest State Highway (SH 10-Biju Express Highway), around 20 kms. away from the nearest National Highway (NH-49), and more than 400 kms. away from the nearest sea-port (Paradip/ Gopalpur). Further, there is no big road infrastructure activity or major cement industry (apart from one cement plant) in the Plant's vicinity. Moreover, there are no large stone quarries, nor has the Review Petitioner been allotted a suitable mine void filling space in the vicinity either.

3.23 Moreover, like the Review Petitioner's Plant, most of the power plants located in Odisha, Chhattisgarh, Uttar Pradesh, Madhya Pradesh and Assam that are located in coal bearing areas have difficulty in utilizing even 50% of their fly ash generation. The absence of many cement plants or any major national highway construction in the vicinity, leads to low fly ash utilisation from the Plant.

3.24 Thus, the Review Petitioner's inability to achieve 100% fly ash utilisation is due to uncontrollable reasons and despite Review Petitioner's best efforts. The Review Petitioner's inability to achieve 100% fly ash utilisation is thus not on account of any failure on the Review Petitioner's part. In the circumstances, this Ld. Commission's direction to achieve 100% fly ash utilisation is impossible to comply with. Therefore, it is prayed that the cost towards construction of a new ash pond may kindly be allowed.

4. The Review Petitioner submits that it is presently one of the cheapest sources of electricity in the State for GRIDCO and ranks significantly high on the merit order. Further, even if the incremental costs towards the new ash pond are allowed, the tariff of the Review Petitioner will still remain competitive, and it will continue to rank high in the merit order of the State. Thus, it is imperative that the said costs be allowed for the sustained operation of the Plant beyond June 2026 and to ensure the continued supply of reliable and cost-effective power by the Review Petitioner to the State of Odisha.

5. As repeatedly averred by the Review Petitioner, the construction of a new ash pond, commensurate with a life extension of 15 years, is a basic requirement and is an integral part of the R&M activity, without which continuous operation of the Plant and the benefits accruing out of capital expenditure to be made towards life extension will be at stake. Thus, life extension cannot be undertaken in line with the Impugned Order without provision of a new ash pond.



Satanish Kumar Satapathy

6. For the reasons stated above, the Review Petitioner is constrained to file the present petition. It is submitted that the Review Petitioner will suffer grave prejudice and injustice if the Order under review is not modified in the manner prayed below. Indeed, the Review Petitioner cannot operate its plant beyond June 2026 in the event it is not allowed to construct a new ash pond, thereby rendering the Order itself futile.
7. It is submitted that this Hon'ble Commission has the widest power to do complete justice to the Petitioner under Sections, 62, 86 and 94(1)(f) of the Act read with Regulations 70, 76, 78 and 79 of the OERC Conduct of Business Regulations. It is humbly stated that as is well settled that justice is a virtue that transcends all technicalities, rules and barriers. It is prayed that this Hon'ble Commission may kindly exercise its powers to determine the Petitioner's cost for R&M appropriately, do complete justice on the question and to avoid miscarriage of justice.
8. The present Review Petition is within time, *bona fide* and in the interest of justice.

### PRAYERS

In view of the facts and circumstances detailed above, it is most respectfully prayed that this Hon'ble Commission may be pleased to:

- a) Allow the present Review Petition as stated above;
- b) Review and modify the Order dated 03.11.2021 in Case No. 66/2021 to approve the proposed capital expenditure of INR 140 crore for construction of a new ash pond; and
- c) Pass such further orders as this Hon'ble Commission may deem fit.



*Amresh Kumar Satapathy*  
DEPONENT

Place: Bhubaneswar  
Date: 24 November 2021



*[Signature]*  
24.11.2021  
**PUSKAR SAHOO**  
NOTARY, BHUBANESWAR  
GOVT. OF ODISHA  
Mob: 9337129137



**Action Plan for 100% Average Fly Ash Utilization for the 1<sup>st</sup> compliance cycle as per MoEF Notification Dated 31.12.2021.**

Every coal or lignite based thermal power plant (including captive or co-generating stations or both) shall be primarily responsible to ensure 100 per cent utilisation of ash (fly ash, and bottom ash) generated by it in an eco-friendly manner such as in manufacturing of Bricks, Asbestos, PPC Cement, Ready Mix Concrete, Ash Aggregates, Construction of fly over, embankments, geo-polymers, Construction of Dams, filling up of Low-Lying Areas, Use in Agriculture & for protection of shorelines. For achieving this 100% ash utilization targets, the notification has specified compliance cycle of 3 years, 4 years & 5 years based on the percentage ash utilization of the year 2021-22 which are as below

Utilisation percentages of thermal power plants	First compliance Cycle to meet 100 per cent utilisation
>80 per cent	3 years
60-80 per cent	4 years
<60 per cent	5 years

It is pertinent here to mention that the average ash utilization % of Ib Thermal Station of OPGC was 28.24 % (40.41% for OPGC-I & 23.29% for OPGC-II) and hence 5 years compliance cycle is applicable for OPGC with no mandate of minimum 80% utilization in each Financial Year. For the same OPGC has choked out a detailed utilization Plan which is as below:

5 Years Action Plan For Cumulative Ash Utilization-2X210 MW								
Year	Ash Generation		Ash Utilization					
			Bricks & Asbestos	Road	Dyke Height	Low Lying	Mine Void	Total Utilization
2022-23	Balance Unutilized Ash of 2022-23	685504	-	-	-	-	-	-
2023-24	Projected Ash Generation 2023-24 at 80 % PLF	934400	30000	250000	350000	500000	0	1130000
2024-25	Projected Ash Generation 2024-25 at 80 % PLF	934400	30000	250000	350000	500000	0	1130000
2025-26	Projected Ash Generation 2025-26 at 80 % PLF	934400	30000	0	0	500000	500000	1030000
2026-27	Projected Ash Generation 2026-27 at 80 % PLF	934400	30000	0	0	500000	600000	1130000
Total		4423104	120000	500000	700000	2000000	1100000	4420000
Cumulative % Ash Utilization		100						

5 Years Action Plan For Cumulative Ash Utilization-2X660 MW								
Year	Ash Generation		Ash Utilization					
			Cement	Road	Dyke Height	Low Lying	Mine Void	Total Utilization
2022-23	Balance Unutilized Ash of 2022-23	2166218	-	-	-	-	-	-
2023-24	Projected Ash Generation 2023-24 at 80 % PLF	2336000	200000	0	330000	450000	0	980000
2024-25	Projected Ash Generation 2024-25 at 80 % PLF	2336000	2500000	250000	330000	450000	0	3530000
2025-26	Projected Ash Generation 2025-26 at 80 % PLF	2336000	2500000	0	330000	450000	400000	3680000
2026-27	Projected Ash Generation 2026-27 at 80 % PLF	2336000	2500000	0	0	450000	400000	3350000
Total		11510218	7700000	250000	990000	1800000	800000	11540000
Cumulative % Ash Utilization		100						



10 Years Action Plan For legacy Ash Utilization-2X660 MW & 2X210 MW ( Station)								
Year	Ash Generation		Ash Utilization					Total Utilization
			Cement	Road	Dyke Height	Low Lying	Mine Void	
	Legacy Ash Stock till 31.03.2022	12735300						
2022-23	Legacy Ash to be utilized (20% of installed capacity generation of Ash)	876000	0	0	291011	665415	0	956426
2023-24	Legacy Ash to be utilized (35% of installed capacity generation of Ash)	1539000	0	400000	500000	639000	0	1539000
2024-25	Legacy Ash to be utilized (50 % of installed capacity generation of Ash)	2190000	0	500000	600000	1000000	0	2190000
2025-26	Balance Legacy Ash to be utilized	1150840	0	0	115000	700000	350000	1165000
2026-27	Balance Legacy Ash to be utilized	1150840	0	0	115000	700000	350000	1165000
2027-28	Balance Legacy Ash to be utilized	1150840	0	0	115000	700000	350000	1165000
2028-29	Balance Legacy Ash to be utilized	1150840	0	0	115000	700000	350000	1165000
2029-30	Balance Legacy Ash to be utilized	1150840	0	0	115000	700000	350000	1165000
2030-31	Balance Legacy Ash to be utilized	1150840	0	0	115000	700000	350000	1165000
2031-32	Balance Legacy Ash to be utilized	1150840	0	0	115000	700000	350000	1165000
	Cumulative % Ash Utilization	100						12744426

The Steps taken or the proposal to achieve the above targets are as below.

#### Utilization of Fly Ash in Cement Manufacturing

##### **Proposal-1 Dry Fly Ash transportation to Dalmia Cement (DCBL, Rajganpur)**

It is proposed to deliver Dry Fly Ash to M/s DCBL, Rajganpur Plant (at Zero cost to DCBL), to get the assured evacuation of 1.02 million MT of Dry Fly Ash per annum.

Presently, M/s DCBL is the only Cement Plant in the vicinity i.e., at a distance of less than 100 kms (Rail Route) and turnaround of rakes can be done easily for such distance. Also, M/s DCBL is planning for an expansion Project and has assured to lift around Two Million MT of Dry Fly Ash annually from OPGC by deploying additional BTAP rakes in future. With gradual expansion of their Units at Rajganpur, which shall enable us for long term sustainable ash utilization even after capacity expansion plan of OPGC III (Unit 5 & 6).

##### **Proposal Gist:**

- Rakes to be utilized: Two numbers of BTAP Rakes. (Third party leased)
- Assured Quantity to be evacuated: 1.02 million MT.
- Mode of operation: Leased Rakes under LSFTO policy of Indian Railways
- Rake lease charges: Rs. 12.77 Cr per annum (including GST) ie. Rs. 6.38 Cr per rake
- Estimated rake lease cost /MT considering 14 rakes/month/rake: Rs. 127.08/MT
- Railway freight & other charges: Rs.210.25/MT.
- Total cost per MT approx.: 337.33/MT (including GST)
- Total financial implication per annum: approx. 33.80 Cr
- Involvement of Third-party logistics provider for entire co-ordination for movement.
- Single destination for Fly ash rakes: DCBL, Rajganpur Plant (within 100 km as per FOIS)
- Agreement to be executed:
  - a) Tri-partite agreement (OPGC, DCBL & TMIL- Third Party logistics provider)
  - b) Bi-partite agreement (OPGC & DCBL)





- Agreement Tenure: 14 years (with exit clause after 10 years)
- Rate Variation:
  - a) Rake lease fixed for entire contract period.
  - b) Railway freight & other charges (escalation as per Railway policy)

#### **Proposal-2 Transportation of fly ash to various Cement Plants of Adani Cement**

- It is proposed to execute a Fly Ash Supply Agreement between OPGC & Adani Cement. for transportation of Fly Ash in BCFC/BOXN rake to get the assured evacuation of 0.6-1 million MT of Fly Ash per annum.
- M/s Adani Cement, (ACC & Ambuja Cement) has ordered BCFC rakes and BOXN rakes for transportation of Fly Ash from various Power Plants to their Cement Plants based on plant requirement and logistics feasibility.
- M/s Adani have offered to lift 14-15 rakes per month from OPGC plant to various cement Plants in eastern region located in Sank rail, Sindri, Bargarh, Chaibasa, Damodar & Farakka. All the plants are in the range of 110 km to 628 km from OPGC Plant through Indian Railway Network and Railway freight varies from Rs. 186 to Rs 813/ Tonne.

Plant Location	Sankrail	Sindri	Bargarh	Chaibasa	Damodar	Farakka
Distance from OPGC Plant	521	404	110	277	407	628
Basic Freight	636	500	170	367	500	744
Busy Season Surcharge 15%	95	75	26	55	75	112
Development Charge 5%	37	29	10	21	29	43
Freight Discount @ 10%	-73	-58	-20	-42	-58	-86
Net Freight (Rs)	695	546	186	401	546	813

Based on the requirement of various plants, weighted average freight have been calculated and freight subsidy of Rs. 400/MT is required to be paid to Adani for transportation of Fly ash from OPGC Plant to various destination in long term basis.

#### **Proposal Gist:**

- Rakes to be utilized: BCFC/BOXN Rakes. (Owned by Adani Group)
- Assured Quantity to be evacuated: 0.6-1 million MT.
- Mode of operation: Through Adani Rakes BCFC/BOXN under LSFTO policy of Indian Railways
- Freight subsidy to be paid / MT approx.: Rs.400/MT (including GST)
- Additional cost involved: Railway Shunting/Fixed siding charges (1.39 Lakh/rake)





- Total cost per MT approx.: 440/MT (including GST)
- Total financial implication per annum: approx. 44 Cr
- Diversified destination of cement plant: Multiple location in Eastern India.
- Involvement of Strong Channel of Adani group for entire co-ordination for movement.
- Agreement to be executed: Bi-partite agreement (OPGC & Adani)
- As delivery period of BCFC rakes are 7-10 months, initially BOXN rakes shall be deployed for transportation till the delivery of BCFC rakes by the manufacturer
- Agreement Tenure: 10 years
- Rate Variation:
  - a) Freight Subsidy fixed for entire contract period.
  - b) Railway shunting/siding charges (escalation as per Railway policy)

#### **Utilization of Fly Ash in Brick/Asbestos Manufacturing**

At present OPGC is has been utilizing on an average 12 thousand MT/Year of fly ash in brick & cement manufacturing. OPGC plans to augment it to 30 thousand MT/Year. OPGC has an inhouse brick plants for manufacturing of around 15000 bricks per day, the plant is not running to its fullest capacity for being unable to dispose the final products. OPGC proposes to establish a sub company for sale of fly ash bricks to surrounding communities at minimal rate of production cost with no profit so that the plant can run at its fullest capacity. OPGC at present supplies ash to about 13 brick plants and proposes to include a greater number of brick plants within in 50 Km to 100 Km radius by adopting door step delivery of ash as per the provisions of the Fly Ash Notification-2021. OPGC also proposes to support R&D in brick manufacturing so as to use bottom ash in replacing the sand used for manufacturing of fly ash bricks this will further strengthen utilization of bottom ash. OPGC will further ensure supplying ash to Vaisakha Asbestos to the tune of around 1000 MT/Month.

#### **Utilization of Fly Ash in Low Lying Area Filling**

OPGC at present has a rate contract for utilization of around 2 lakh MT of ash annually in low lying areas. OPGC has further floated a tender to utilize further 2 Lakh MT of Ash annually. Further OPGC is in process of developing a dedicated ash utilization team whose one of the focus shall be identification of stone quarries and other low-lying areas in consultation with District Administration. All necessary clearances such as CTE from OSPCB.

#### **Utilization of Fly Ash in Mine Void Filling.**

MoEF & CC vide fly ash notification of 2021 has mandated the use of fly ash in external overburden dump to the tune of around 25% blending. In support of the notification, it has been intimated to all mines vide Ministry of Mine Oder dated 13<sup>th</sup> May 2023 to submit a stability report to DGMS while using fly ash in blending external overburden. OPGC thus sees this as an opportunity to use its ash in external overburden dump of Lakhanpur Open Cast Mines of MCL. Further discussion of OPGC with its sister concern (OCPL) is in progress with its sister concern to utilize ash in mine voids and external dump of Manoharpur mines.



**Utilization of Fly Ash in Dyke Height Raising.**

OPGC at present increasing the dyke heights of Ash Pond-C by 3 m and Tilia Ash Ponds by 4 m. It has been estimated that a balance quantity of around 5.5 Lakh MT will be progressively utilized in coming years in this activity. Further OPGC has proposed to increase the dyke height of Ash Pond A & C combinedly by additional 3 m by inward raising. This will further open avenue to utilize 6 Lakh MT of ash. Ash shall also be used in construction of new up coming ash ponds of OPGC.





ODISHA POWER GENERATION CORPORATION LTD.

EOI No. 09 (Sl.No.06)

Dated: 11.09.2017

**INVITATION FOR EXPRESSION OF INTEREST (EOI)**

**FROM**

**INTERESTED PARTIES FOR**

**ESTABLISHING INTEGRATED CEMENT PLANT/CEMENT CLINKER GRINDING UNIT/  
CEMENT BLENDING UNIT / ALLIED PRODUCTS MANUFACTURING UNITS IN /  
ADJACENT TO OPGC POWER PLANT AT ITPS ON "BUILT, OWN AND OPERATE (BOO) /  
JV MODE"**

**1.0 Introduction**

Odisha Power Generation Corporation Limited (OPGC), incorporated on Nov' 14, 1984, started as a wholly owned government company of the state of Odisha with the main objective of establishing, operating & maintaining large thermal power generating stations. In pursuit of its objectives, OPGC established **IB Thermal Power Station** in the Ib valley area of Jharsuguda district in the state of Odisha with operational capacity of 2 X 210 MW. These units have become operational since 1994 (1st Unit) and 1996 (2nd Unit). OPGC has firmly established its credentials as a successful power generating company both technically & commercially by providing safe, clean & reliable power.

IB Thermal Power Station (ITPS) is a coal based thermal power plant operating two units of 210 MW each. About 8000 MT of coal is burnt daily for power generation of Unit #1 & 2 (2x210 MW) and approx. 3200 MT of ash is generated daily. Again for the purpose of capacity enhancement another 2 units of 660 MW each is under construction adjacent to the existing operational units.





Presently OPGC ash is being utilized in land development, ash dyke raising, road embankment construction, brick industries & cement/asbestos industries etc. OPGC intends to increase its ash utilization by inviting EOI from interested parties for establishing integrated cement plant/ cement clinker grinding unit/ cement blending unit/ allied products manufacturing unit in/ adjacent to OPGC power plant at ITPS, Banharpali on "Built, Own and Operate (BOO)/ JV mode.

<b>Location:</b>	Orissa Power Generation Corporation Ltd (OPGC)
	Ib Thermal Power Station (ITPS)
	Banharpali, Dist-Jharsuguda
	Orissa – 768234; India.
	Latitude - 21° 42' North
	Longitude - 83° 52' East
Generating Capacity:	420 MW (2x210 MW);
	2 X 660 MW under Construction
Nearest Railway Station:	Belpahar (Code: BPH); 18 Km from Generating Station
	Jharsuguda (Code: JSG); 40 Km

## 2.0 Expression of Interest:

OPGC invites "Expression of Interest (EOI)" from interested parties for establishing integrated cement plant/ cement clinker grinding unit/ cement blending unit/ allied products manufacturing unit of 1 MTPA or higher capacity in/ adjacent to OPGC Power Plant premises in ITPS, Banharpali on Built, Own and Operate (BOO)/JV mode, using Ash from OPGC thermal power plants. Interested parties may clearly indicate the inputs required from OPGC.

## 3.0 Purpose of EOI:

Through this EOI, OPGC intends to shortlist reputed parties having requisite capability and are willing to establish integrated cement plant/ cement clinker grinding unit/ cement blending unit/ allied products manufacturing unit of 1 MTPA or higher capacity in/ adjacent to IB Thermal Power Station on Built, Own and Operate (BOO) basis/JV mode.



The Interested Parties shortlisted on the basis of their “Expression of Interest (EOI)” may be considered for further steps of business partner selection.

#### **4.0 Role of the Interested Parties/OPGC**

- 4.1. Interested Parties may examine and indicate the location near power station for establishing the cement manufacturing unit (integrated cement plant/ blending unit/ clinkering unit) or any allied product manufacturing unit.
- 4.2. The capacity of manufacturing unit shall be at least 1 MTPA capacity. A higher capacity establishment may be preferred.
- 4.3. Ash required for the project shall be made available by OPGC.
- 4.4. Interested party shall sign a long term agreement with OPGC for use of Fly Ash & Electricity exclusively from OPGC from the date of commissioning of cement/Allied product plant.
- 4.5. All other raw material required for manufacturing unit shall be arranged by the Interested Party.
- 4.6. All clearance related to establishment of manufacturing unit shall be obtained by the interested party; however OPGC shall provide necessary assistance in this process.
- 4.7. The interested party/JVC shall be responsible for marketing, selling and logistics of the raw material and products of these Plants.

#### **5.0 Required Information:**

- 5.1. Financial strength of the organization is required to establish the manufacturing facility (organization structure, audited accounts of last three financial years, etc.). Audited Balance Sheets for last three (3) years may also be submitted.
- 5.2. Interested parties may clearly indicate the inputs required from OPGC.
- 5.3. The party submitting the EOI shall be bearing all costs associated with the preparation and submission of the EOI and OPGC will, in no case be responsible or liable for these costs, regardless of the conduct or outcome of the assessment/evaluation process.



## 6.0 Submission of EOIs:

Interested parties are required to submit all required documents complete in all respects with one original and one authenticated copies for each in hard form under the registered post or hand delivered to the address:

AGM-SCM,

Contract Cell,ITPS, Banharpali, OPGC

**On or before Dt.10.10.2017** The top left hand corner of the envelope shall indicate with "EOI FOR ESTABLISHING INTEGRATED CEMENT PLANT/ CEMENT CLINKER GRINDING UNIT/ CEMENT BLENDING UNIT/ ALLIED PRODUCTS MANUFACTURING IN/ ADJACENT TO OPGC POWER PLANT AT ITPS, BANHARPALI ON "BUILT, OWN AND OPERATE (BOO)/JV MODE".

Late submissions will not be accepted. Electronic (Soft form) copy of the EOI should be sent to the email address given below. If there is any discrepancy in the documents submitted in hard form & Soft form, the documents in hard form will be considered for evaluation.

- i. Each page of the documents submitted shall be duly authenticated by the applicant.
- ii. The language of submission of applications shall be in English.
- iii. Financial Data, Project Costs shall be in INR only.

For any further clarification/queries the following personals may be contacted:

Sri Bijay Mishra; G.M. Civil; ITPS; M - 9338715419

Sri Akhila Satapathy; Manager Civil; M – 7682854481





### Standard Format for Expression of Interest

Date: \_\_\_\_\_

Mr. \_\_\_\_\_

ITPS, Banharpali, OPGC

Jharsuguda, Odisha

Subject: Expression of Interest ("EOI") for establishing integrated cement plant or cement clinker grinding unit or cement blending unit or allied products manufacturing unit, in or adjacent to OPGC Power Plant premises at ITPS, Banharpali on Built, Own and Operate (BOO) or JV mode.

Dear Sir,

In response to your public advertisement in [*Insert the names of the newspaper and/or website*] on [*Insert date of the advertisement*] inviting EOI for establishing integrated cement plant or cement clinker grinding unit or cement blending unit or allied products manufacturing unit, in or adjacent to OPGC Power Plant at ITPS, Banharpali premises on Built, Own and Operate (BOO) or JV mode, we hereby submit our EOI.

We have also attached information according to the standard form as per Annexure. The information furnished by us in this EOI is true, correct and accurate to the best of our knowledge.

Sincerely yours,

On behalf of the firm/company/organization:

Signature: \_\_\_\_\_



*(Person signing the EOI and supporting documents should be an Authorized Signatory supported by necessary Board resolutions)*

Name of signatory; Designation; Company Seal/stamp

### **Annexure**

#### 1. Name and address

- i. Name of the Firm/Company/Organization:
- ii. Corporate Address:
- iii. Registered Address:
- iv. Telephone No:
- v. Fax:
- vi. Email:

#### 2. Contact Person:

- i. Name:
- ii. Designation:
- iii. Telephone No:
- iv. Email:

#### 3. Company Profile:

- i. Core area of expertise:
- ii. Date of Incorporation:
- iii. CIN No.:
- iv. GST No.:
- v. PAN No.:
- vi. Shareholding Pattern:
- vii. Financial Capability (Including Turnover, Reserve and Surplus etc)

#### 4. Key Operating parameters for last three years: [Installed Capacity, Utilization factor etc.]

#### 5. Supporting Documents:



[Provide copy of the registration, copy of PAN of the firm; with their latest renewals where applicable, Audited Financials for last three Financial years]

6. Experience/ Major Projects under construction/operation by the Firm/Company/Organization (Along with value and time of completion/ award);
7. Proposed Project details:
8. Location for which company is interested (in order of preference)
  1. ....
  2. ....
  3. ....
  4. ....







**ODISHA POWER GENERATION CORPORATION LIMITED**  
**IB THERMAL POWER STATION**  
**At/PO: BANHARPALI, DIST: JHARSUGUDA – 768 234 (ODISHA)**

**NOTICE INVITING TENDER**

OPGC invites sealed bids from bona fide and financially sound Registered Agencies/Firms/Companies for execution of the following works & supplies for its 2x210MW power plant at Banharpali :

**WORK TENDER (NIT No. ITPS/CC-22/2017/09, Date: 11<sup>th</sup> September, 2017 (Telephone: 06645-289-232/315/221/245; Email: [bailochan.jena@opgc.co.in](mailto:bailochan.jena@opgc.co.in); [satya.tarai@opgc.co.in](mailto:satya.tarai@opgc.co.in); [siba.pati@opgc.co.in](mailto:siba.pati@opgc.co.in); [ashwendra.upadhyay@opgc.co.in](mailto:ashwendra.upadhyay@opgc.co.in))**

S/N	Name of the work	Tender cost	EMD (Rs.)	Contract Period	Bid Sale/ Issue date	Date of receipt & submission /Opening of Bid
1.	ARC for Condition Monitoring of Equipments at ITPS	Rs.5,000/- + GST	1% of total quoted price	As per Bid Document	19.09.17 to 10.10.17	Up to 15:00 Hrs on 11.10.2017/ 15:30 Hrs onwards on 11.10.2017
2.	Detailed Energy Audit for PAT Cycle-II of ITPS (2 x 210 MW), OPGC Ltd.	Rs.5,000/- + GST	1% of total quoted price	As per Bid Document	15.09.17 to 04.10.17	Up to 15:00 Hrs on 05.10.2017/ 15:30 Hrs onwards on 05.10.2017
3.	Painting of Dry Ash Silo, Ash pipelines & structurals of Unit#1&2 at ITPS	Rs.1,000/- + GST	1% of total quoted price	As per Bid Document	25.09.17 to 16.10.17	Up to 15:00 Hrs on 17.10.2017/ 15:30 Hrs onwards on 17.10.2017
4.	Construction of Balance road from ash pond junction to ash pond at ITPS	Rs.5,000/- + GST	1% of total quoted price	As per Bid Document	20.09.17 to 11.10.17	Up to 15:00 Hrs on 12.10.2017/ 15:30 Hrs onwards on 12.10.2017
5.	Landscaping and construction of ash mound over ash pond 'B' at ITPS	Rs.10,000/- + GST	1% of total quoted price	As per Bid Document	20.09.17 to 11.10.17	Up to 15:00 Hrs on 12.10.2017/ 16:00 Hrs onwards on 12.10.2017
6.	Establishing cement plant adjacent to ITPS (EOI)	-	-	-	EOI	Up to 15:00 Hrs on 10.10.2017/ 15:30 Hrs onwards on 10.10.2017

7.	Annual Contract for Material Handling at Warehouse of ITPS	Rs.5,000/- + GST	1% of total quoted price	As per Bid Document	15.09.17 to 26.09.17	Up to 15:00 Hrs on 27.09.2017/ 15:30 Hrs onwards on 27.09.2017
8.	Providing APP Membrane over roof of Resource Centre Building at ITPS	Rs.5,000/- + GST	1% of total quoted price	As per Bid Document	25.09.17 to 16.10.17	Up to 15:00 Hrs on 17.10.2017/ 16:00 Hrs onwards on 17.10.2017
9.	Annual Contract for providing services for publication of tender notices etc.	Rs.5,000/- + GST	Rs.20,000/-	As per Bid Document	15.09.17 to 05.10.17	Up to 15:00 Hrs on 06.10.2017/ 15:30 Hrs onwards on 06.10.2017

Cost of bid document (non-refundable) shall be paid by Demand Draft in favour of OPGC Ltd. drawn on State Bank of India (Code-9510) / Andhra Bank (Code-0662) / Central Bank of India (Code-283899) payable at ITPS, Banharipali or ICICI Bank, (Code-ICIC0003679) payable at Telenpali. Cost of bid document shall have to be submitted along with the bid and the DD towards the tender cost (separate from EMD) should be prepared on or before the last date of submission/receipt of tender, otherwise the bid shall be liable for rejection. In case of any discrepancy found between tender document submitted by the agency and the master copy in our office, the latter should prevail. No claim on this account shall be entertained. Complete and signed sealed bids in hard copy form only shall be received at Contract Cell, ITPS. Bids shall be opened at Contract Cell, ITPS in the presence of the bidders or their authorized representatives, if present at the time of opening. If the last date of issue / receipt / opening happens to be a HOLIDAY, the tender will be issued/ received / opened at the respective time on the next working day. The photocopies of all the supporting documents required for participating in the tender mentioned in NIT/Tender paper shall be submitted along with the bid; otherwise the bid is liable for rejection. Bids without EMD will be rejected outright.

**NB: Bidders having the requisite qualifying requirements as specified in the bid document shall only be considered for tender evaluation.**

Bids received after stipulated date & time shall not be entertained. OPGC shall not take any liability on account of any postal/courier delay. OPGC reserves the right to accept / reject any or all tenders, seek additional clarifications, split up the scope among eligible bidders or cancel the tender altogether without assigning any reasons thereof.

**Important:** The detailed NIT along with Terms and Conditions are available for download at OPGC website at [www.opgc.co.in](http://www.opgc.co.in). Addenda/Corrigenda/ Extensions, if any, will be notified on the OPGC website only and will not be published in any other media. Interested companies or entities may visit OPGC website for the tender timeline and other details.

Sd/- AGM-SCM

(Email: [bkmishra@opgc.co.in](mailto:bkmishra@opgc.co.in); Landline No. 06645-289703)

**SAFE & CLEAN POWER IS OUR COMMITMENT**

**OPGC encourages all existing or new vendors/suppliers to register with us as empanelled vendors. Please visit our website [www.opgc.co.in](http://www.opgc.co.in) for details.**









**Expression of Interest (EOI)**

**Name of work:** "Utilization / offtaking of ash (Fly ash & Pond ash) from OPGC, IB Thermal Power Station at Banharpali, Jharsuguda, Odisha"

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ODISHA POWER GENERATION CORPORATION LTD.  
Ib Thermal Power Station, Banaharpali, Jharsuguda – 768234  
(ODISHA)  
Email: contract@opgc.co.in



**ODISHA POWER GENERATION CORPORATION LIMITED**  
**IB THERMAL POWER STATION**  
**At/PO: BANHARPALI, DIST: JHARSUGUDA – 768 234 (ODISHA)**

**NOTICE INVITING TENDER**

OPGC invites sealed bids from bona fide and financially sound Registered Agencies/Firms/Companies for execution of the following works & supplies for its thermal power plant at Banharपाली:

**WORKS TENDER FOR UNIT#1&2 (NIT No. ITPS/CC-22/2020-21/02, Date: 19<sup>th</sup> May, 2020) (Telephone: 06645-289-232/355/328/245; Email: [bailochan.jena@opgc.co.in](mailto:bailochan.jena@opgc.co.in); [satya.tarai@opgc.co.in](mailto:satya.tarai@opgc.co.in); [rabindra.panda@opgc.co.in](mailto:rabindra.panda@opgc.co.in); [siba.pati@opgc.co.in](mailto:siba.pati@opgc.co.in))**

S/ N	Name of the work	Tender cost	EMD (Rs.)	Contract Period	Bid Sale/ Issue date	Date of receipt & submission /Opening of Bid
1.	Raising of embankment height for Ash Pond 'C' at ITPS	Rs.11200/- including GST	1% of total quoted price	As per Bid Document	20.05.20 to 10.06.20	Up to 15:00 Hrs on 11.06.2020/ 15:30 Hrs onwards on 11.06.2020
2.	Ash Utilization in reclamation of low land inside plant at ITPS	Rs.5600/- including GST	1% of total quoted price	As per Bid Document	21.05.20 to 11.06.20	Up to 15:00 Hrs on 12.06.2020/ 15:30 Hrs onwards on 12.06.2020
3.	Expression of interest for Utilization/Off-taking of Ash from OPGC	--	1% of total quoted price	As per Bid Document	20.05.20 to 09.06.20	Up to 15:00 Hrs on 10.06.2020/ 15:30 Hrs onwards on 10.06.2020
4.	Arc Flash Study and Training at ITPS	Rs.5600/- including GST	1% of total quoted price	As per Bid Document	25.05.20 to 16.06.20	Up to 15:00 Hrs on 17.06.2020/ 15:30 Hrs onwards on 17.06.2020
5.	Overhauling of Main Oil Pump, Servicing of HPT&IPT Stop & Control Valves and HRH Strainers, Inspection & Replacement of Generator Hydrogen Seals	Rs.5600/- including GST	1% of total quoted price	As per Bid Document	20.05.20 to 09.06.20	Up to 15:00 Hrs on 10.06.2020/ 15:30 Hrs onwards on 10.06.2020
6.	AOH of Boiler Pr. Parts, Boiler & Turbine valves, Fuel Firing System of Unit#2	Rs.5600/- including GST	1% of total quoted price	As per Bid Document	20.05.20 to 09.06.20	Up to 15:00 Hrs on 10.06.2020/ 15:30 Hrs onwards on 10.06.2020
7.	Upgradation of Chiller Unit (75TR) with installation, commissioning & testing.	Rs.5600/- including GST	1% of total quoted price	As per Bid Document	20.05.20 to 09.06.20	Up to 15:00 Hrs on 10.06.2020/ 15:30 Hrs onwards on 10.06.2020
8.	Repair of Boiler Tube Leakage at ITPS for the FY- 2020-21	Rs.5600/- including GST	1% of total quoted price	As per Bid Document	20.05.20 to 09.06.20	Up to 15:00 Hrs on 10.06.2020/ 15:30 Hrs onwards on 10.06.2020

- **e-Reverse Auction (E-RA) shall be conducted for the works at Sl. No. 1 & 6 above. The Transaction Fees for e-Reverse Auction shall be deposited to the account of MSTC Limited directly.**

The non-refundable **Transaction Fees towards e-Reverse Auction** as mentioned above shall be deposited by all Techno-Commercially qualified bidders directly to the account of MSTC before E-RA launch schedule. The date of conduct of E-RA shall be intimated in later stage to Techno Commercially qualified bidders via e-mail. Before participation in e-Reverse Auction, the bidder has to register in MSTC e-Procurement Portal well in advance and submit the E-RA fee amounting to the value intimated by M/s. MSTC Limited.

Cost of bid document (non-refundable) shall be paid by Demand Draft in favour of OPGC Ltd. drawn on State Bank of India (Code-9510) / Andhra Bank (Code-0662) / Central Bank of India (Code-283899) payable at ITPS, Banharपाली or ICICI Bank, (Code-ICIC0003679) payable at Telenpali. Cost of bid document shall have to be submitted along with the bid and the DD



towards the tender cost (separate from EMD) should be prepared on or before the last date of submission/receipt of tender, otherwise the bid shall be liable for rejection. Small scale industries/National Small-Scale Industries Corporation/ MSME firms are exempted from payment of Cost of bid document only if they are entitled for exemption of the offered service. Tenderers seeking exemption shall claim in advance along with the photocopy of Valid Registration Certificates at least two days before the due submission date. However, OPGC reserves the right to accept/ reject the exemption request if the same is found unauthenticated or not relevant to the offered item. In case of any discrepancy found between tender document submitted by the agency and the master copy in our office, the latter should prevail. No claim on this account shall be entertained. Complete and signed sealed bids in hard copy form only shall be received at Contract Cell, ITPS. Bids shall be opened at Contract Cell, ITPS in the presence of the bidders or their authorized representatives, if present at the time of opening. If the last date of issue / receipt / opening happens to be a HOLIDAY, the tender will be issued/ received / opened at the respective time on the next working day. The photocopies of all the supporting documents required for participating in the tender mentioned in NIT/Tender paper shall be submitted along with the bid; otherwise the bid is liable for rejection. Bids without EMD will be rejected outright.

**NB: Bidders having the requisite qualifying requirements as specified in the bid document shall only be considered for tender evaluation.**

Bids received after stipulated date & time shall not be entertained. OPGC shall not take any liability on account of any postal/courier delay. OPGC reserves the right to accept / reject any or all tenders, seek additional clarifications, split up the scope among eligible bidders or cancel the tender altogether without assigning any reasons thereof.

**Important:** The detailed NIT along with Terms and Conditions are available for download at OPGC website at [www.opgc.co.in](http://www.opgc.co.in). Addenda/Corrigenda/ Extensions, if any, will be notified on the OPGC website only and will not be published in any other media. Interested companies or entities may visit OPGC website for the tender timeline and other details.

Sd/- GM-SCM  
(Email: [bkmishra@opgc.co.in](mailto:bkmishra@opgc.co.in))

**SAFE & CLEAN POWER IS OUR COMMITMENT**

**OPGC encourages all existing or new vendors/suppliers to register with us as empaneled vendors. Please visit our website [www.opgc.co.in](http://www.opgc.co.in) for details.**







## 1.0 Introduction

1.1 Odisha Power Generation Corporation Limited (OPGC), operates two units of 210 MW at IB Thermal Power Station (ITPS), Banharpali. In addition to that; unit 3 & 4 (2 X 660 MW) are also in operation. Approximate 3200 MT of ash is generated daily for power generation from unit #1 & 2 (2x210 MW), and approximate 6000 MT of ash is generated daily from unit 3 & 4 (2 X 660 MW) at ITPS. Coal ash produced in the plant, are disposed in slurry form for deposition in the ash ponds. ITPS has both wet ash disposal system as well as dry ash disposal system for handling fly ash & bottom ash.

## 1.2 Basic information:

1.2.1 Plant capacity :2x210 MW (Unit 1&2); 2X660 MW (Unit 3&4)

1.2.2 Total ash disposal:10.5 Lakh MT (Unit 1&2); 28 Lakh MT (Unit 3&4)

1.2.3 The plant is situated at a distance of about 35 Kms from Jharsuguda

**Location:** Orissa Power Generation Corporation Ltd (OPGC)

Ib Thermal Power Station (ITPS)

Banharpali, Dist-Jharsuguda

Orissa – 768234; India.

Latitude - 21<sup>0</sup> 42' North

Longitude - 83<sup>0</sup> 52' East

Nearest Railway Station: Belpahar (Code: BPH);

18 Km from Generating Station

Jharsuguda (Code: JSG); 40 Km



## 2.0 Expression of Interest:

OPGC invites "Expression of Interest (EOI)" from interested parties for "Offtaking of ash from ash dyke as well as from dry ash silo; at ITPS, Banharpali, in as is and where is basis, for utilization and consumption in environment friendly manner as per the guidelines of OSPCB". Interested parties may clearly indicate the inputs required from OPGC.

## 3.0 Purpose of this EOI:

Through this EOI, OPGC intends to supply ash generated from its power stations; at free of cost to interested and capable agencies for utilization and consumptions in environment friendly manner as per guidelines of OSPCB.

The Interested Parties shortlisted on the basis of their "Expression of Interest (EOI)" will be considered for supply of ash free of cost from ITPS Banharpali, in as is and where is basis.

## 4.0 Role of the Interested Parties & OPGC

- 4.1 In order to promote utilization of fly ash as resource material; and to encourage the fly ash utilization of IB Thermal Power Station, Banharpali, Jharsuguda, Odisha; OPGC invites potential bulk users for supply / providing the fly ash to them free of cost for use in their civil construction and other works etc. Help / concessions may be offered to the bulk users in this regard subject to assessment of their genuineness & mutual interest including long term agreement / tie ups for a period of five years or more subject to force majeure conditions such as change in policies etc.
- 4.2 Prospective users may submit their preliminary offers for lifting of fly ash from the dry ash Silo for any of the units or from ash pond or ash from all these sources. The offers should include the particulars of company with the background of operation, business where ash will be utilized, tentative plan, proposed quantity of ash to be utilized etc. Preference will be given to agencies who will off take maximum quantity of ash.
- 4.3 Interested party shall sign a long-term agreement with OPGC for utilization of Fly Ash in environment friendly manner as per the guidelines of OSPCB.
- 4.4 Interested agencies will transport the dry ash in environment friendly manner for utilization / consumption as per their requirement at their risk and cost.
- 4.5 Loading of dry fly ash will be made available by OPGC free of cost in as is and where is basis; from the Silo inside plant at ITPS, Banharpali.



- 4.6 Similarly Pond ash in dry form will be made available by OPGC, free of cost in as is and where is basis at Ash Pond. Interested agencies will have to arrange for loading and transportation of ash from ash pond.
- 4.7 Mode of packing, loading, transportation and utilization must be clearly mentioned by the interested agencies.
- 4.8 Interested parties may clearly indicate the inputs required from OPGC.
- 4.9 All the works of ash packing, loading, and transportation must be executed confirming to the EHS rules and regulations of OPGC.

## 5.0 Required Information:

- 5.1 The prospective fly ash users are required to submit particulars of the firm with the background of operation, business where ash will be utilized, tentative plan, and proposed quantity of fly ash to be utilized etc.
- 5.2 The party submitting the EOI shall be bearing all costs associated with the preparation and submission of the EOI and OPGC will, in no case be responsible or liable for these costs, regardless of the conduct or outcome of the assessment/evaluation process.

## 6.0 Submission of EOIs:

Interested parties are required to submit all the documents as per the attached format complete in all respects with one original and one authenticated copies for each in hard form under the registered post or hand delivered to the address:

Mr.....

.....

ITPS, Banharpali, OPGC

On or before ..... The top left-hand corner of the envelope shall indicate with **“EOI for Utilization / offtaking of ash (Fly ash & Pond ash) from OPGC, IB Thermal Power Station At Banharpali, Jharsuguda, Odisha”**





Electronic (Soft form) copy of the EOI should be sent to the email address given below. If there is any discrepancy in the documents submitted in hard form & Soft form, the documents in hard form will be considered for evaluation.

- i. Each page of the documents submitted shall be duly authenticated by the applicant.
- ii. The language of submission of applications shall be in English.

For any further clarification/queries the following personals may be contacted:

Sri Bijay Mishra; G.M. Civil; ITPS; M - 9338715419

Sri Akhila Satapathy; Manager Civil; M – 7682854481



## Standard Format for Expression of Interest

Date: \_\_\_\_\_

Mr. ....

.....

ITPS, Banharpali, OPGC

Jharsuguda, Odisha

Subject: Expression of Interest (EOI) for Utilization / offtaking of ash (Fly ash & Pond ash) from OPGC, IB Thermal Power Station at Banharpali, Jharsuguda, Odisha

Dear Sir,

In response to your public advertisement in *[Insert the names of the newspaper and/or website]* on *[Insert date of the advertisement]* inviting EOI for, Utilization / offtaking of ash (Fly ash & Pond ash) from OPGC, IB Thermal Power Station At Banharpali, Jharsuguda, Odisha; we hereby submit our EOI.

We have also attached information according to the standard form as per Annexure. The information furnished by us in this EOI is true, correct and accurate to the best of our knowledge.

Sincerely yours,

On behalf of the firm/company/organization:

Signature: \_\_\_\_\_

*(Person signing the EOI and supporting documents should be an Authorized Signatory supported by necessary Board resolutions)*

Name of signatory; Designation; Company Seal/stamp



**Annexure - 1****1. Name and address**

- i. Name of the Firm/Company/Organization:
- ii. Corporate Address:
- iii. Registered Address:
- iv. Telephone No:
- v. Fax:
- vi. Email:

**2. Contact Person:**

- i. Name:
- ii. Designation:
- iii. Telephone No:
- iv. Email:

**3. Company Profile:**

- i. Core area of expertise:
- ii. Date of Incorporation:
- iii. CIN No.:
- iv. GST No.:
- v. PAN No.:
- vi. Shareholding Pattern:
- vii. Financial Capability (Including Turnover, Reserve and Surplus etc)

**4. Key Operating parameters for last three years: [Installed Capacity, Utilization of ash etc.]****5. Supporting Documents:**

[Provide copy of the registration, copy of PAN of the firm; with their latest renewals where applicable, Audited Financials for last three Financial years]

**6. Experience/ Major Projects under construction/operation by the Firm/Company/Organization (Along with value and time of completion/ award):**



7. Proposed details of ash utilization:
8. Proposed mode of transportation of ash:
9. Proposed quantity of ash utilization per Month / Annum.
10. Any other details.



Annexure – II

UNDERTAKING  
(On Non-Judicial Stamp Paper)

To

Date:

OPGC Address (AGM, SCM)

Subject: Undertaking for Usage of Fly Ash in Cement / construction / or other ash-based Product / industry / road construction / land filling / export to other sites in environment friendly manner.

Dear Sir,

This is to certify that we M/S -----the Interested agencies for the OPGC EOI No..... Date. \_\_\_\_\_; do hereby declare that the Fly Ash, if allocated to us, shall be used in Cement / construction / or other ash-based Product / industry / road construction / land filling / export to other sites in environment friendly manner, at our cost and risk.

Thanking you,

(Signature of authorized person)

(Name &amp; Designation)

(Seal/ Stamp of Company)



INVITATION FOR EXPRESSION (EOI)

**ODISHA POWER GENERATION CORPORATION LIMITED**  
**IB THERMAL POWER STATION**  
**AT/ PO- BANAHARPALI, JHARSUGUDA**  
**ODISHA**



**Invites**  
**Expression of Interest (EOI)**  
**FOR**  
**Utilization / offtaking of ash (Fly ash & Pond ash) from**  
**OPGC, IB Thermal Power Station**  
**At Banharpali, Jharsuguda, Odisha**

**EOI No.** : ITPS/CC-22/2020-21/04, SL No. 06 **Dt.** 09<sup>th</sup> August, 2020





## INVITATION FOR EXPRESSION (EOI)

### 1.0 Introduction

1.1 Odisha Power Generation Corporation Limited (OPGC), operates two units of 210 MW at IB Thermal Power Station (ITPS), Banharpali. In addition to that; unit 3 & 4 (2 X 660 MW) are also in operation. Approximate 3200 MT of ash is generated daily for power generation from unit #1 & 2 (2x210 MW), and approximate 6000 MT of ash is generated daily from unit 3 & 4 (2 X 660 MW) at ITPS. Coal ash produced in the plant, are disposed in slurry form for deposition in the ash ponds. ITPS has both wet ash disposal system as well as dry ash disposal system for handling fly ash & bottom ash.

### 1.2 Basic information:

- 1.2.1 Plant capacity :2x210 MW (Unit 1&2); 2X660 MW (Unit 3&4)
- 1.2.2 Total ash disposal:10.5 Lakh MT (Unit 1&2); 28 Lakh MT (Unit 3&4)
- 1.2.3 The plant is situated at a distance of about 35 Kms from Jharsuguda

**Location:** Orissa Power Generation Corporation Ltd (OPGC)

Ib Thermal Power Station (ITPS)

Banharpali, Dist-Jharsuguda

Orissa – 768234; India.

Latitude - 21° 42' North

Longitude - 83° 52' East

Nearest Railway Station: Belpahar (Code: BPH);

18 Km from Generating Station

Jharsuguda (Code: JSG); 40 Km

### 2.0 Expression of Interest:

OPGC invites "Expression of Interest (EOI)" from interested parties for "Offtaking of ash from ash dyke as well as from dry ash silo; at ITPS, Banharpali, in as is and where is basis, for utilization and consumption in environment friendly manner as per



## INVITATION FOR EXPRESSION (EOI)

the guidelines of OSPCB". Interested parties may clearly indicate the inputs required from OPGC.

### **3.0 Purpose of this EOI:**

Through this EOI, OPGC intends to supply ash generated from its power stations; at free of cost to interested and capable agencies for utilization and consumptions in environment friendly manner as per guidelines of OSPCB.

The Interested Parties shortlisted on the basis of their "Expression of Interest (EOI)" will be considered for supply of ash free of cost from ITPS Banharpali, in as is and where is basis.

### **4.0 Role of the Interested Parties & OPGC**

- 4.1 In order to promote utilization of fly ash as resource material; and to encourage the fly ash utilization of IB Thermal Power Station, Banharpali, Jharsuguda, Odisha; OPGC invites potential bulk users for supply / providing the fly ash to them free of cost for use in their civil construction and other works etc. Help / concessions may be offered to the bulk users in this regard subject to assessment of their genuineness & mutual interest including long term agreement / tie ups for a period of five years or more subject to force majeure conditions such as change in policies etc.
- 4.2 Prospective users may submit their preliminary offers for lifting of fly ash from the dry ash Silo for any of the units or from ash pond or ash from all these sources. The offers should include the particulars of company with the background of operation, business where ash will be utilized, tentative plan, proposed quantity of ash to be utilized etc. Preference will be given to agencies who will off take maximum quantity of ash.
- 4.3 Interested party shall sign a long-term agreement with OPGC for utilization of Fly Ash in environment friendly manner as per the guidelines of OSPCB.
- 4.4 Interested agencies will transport the dry ash in environment friendly manner for utilization / consumption as per their requirement at their risk and cost.
- 4.5 Loading of dry fly ash will be made available by OPGC free of cost in as is and where is basis; from the Silo inside plant at ITPS, Banharpali.





## INVITATION FOR EXPRESSION (EOI)

- 4.6 Similarly Pond ash in dry form will be made available by OPGC, free of cost in as is and where is basis at Ash Pond. Interested agencies will have to arrange for loading and transportation of ash from ash pond.
- 4.7 Mode of packing, loading, transportation and utilization must be clearly mentioned by the interested agencies.
- 4.8 Interested parties may clearly indicate the inputs required from OPGC.
- 4.9 All the works of ash packing, loading, and transportation must be executed confirming to the EHS rules and regulations of OPGC.

### **5.0 Required Information:**

- 5.1 The prospective fly ash users are required to submit particulars of the firm with the background of operation, business where ash will be utilized, tentative plan, and proposed quantity of fly ash to be utilized etc.
- 5.2 The party submitting the EOI shall be bearing all costs associated with the preparation and submission of the EOI and OPGC will, in no case be responsible or liable for these costs, regardless of the conduct or outcome of the assessment/evaluation process.

### **6.0 Submission of EOIs:**

Interested parties are required to submit all the documents as per the attached format complete in all respects with one original and one authenticated copies for each in hard form under the registered post or hand delivered to the address.

AGM- Contract Cell  
ITPS, Banharpali, OPGC,  
District- Jharsuguda, Pin- 768234

On or before 15:00 Hrs Dated. 03.09.2020. The top left-hand corner of the envelope shall indicate with **“EOI for Utilization / offtaking of ash (Fly ash & Pond ash) from OPGC, IB Thermal Power Station At Banharpali, Jharsuguda, Odisha”**







### INVITATION FOR EXPRESSION (EOI)

Electronic (Soft form) copy of the EOI should be sent to the email address given below. If there is any discrepancy in the documents submitted in hard form & Soft form, the documents in hard form will be considered for evaluation.

- i. Each page of the documents submitted shall be duly authenticated by the applicant.
- ii. The language of submission of applications shall be in English.

For any further clarification/queries the following personals may be contacted:

Sri R.N. Panda; A.G.M. Contract Cell; ITPS; E-Mail Id. [rabindra.panda@opgc.co.in](mailto:rabindra.panda@opgc.co.in)





## INVITATION FOR EXPRESSION (EOI)

### Standard Format for Expression of Interest

Date: \_\_\_\_\_

AGM- Contract Cell

ITPS, Banharpali, OPGC,

District- Jharsuguda, Pin- 768234

Subject:        Expression of Interest (EOI) for Utilization / offtaking of ash  
(Fly ash & Pond ash) from OPGC, IB Thermal Power Station  
At Banharpali, Jharsuguda, Odisha

Dear Sir,

In response to your public advertisement in [*Insert the names of the newspaper and/or website*] on [*Insert date of the advertisement*] inviting EOI for, Utilization / offtaking of ash (Fly ash & Pond ash) from OPGC, IB Thermal Power Station At Banharpali, Jharsuguda, Odisha; we hereby submit our EOI.

We have also attached information according to the standard form as per Annexure. The information furnished by us in this EOI is true, correct and accurate to the best of our knowledge.

Sincerely yours,

On behalf of the firm/company/organization:

Signature: \_\_\_\_\_

*(Person signing the EOI and supporting documents should be an Authorized Signatory supported by necessary Board resolutions)*

Name of signatory; Designation; Company Seal/stamp





## INVITATION FOR EXPRESSION (EOI)

### Annexure - 1

1. Name and address
  - i. Name of the Firm/Company/Organization:
  - ii. Corporate Address:
  - iii. Registered Address:
  - iv. Telephone No:
  - v. Fax:
  - vi. Email:
2. Contact Person:
  - i. Name:
  - ii. Designation:
  - iii. Telephone No:
  - iv. Email:
3. Company Profile:
  - i. Core area of expertise:
  - ii. Date of Incorporation:
  - iii. CIN No.:
  - iv. GST No.:
  - v. PAN No.:
  - vi. Shareholding Pattern:
  - vii. Financial Capability (Including Turnover, Reserve and Surplus etc)
4. Key Operating parameters for last three years: [Installed Capacity, Utilization factor etc.]
5. Supporting Documents:

[Provide copy of the registration, copy of PAN of the firm, with their latest renewals where applicable, Audited Financials for last three Financial years]







INVITATION FOR EXPRESSION (EOI)

6. Experience/ Major Projects under construction/operation by the Firm/Company/Organization (Along with value and time of completion/ award):

7. Proposed details of ash utilization:

8. Proposed mode of transportation of ash:

9. Proposed quantity of ash utilization per Month / Annum.

10. Any other details.





## INVITATION FOR EXPRESSION (EOI)

### Annexure – II

#### UNDERTAKING (On Non-Judicial Stamp Paper)

To

Date:

AGM- Contract Cell  
ITPS, Banharpali, OPGC,  
District- Jharsuguda, Pin- 768234

Subject: Undertaking for Usage of Fly Ash in Cement / construction / or  
other ash-based Product / industry / road construction / land  
filling / export to other sites in environment friendly manner.

Dear Sir,

This is to certify that we M/S -----the Interested agencies for the  
OPGC EOI No. .... Date. ....; do hereby  
declare that the Fly Ash, if allocated to us, shall be used in Cement / construction / or  
other ash-based Product / industry / road construction / land filling / export to other  
sites in environment friendly manner, at our cost and risk.

Thanking you,

(Signature of authorized person)

(Name & Designation)

(Seal/ Stamp of Company)



INVITATION FOR EXPRESSION (EOI)

**ODISHA POWER GENERATION CORPORATION LIMITED**  
**IB THERMAL POWER STATION**  
**AT/ PO- BANAHARPALI, JHARSUGUDA**  
**ODISHA**



**Invites**  
**Expression of Interest (EOI)**  
**FOR**  
**Purchase of ash (Fly ash & Pond ash) from**  
**OPGC, IB Thermal Power Station**  
**At Banharpali, Jharsuguda, Odisha**

EOI No. : ..... Dt.....





## INVITATION FOR EXPRESSION (EOI)

### 1.0 Introduction

- 1.1 Odisha Power Generation Corporation Limited (OPGC), operates two units of 210 MW (Unit # 1 & 2) and 2 units of 660 MW (Unit # 3 & 4) at IB Thermal Power Station (ITPS), Banharpali. Approximate 3200 MT of ash is generated daily for power generation from unit #1 & 2 (2x210 MW), and approximate 8000 MT of ash is generated daily from unit # 3 & 4 (2 X 660 MW) at ITPS. Coal ash produced in the plant, are disposed in slurry form for deposition in the ash ponds. ITPS has both wet ash disposal system as well as dry ash disposal system for handling fly ash & bottom ash.

### 1.2 Basic information:

1.2.1 Plant capacity: 2x210 MW (Unit 1&2);

2X660 MW (Unit 3&4)

1.2.2 Total ash disposal: 10.5 Lakh MT (Unit 1&2);

28 Lakh MT (Unit 3&4)

1.2.3 The plant is situated at a distance of about 35 Kms from Jharsuguda

**Location:** Orissa Power Generation Corporation Ltd (OPGC)

Ib Thermal Power Station (ITPS)

Banharpali, Dist.-Jharsuguda

Orissa – 768234; India.

Latitude - 21° 42' North

Longitude - 83° 52' East

Nearest Railway Station: Belpahar (Code: BPH);

18 Km from Generating Station

Jharsuguda (Code: JSG); 40 Km



## INVITATION FOR EXPRESSION (EOI)

### **2.0 Expression of Interest:**

OPGC invites "Expression of Interest (EOI)" from interested parties for "Purchase of ash from ash dyke as well as from dry ash silo; at ITPS, Banharpali, on as-is and where-is basis, for utilization, consumption and export to other locations inside or outside India in environment friendly manner as per the guidelines of MoEF & CC and OSPCB". Interested parties may clearly indicate the inputs required from OPGC.

### **3.0 Purpose of this EOI:**

Through this EOI, OPGC intends to sale ash generated from its power stations; to interested and capable agencies for utilization and consumptions in environment friendly manner as per guidelines of MoEF & CC and OSPCB.

**After identifying the applicants through EOI; OPGC may come out with detailed tender (open/ limited) process, for sale of ash from ITPS Banharpali, on as is and where is basis.**

### **4.0 Role of the Interested Parties & OPGC**

- 4.1 In order to promote utilization of fly ash as resource material; and to encourage fly ash utilization at IB Thermal Power Station, Banharpali, Jharsuguda, Odisha; OPGC invites EOI from potential bulk users for purchase of fly ash for use in their civil construction and manufacturing of other fly ash-based construction materials.
- 4.2 OPGC Unit # 3 & 4; is having 3 fly ash silos of capacity 2300 MT each, with state-of-the-art facility of loading in railway rakes having connectivity with Indian railways. Fly ash can be loaded from Silo for transportation to different Cement plants and other demand centres across India.
- 4.3 Loading of dry fly ash will be made available by OPGC at the agreed unit rate on as-is and where-is basis; from the Silo inside plant at ITPS, Banharpali.
- 4.4 Similarly Pond ash in dry form will be made available by OPGC, at the agreed unit rate on as is and where is basis at Ash Pond. Interested agencies will have to arrange for loading and transportation of ash from ash pond.
- 4.5 Mode of packing, loading, transportation and utilization must be clearly mentioned by the interested agencies.



### INVITATION FOR EXPRESSION (EOI)

- 4.6 Interested parties may clearly indicate the inputs required from OPGC.
- 4.7 Prospective users may submit their EOI for lifting of fly ash from the dry ash Silo or from ash pond or ash from all these sources. The offers should include the particulars of company with the background of operation, business where ash will be utilized, tentative plan, proposed quantity of ash to be utilized etc. Preference will be given to agencies who will off take maximum quantity of ash, at higher price.
- 4.8 Interested agencies will transport the dry ash in environment friendly manner for utilization / consumption as per their requirement at their risk and cost.
- 4.9 All the costs for transportation and utilization, necessary regulatory permissions, Taxes, duties etc as applicable will be in the scope of the agency.
- 4.10 All the works of ash packing, loading, and transportation must be executed confirming to the EHS rules and regulations of OPGC.

#### **5.0 Required Information:**

- 5.1 The prospective fly ash users are required to submit particulars of the firm with the background of operation, business where ash will be utilized, tentative plan, and proposed quantity of fly ash to be utilized etc.
- 5.2 The party submitting the EOI shall be bearing all costs associated with the preparation and submission of the EOI and OPGC will, in no case be responsible or liable for these costs, regardless of the conduct or outcome of the assessment/evaluation process.





## INVITATION FOR EXPRESSION (EOI)

### 6.0 Submission of EOIs:

Interested parties are required to submit all the documents as per the attached format complete in all respects with one original and one authenticated copies for each in hard form under the registered post or hand delivered to the address:

Mr.....

.....

ITPS, Banharpali, OPGC

On or before ..... The top left-hand corner of the envelope shall indicate with **“EOI for Purchase of ash (Fly ash & Pond ash) from OPGC, IB Thermal Power Station At Banharpali, Jharsuguda, Odisha”**

Electronic (Soft form) copy of the EOI should be sent to the email address given below. If there is any discrepancy in the documents submitted in hard form & Soft form, the documents in hard form will be considered for evaluation.

- i. Each page of the documents submitted shall be duly authenticated by the applicant.
- ii. The language of submission of applications shall be in English.

For any further clarification/queries the following personals may be contacted:

Sri Bijaya Kumar Mishra; Sr. G.M. Civil; ITPS; M – 9338715419

E. mail: [bijoy.mishra@opgc.co.in](mailto:bijoy.mishra@opgc.co.in)

Sri Akhila Satapathy; Sr. Manager Civil; M – 7682854481

E. mail : [akhila.satapathy@opgc.co.in](mailto:akhila.satapathy@opgc.co.in)



## INVITATION FOR EXPRESSION (EOI)

### Standard Format for Expression of Interest

Date: \_\_\_\_\_

Mr. ....

.....

ITPS, Banharpali, OPGC

Jharsuguda, Odisha

Subject: Expression of Interest (EOI) for Purchase of ash (Fly ash & Pond ash) from OPGC, IB Thermal Power Station At Banharpali, Jharsuguda, Odisha

Dear Sir,

In response to your public advertisement in [*Insert the names of the newspaper and/or website*] on [*Insert date of the advertisement*] inviting EOI for, Purchase of ash (Fly ash & Pond ash) from OPGC, IB Thermal Power Station At Banharpali, Jharsuguda, Odisha; we hereby submit our EOI.

We have also attached information according to the standard form as per Annexure. The information furnished by us in this EOI is true, correct and accurate to the best of our knowledge.

Sincerely yours,

On behalf of the firm/company/organization:

Signature: \_\_\_\_\_

*(Person signing the EOI and supporting documents should be an Authorized Signatory supported by necessary Board resolutions)*



## INVITATION FOR EXPRESSION (EOI)

Name of signatory; Designation; Company Seal/stamp

### Annexure - 1

1. Name and address

- i. Name of the Firm/Company/Organization:
- ii. Corporate Address:
- iii. Registered Address:
- iv. Telephone No:
- v. Fax:
- vi. Email:

2. Contact Person:

- i. Name:
- ii. Designation:
- iii. Telephone No:
- iv. Email:

3. Company Profile:

- i. Core area of expertise:
- ii. Date of Incorporation:
- iii. CIN No.:
- iv. GST No.:
- v. PAN No.:
- vi. Shareholding Pattern:
- vii. Financial Capability (Including Turnover, Reserve and Surplus etc)

4. Key Operating parameters for last three years: [Installed Capacity, Utilization factor etc.]

5. Supporting Documents:

[Provide copy of the registration, copy of PAN of the firm; with their latest renewals where applicable, Audited Financials for last three Financial years]





### INVITATION FOR EXPRESSION (EOI)

6. Experience/ Major Projects under construction/operation by the Firm/Company/Organization (Along with value and time of completion/ award):

7. Proposed details of ash utilization:

8. Proposed mode of transportation of ash:

9. Proposed quantity of ash utilization per Month / Annum.

10. Any other details.



## INVITATION FOR EXPRESSION (EOI)

### Annexure – II

#### UNDERTAKING (On Non-Judicial Stamp Paper)

To

Date:

OPGC Address

Subject: Undertaking for Purchase of Fly Ash for utilization in Cement plant / construction projects / or for manufacturing of other ash-based Product / industry / road construction / land filling / export to other sites in environment friendly manner.

Dear Sir,

This is to certify that we M/S -----the Interested agencies for the OPGC EOI No. .... Date. ....; do hereby declare that the Fly Ash, if allocated to us, shall be used in Cement / construction / or other ash-based Product / industry / road construction / land filling / export to other sites in environment friendly manner, at our cost and risk.

Thanking you,

(Signature of authorized person)

(Name & Designation)

(Seal/ Stamp of Company)

