



**Petition No.1484 of 2019**

**BEFORE**

**THE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION**

**LUCKNOW**

**Date of Order: 18.08.2021**

**PRESENT:**

Hon'ble Shri Raj Pratap Singh, Chairman  
Hon'ble Shri Kaushal Kishore Sharma, Member  
Hon'ble Shri Vinod Kumar Srivastava, Member (Law)

**IN THE MATTER OF** Seeking declaration from UPERC to acknowledge and approve the developments in the form of new environment regulations by the ministry of the environment Forest and climate change vide notification dt. 07.12.15 and 28.06.2018 as event of change in Law.

Prayagraj Power Generation Company Ltd, Sector 128, Noida – 201 304  
Uttar Pradesh (India)

..... **Petitioner**

1. UP Power Corporation Ltd. (through its Managing Director), 7th Floor, Shakti Bhawan Extnn, 14- Ashok Marg, Lucknow
2. Paschimanchal Vidyut Vitran Nigam Ltd. (PVVNL) through its Managing Director, Urja Bhawan, Victoria Park Meerut – 250001
3. Madhyanchal Vidyut Vitran Nigam Ltd. (MVVNL) through its Managing Director, 4A, Gokhale Marg Lucknow – 226001
4. Purvanchal Vidyut Vitran Nigam Limited (PuVVNL) through its Managing Director, DLW Bhikharipur, Varanasi – 221 004
5. Dakshinanchal Vidyut Vitran Nigam Ltd. (DVVNL) through its Managing Director, Urja Bhawan, NH-2 (Agra-Delhi Bypass Road) Sikandra, Agra-282002

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6. Kanpur Electricity Supply Company Ltd. (KESCO), through its Managing Director, 14/71, Civil Lines, KESA House, Kanpur -208001

.....Respondents

The following were present:

1. Chief Engineer-Planning, UPPCL
2. Shri Siteesh Mukherjee, Advocate, UPPCL
3. Shri Venkatesh, Advocate, PPGCL
4. Shri Suhael Buttan, Advocate, PPGCL
5. Shri Sanjay Bhargava, PPGCL

**ORDER**

**(Date of Hearing 03.06.2021)**

1. The present petition has been filed by the Petitioner, Prayagraj Power Generation Company Limited under Section 86(1)(b) and Section 86(1)(f) of the Electricity Act, 2003 (**Act**) and Article 13.3 and Article 13 of the Power Purchase Agreement (**PPA**) dated 21.11.2008, seeking declaration to acknowledge and approve the developments under the new environment regulations, promulgated by the Ministry of Environment Forest and Climate Change (**MoEF&CC**) vide notification dated 07.12.2015 along with its amendment dated 28.06.2018, as events of Change in Law.
2. The Petitioner has made following prayers :
  - a) Acknowledge and approve the promulgation of the new Environment rules and Regulations vide Notifications dated 7th December 2015 and 28th June 2018, as a Change in Law event under Article 13 of the PPA;
  - b) Allow the Petitioner ad hoc / provisional relief under Article 13.4 of the PPA dated 21.11.2008 for capital cost of Rs. 1328.68 Crore (excluding Interest During Construction & Incidental Expense During Construction i.e IDC & IEDC), Variable Cost and Additional Operation & Maintenance Expenses on account of the Change in Law Events, i.e. promulgation of the new environment rules and regulation pending final determination of costs;



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- c) Allow the Petitioner to approach this Commission subsequently to revise estimates of Capital Expenditure including IDC & IEDC, Pre-operative expenses, Design Engineering & Project Management Cost, O&M expenses and Variable expenses after the competitive bidding process as advised by the CEA; and on completion of the project work;
- d) Reimburse the legal and administrative costs incurred by the Petitioner in pursuing the instant Petition; and
- e) Pass such other orders that this Hon'ble Commission deems fit in the facts of this case.

**BRIEF FACTS OF THE CASE:**

3. In accordance with the CBG dated 19.01.2005 and amendment in 2009, issued by Ministry of Power (**MoP**), Government of India (**GoI**), PPGCL, the Special Purpose Vehicle authorized by the GoUP for the TPP, carried out the bid process for selection of a successful bidder for the TPP at Bara, Allahabad. M/s Jaiprakash Associates Limited (**JAL**) was declared as the successful bidder in the bidding process with a levelized tariff of Rs. 3.020 per kWh and a Letter of Intent (**LoI**) was issued in favor of JAL. The tariff was determined under the Case-II standard bidding documents dated 27.03.2009 for determination of tariff for procurement of power by the Distribution Licensees.
4. PPGCL with JAL as its developer, set up a 1980MWTPP consisting of 3 x 660MW Units at Tehsil Bara, District, Allahabad, Uttar Pradesh (**Project**). PPGCL entered into a PPA dated 21.11.2008 with the Distribution Licensees for sale of 1648 MW contracted capacity. The three (3) units of 660 MW at Bara, Allahabad were commissioned on 29.02.2016, 10.09.2016 and 26.05.2017, respectively.
5. Ministry of Environment Forest & Climate Change (**MoEF& CC**), vide notifications dated 7<sup>th</sup> December 2015 and 28<sup>th</sup> June 2018



(**Notifications**), amended the Environment (Protection) Rules, 1986 (**1986 Rules**), thereby bringing environment norms modifications related to air emissions including Oxides of Nitrogen, Sulphur Dioxide, Particulate Matter, Mercury, quantum of water use and stack height for abatement of Sulphur Dioxide (**SO<sub>2</sub>**) emissions.

6. A summary of new regulations on air emission as per the Notification is extracted hereinbelow:

SR. NO.	INDUSTRY	PARAMETER	STANDARDS
1	2	2	4
25	Thermal Power Plant	<b>TPPs (units) installed before 31st December, 2003</b>	
		Particulate Matter	100mg/Nm <sup>3</sup>
		Sulphur Dioxide (SO <sub>2</sub> )	600mg/Nm <sup>3</sup> (Units Smaller than 500MW capacity units) 200mg/Nm <sup>3</sup> (for units having Capacity of 500MW and above)
		Oxides of Nitrogen (NOx)	600mg/Nm <sup>3</sup>
		Mercury (Hg)	0.03mg/Nm <sup>3</sup> (for units having capacity of 500MW and above)
		<b>TPPs (units) installed after 01<sup>st</sup>January, 2004 up to 31<sup>st</sup> December, 2016</b>	
		Particulate Matter	50mg/Nm <sup>3</sup>
		Sulphur Dioxide (SO <sub>2</sub> )	600mg/Nm <sup>3</sup> (Units Smaller than 500MW capacity units) 200mg/Nm <sup>3</sup> (for units having Capacity of 500MW and above)
		Oxides of Nitrogen (NOx)	300mg/Nm <sup>3</sup>
		Mercury (Hg)	0.03mg/Nm <sup>3</sup>
		<b>TPPs (units) installed after 01<sup>st</sup>January 2017</b>	
		Particulate Matter	30mg/Nm <sup>3</sup>

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		Sulphur Dioxide (SO <sub>2</sub> )	100mg/Nm <sup>3</sup>
		Oxides of Nitrogen (NO <sub>x</sub> )	100mg/Nm <sup>3</sup>
		Mercury (Hg)	0.03mg/Nm <sup>3</sup>

All monitored values for SO<sub>2</sub>, NO<sub>x</sub> and Particulate matter shall be corrected to 6% Oxygen on dry basis.

7. Unit-1 of the Bara TPP was commissioned on 29.02.2016, Unit-2 on 10.09.2016 and Unit-3 on 26.05.2017. The applicable air emission norms for this plant are as follows:

Year of Commissioning	Particulate Matter	Sulphur Dioxide (SO <sub>2</sub> )	Oxides of Nitrogen (NO <sub>x</sub> )	Mercury (Hg)
2004-2016 (For Unit 1 & 2)	50mg/Nm <sup>3</sup>	200 mg/Nm <sup>3</sup> Units having capacity of 500 MW and above	300mg/Nm <sup>3</sup>	0.03mg/Nm <sup>3</sup>
From 1 <sup>st</sup> January 2017 onwards (For Unit 3)	30mg/Nm <sup>3</sup>	100 mg/Nm <sup>3</sup>	100mg/Nm <sup>3</sup>	0.03mg/Nm <sup>3</sup>

8. Prior to issuance of the MoEF & CC Notification, the Petitioner was compliant with the environmental norms in terms of the environmental clearance dated 08.09.2009. Earlier to execution of the PPA, there was no stipulation of SO<sub>2</sub> being limited to 200 mg/Nm<sup>3</sup> warranting installation of FGD system. As per the MoEF&CC Notification, the Petitioner is now required to keep SO<sub>2</sub> emissions from the unit (stack emission basis) below 200 mg/Nm<sup>3</sup> irrespective of ground level concentration and ambient air quality norms and to comply with the said norm, therefore, the Petitioner is required to install FGD system for each Unit. Regarding maximum specific water consumption, particulate matter emission and mercury emission, the Petitioner is complying to the amended limits.

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9. As per Article 13.1.1 of the PPA dated 21.11.2008, 'Change in Law' means occurrence of events subsequent to the date seven (7) days prior to the Bidding Deadline i.e. last date of submission of the bid in response to the RFP. The Notifications by MOEF&CC is stated to fall within the definition of a 'Change in Law' event as envisaged in the PPA, having an effect of amending existing environmental rules and thereby imposing new requirements for the Bara TPP for getting the environmental clearances.
10. As per Article 13.3.2 of the PPA, the Petitioner has duly notified the Respondents of the 'Change in Law' event which has a material and direct impact on Project cost and tariff, for supply of power to Respondents 2 to 6. The relief for impact of any Change in Law event is to be sought through Monthly Tariff Payment to be decided by the appropriate commission.
11. That the stack height post FGD installation under the Notification dated 28.06.2018 is as follows:

SL. NO.	INDUSTRY	PARAMETER	STANDARDS
1	2	3	4
"33A	Thermal Power plants with Flue gas Desulphurization (FGD)	Stack Height/Limit in Meters	Power Generation capacity : 100 MW and above $H = 6.902 (QX0.277)^{0.555}$ Or 100 m minimum
			Q = Emission rate of SO <sub>2</sub> in kg/hr * H = Physical stack height in meter *total of the all Unit's connected to stack

12. The Notifications envisage installation of FGD system as per the new SO<sub>2</sub> emission norms. The Petitioner, for installation of FGD system having a design adept with the requirement by the Bara TPP, got prepared a Feasibility Report dated February 2019 by the Tata



Consulting Engineers. A wet limestone based FGD, having SO<sub>2</sub> absorption efficiency of 95%, was proposed as the optimum and best suited technology for the same by TCE.

13. The summary of the most viable technology (Wet Lime based FGD) for abatement of SO<sub>2</sub> as per the Feasibility Reports is extracted hereinbelow:

<b>PROCESS</b>	Wet Type (Limestone to Gypsum)
<b>CONCEPT</b>	Contact with liquid absorbent - Removes SO <sub>2</sub> in Wet phase using wet Absorber and discharges the liquid waste (Gypsum slurry)
<b>ABSORBANT</b>	Calcium Carbonate (CaCO <sub>3</sub> )
<b>BYPRODUCTS</b>	Gypsum Slurry
<b>MAIN COMPONENTS</b>	- Wet Absorber - Limestone slurry preparation System - Wastewater treatment system - Gypsum handling system - Wet Stack

14. That the abovesaid installation of FGD for the 3X660 MW Bara TPP, is likely to entail the following cost as estimated in the Feasibility Report:

- a) Hard Cost of construction as per Feasibility Report dated February 2019 :

<b>PARTICULARS</b>	<b>AMOUNT (RS CRS)</b>
<b>Base Cost (including Taxes &amp; Duties, Contingency, Engineering and Project Management) without IDC&amp; IEDC</b>	1173.73
Loss of capacity Charges due to shutdown of Generation for both units for 30 days on account of duct interconnection	154.95
<b>Total cost</b>	<b>1328.68</b>
Cost per MW (1980 MW Bara STPP) without IDC & IEDC	Rs 0.671 Crs/MW



- b) The Annual Operating Cost as per the Feasibility Report dated February 2019:

PARTICULARS	AMOUNT (RS CRS)
Cost of reagent	30.20
Additional Auxiliary power consumption	62.10
Additional clarified water FGD	7.48
O & M Cost for FGD	20.20
By product Associated costs	-4.33
<b>Total cost</b>	<b>115.65</b>

15. The CEA vide letter dated 28.02.2019, on the basis of the Feasibility Report dated February 2019, has issued a recommendation report with details of the suggestive technology and indicating the cost for the installation of such FGD. The CEA has estimated the Hard Cost for implementation at Rs 0.37 Per MW (at Rs 732.6 Crs) as the base cost only excluding opportunity cost related to interconnection of FGD, Taxes & Duties and IDC & IEDC. Additional annual Operational Expenditure of Rs 93.14 crores per annum have been given by CEA in its report.
16. The actual cost of the FGD will be determined only after implementation of the same in a transparent manner through competitive bidding along with actual IDC & IEDC. However, to secure bankability of the project and to get the necessary funding for commencing work on the project, the Petitioner has sought in-principle approval for the estimated cost of the project.

#### Record of Proceedings

17. The Commission during the hearing held on 27.08.2019, observed that it was mandatory to place on record the original EC (Environmental Clearance) conditions and its compliance report(s). The Commission also enquired that under which provisions of the Electricity Act'03 / PPA / Regulations, "In Principle" approval was being sought without incurring any expenditure on the said event of Change in Law. The Petitioner was directed to file response to UPPCL reply dated 24.08.2019 and the Commission's observations. The





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Petitioner, filed its rejoinder in July 2020 and subsequently, vide application dated 02.03.2021, placed additional facts on record. The Commission during hearing on 05.03.2021, allowed UPPCL to file response to Petitioner's application dated 02.03.21, which has been filed on 07.04.21. The Commission during the hearing on 8<sup>th</sup> April 21 allowed the Petitioner to file rejoinder to UPPCL response dated 07.04.21 which has been filed on 15.04.21. The Commission heard the final arguments on 22<sup>nd</sup> April & 27<sup>th</sup> May 2021 and concluded the hearing.

**UPPCL reply dated 24.08.2019:**

18. UPPCL has submitted the following vide its reply dated 24.08.2019:

- (a) The Petition was Premature and was not maintainable as there was no provision in the PPA for adhoc / interim relief without incurring any expenditure towards such change in law event.
- (b) The Petitioner's claim of change in law is barred by limitation since the PPA provides for seller to give notice to the procurer of change in law as soon as reasonably practicable after becoming aware of such change in law event. The notice by the Petitioner has been issued on 01.05.2019 only whereas the MoEF&CC notification was issued on 07.12.2015.
- (c) Compliance of the environmental norms at the time of commissioning and during operation phase of the Project was the sole responsibility of the Petitioner.
- (d) The prospective bidder while submitting its bid had to structure its bid to include the cost of installing FGD system in terms of the bidding norms pertaining to the Environmental parameters.
- (e) PPGCL's Feasibility Report does not contain actual emission data and there is huge disparity between data recorded in the Feasibility Report and emission data in the Environment Compliance Report. Hence, CEA report prepared pursuant to Feasibility Report cannot be relied upon.

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(f) As per Order dated 05.08.2019 passed by the Apex Court in W.P. (Civil) No. 13029 of 1985 titled as M.C. Mehta vs. Union of India revision in the limit of NOx emission norms is to be extended to 450 mg/Nm<sup>3</sup>. In view of the above, various alternative methods viz. Flue-gas recirculation, use of low NOx burners, staged combustion and reduced oxygen concentration etc. can be used to control NOx emission.

**PPGCL rejoinder dated 13.07.2020:**

19. PPGCL has submitted the following vide its rejoinder dated 13.07.2020:

- a) Article 13 of the PPA provides for the qualifying events under "Change in Law", principles to be adopted for computing impact of Change in Law event and actions to be undertaken by the Parties in respect of notification of Change in Law event to the counterparty and tariff adjustment and payment thereof on account of Change in Law event. However, none of the Articles of the PPA stipulate that PPGCL can claim compensation towards any Change in Law event only after incurring the said expenditure. Therefore, the PPA does not place any restriction upon PPGCL vis-à-vis the stage at which PPGCL can approach the Commission for seeking relief of Change in Law.
- b) PPGCL, owing to the exorbitant nature of the proposed expenditure is not in the position to meet the said expenditure from its internal accruals and would be required to seek assistance of Financial Institutions, **hence, recognition of the FGD Notification as 'Change in Law' is a necessity for any such Institution to consider debt funding to PPGCL to meet the requirement of the revised emission norms.**
- c) There is no pre-specified tariff re-imburement mechanism under the PPA to give sanctity to recovery of expenditure made by PPGCL in so far as installing FGD & Associated Systems is

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concerned, save and except the general principle of compensating the party affected by the Change in Law event to the same economic position as if such Change in Law has not occurred. In terms of the Judgment of the Hon'ble Supreme Court in ***Energy Watchdog vs. CERC, (2017) 14 SCC 80*** wherein the Hon'ble Supreme Court while outlining the scope of power vested in the Hon'ble Central Electricity Regulatory Commission ("**CERC**") under Section 79(1)(b) of the Act has already held that in case of Section 63, where the PPA/Guidelines are silent on a particular aspect then CERC can exercise its powers under Section 79 (1)(b) to fashion a relief to a party. Regulatory Power are vested with the State Commission under Section 86(1)(b) as with Central Commission in 79(1)(b).

- d) The cause of action for PPGCL to approach the Commission with respect to Notification dated 07.12.2015 arose in 2016 and in 2017 when the respective units were commissioned. PPGCL has filed the instant Petition in 2019. Therefore, the instant Petition is well within the limitation period of 3 year as prescribed under the Limitation Act, 1963 ("**Limitation Act**").
- e) PPGCL, under stressed asset category, was at the brink of insolvency, the entire focus was channelized to revive PPGCL and to save severe financial losses to the stakeholders which would have also prejudiced the public interest at large. As a result, the necessary action towards raising a Change in Law notice and petition could only be taken by 01.05.2019.
- f) Revised time limit for implementation needs to be considered for the Project from date of completion of acquisition. MoP has also raised the issue of revised time-line for implementation with MOEF&CC.
- g) The RFP document mentioned that no FGD was required.
- h) SO<sub>2</sub> stack emission is dependent on GCV & Sulphur content in coal as well as unit load. PPGCL does not have any control on



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Sulphur content or GCV of coal being supplied by coal companies i.e. NCL, BCCL and CCL etc. CEA report also suggests sufficient margin on actual performance parameters of the plant to take care of variation in operating input parameters such as deterioration in coal quality, higher Sulphur content in coal, higher flue gas temperature and flow, higher plant heat rate etc.

- i) Technological solution for NOx as well as other emission abatement system as per MOEF & CC notification is still under finalization. PPGCL will apprise the Commission regarding this once the feasibility study for these emission abatements is finalized.

**Additional facts placed on record vide application dated 02.03.2021:**

20. PPGCL has placed following additional documents placed on record:

- a. A copy of the complete Half Yearly EC compliance report for the period April 2020 to September 2020 dated 27.11.2020 having the compliance status against each stipulated condition
- b. Air Consent to Operate ("CTO") under Section 21 and 22 of the Air (Prevention and Control of Pollution) Act, 1981 and Water CTO under Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974 by Uttar Pradesh Pollution Control Board ("UPPCB") vide letters dated 29.12.2020 for the period 01.01.2021 to 31.12.2025
- c. PPGCL letters dated 21.01.2020 and 18.02.2020 to MoEF&CC and MoP to extend timeline for installation of FGD system for the Project. PPGCL letter dated 19.05.2020 i to CPCB and CEA seeking an extension in the timeline for installation of FGD.
- d. The details of tendering process for installation of FGD and associated system and estimated cost.

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- e. Letter dated 27.02.2020 followed by other communications to UPPCL about initiation of bidding process and requesting nomination of representative for participation in bidding
21. By way of this application, the Petitioner has updated the provisional relief sought for capital cost to Rs. 1514.75 Crs excluding VC and additional O&M expenses on account of change in law event against earlier estimated cost of Rs. 1328.68 Crs. The CEA has estimated the Hard Cost for implementation at Rs 0.37 Per MW (at Rs 732.6 Crs) as the base cost only excluding opportunity cost related to interconnection of FGD, Taxes & Duties and IDC & IEDC.
- "Prayer ....
- a....
- b. Basis the documents placed on record allow the Petitioner ad hoc / provisional relief under Article 13.4 of the PPA dated 21.11.2008 for capital cost of Rs. 1514.75 Crore excluding Variable Cost and Additional Operation & Maintenance Expenses on account of the Change in Law Events, i.e. promulgation of the new environment rules and regulation pending final determination of costs;"*
22. UPPCL vide its reply dated 07.04.21 has reiterated its earlier submission in rejoinder dated 24.08.2019 and has stated that the bidding process has been initiated by PPGCL prior to declaration of the event as change in law by the Commission at its own risk and cost. UPPCL also submitted that the documents placed on record are inconsequential to further the case of Petitioner in deciding the main prayers in the Petition. PPGCL vide its rejoinder dated 15.04.21 has argued that the additional documents/facts placed on record are connected to the main prayer in the Petition and are in compliance to the directions contained in the Commission's order dated 27.08.2019.
23. The petitioner, on 25.05.2021, has placed on record further additional documents referred to during the hearings viz; Environmental protection Act 1986, Ambient Air quality standards 1994 and Environmental Impact Assessment Report etc. The
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Petitioner vide additional affidavit dated 02.06.2021 has placed its submission with regard to the Commission's query during the hearing on 27.05.2021 that which norms / limit are more stringent i.e. those in Notification of December 2015 which are measured in mg/NM<sup>3</sup> or earlier ones which were measured in ug/m<sup>3</sup>. The written submissions have been filed by the Petitioner and UPPCL on 19.06.2021 and 20.07.2021

**Commission's analysis and decision**

24. The Commission has gone through the documents placed on record and heard the arguments of learned counsels of the Petitioner and the Respondent. The following issues emerge for adjudication and no other point was pressed upon during hearings:
- A. Whether additional documents placed on record by the Petitioner can be allowed.
  - B. (i) Whether Petitioner's claim is pre-mature seeking in Principle approval or  
(ii) barred by Limitation  
(iii) In Principle approval of estimated cost approval by the Commission
  - C. Compliance to Particulate matter emission, mercury emission, water consumption and NoX emission norms
  - D. How are ambient air quality norms different from MOEF&CC emission norms issued vide Notification dated 07.12.2015
  - E. Whether MOEF&CC notification dated 07.12.2015 is Change in Law in terms of bidding documents, Environment clearance and PPA
- A. Whether additional documents placed on record by the Petitioner can be allowed.**



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25. UPPCL has contended that Petitioner ought to have brought these documents on record while filing the Petition/ Rejoinder since the said documents were available with the Petitioner at the time of filing the Petition/ Rejoinder.
26. The Commission has gone through the documents placed on record. The Petitioner had earlier placed, six monthly compliance status of conditions stipulated in environmental clearance for the period Oct 16 to March 17, April 18 to Sept 18 and Oct 18 to March 19 as submitted to MOEF&CC, in the Petition. Subsequently, the Commission vide its Order dated 27.08.2019 had observed that before declaring an event as change in Law, it is mandatory to place on record the respective position before that event i.e. original EC (Environmental Clearance) conditions and the performance achieved against the original EC.
27. The Petitioner through the application dated 02.03.2021 has placed half yearly EC compliance report for the period April 2020 to September 2020 dated 27.11.2020 having the compliance status against each stipulated condition. The documents concerning the Air Consent to Operate ("CTO") under Section 21 and 22 of Air (Prevention and Control of Air Pollution Act, 1981 and Water CTO under Section 25 and 26 Water (Prevention and Control of Water Pollution Act, 1974 by Uttar Pradesh Pollution Board ("UPPB") are also placed on record.

**Commission's View:**

**The Commission is of the considered opinion that the Petitioner's placing documents on record, through the application dated 02.03.21 complying to the Commission's order dated 27.08.2019, can be allowed.**

**B(i) Whether Petitioner's claim is pre-mature seeking in Principle approval or barred by Limitation**

28. The primary contention of Respondents is that the Article 13 of the PPA does not provide for any ad hoc/interim relief, thus, the claim for compensation towards alleged Change in Law event is pre-

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mature and can only be raised after incurring the said expenditure. PPGCL, the Petitioner, has contended that in-principle approval is required to seek assistance of Financial Institutions owing to the exorbitant nature of the proposed expenditure, which it is not able to meet from its internal accruals. The Petitioner has thrust the argument that **recognition of the FGD Notification as 'Change in Law' is a necessity for any such Institution to consider debt funding to PPGCL to meet the requirement of the revised emission norms.**

29. The Commission has gone through the Article 13 of the PPA dated 21.11.2008 extensively. Article 13.1.1 of the PPA provides for the events which would qualify as "Change in Law". Article 13.1.2 of the PPA sets out the terms with respect to Competent Court having jurisdiction to adjudicate the issues related to the TPP. Article 13.2 deals with principles to be adopted for computing impact of Change in Law event. Furthermore, Article 13.3 of the PPA provides for the actions to be undertaken by the Parties in respect of notification of Change in Law event to the counterparty and Article 13.4 of the PPA deals with tariff adjustment and payment thereof on account of Change in Law event.
30. However, Article 13.2(b) of the PPA, provides that **compensation for any increase/decrease in revenue / cost to the Seller**, on account of change in law, shall be determined and effective from such date, as decided by this Commission. For ready reference, the said clause has been extracted hereunder:

**"b. Operation Period.**

*As a result of Change in Law, the compensation for any increase/decrease in revenues or cost to the Seller shall be determined and effective from such date, as decided by the Uttar Pradesh Electricity Regulatory Commission whose decision shall be final and binding on both the Parties, subject of rights of appeal provided under applicable law.*





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*Provided that the above-mentioned compensation shall be payable only if and for increase/ decrease in **revenues or cost** to the Seller is in excess of an amount equivalent to one percent (1%) of Letter of Credit in aggregate for a Contract year."*

31. It is clear from above referred clauses of the PPA that the PPA is silent on the tariff reimbursement mechanism for additional Capital Expenditure being made by the PPGCL due to Change in Law during Operation Period. Therefore, there is no pre-specified tariff reimbursement mechanism under the PPA to give sanctity to recovery of expenditure made by PPGCL in so far as installing FGD & Associated Systems is concerned, save and except the general principle of compensating the party affected by the Change in Law event to the same economic position as if such Change in Law has not occurred. *However, to secure regulatory certainty over recovery of additional capital expenditure incurred to comply with the MoEF&CC Notification dated 07.12.2015, it is quintessential that the Commission adjudicates the issue of "Declaration of MOEF &CC Notification dated 07.12.2015", is Change in law*

**Commission's View**

32. **The Commission has noted that none of the Articles of the PPA stipulate the time when PPGCL can claim compensation towards any Change in Law event either prior or after incurring the said expenditure. The Petitioner, to have certainty of recovery of capital expenditure being contingent upon whether the MOEF notification dated 07.12.2015 is Change of Law, to secure debt funding from financial institutions, has filed the present Petition which is not premature in the Commission's View.**

**B(ii) Petitioner's claim is barred by limitation**

33. Respondents have contended that the claim raised by PPGCL is barred by Limitation as the instant Petition has been filed by PPGCL after the expiry of 3 years from the Notification dated 07.12.2015. The Petitioner has argued that MoP had already issued a general notification to all stakeholders under which the said Notification dated 07.12.2015 was deemed to be a Change in Law event.

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Further, above said Notification dated 07.12.2015 was amended on 28.06.2018 by the Environment (Protection) Amendment Rules, 2018. Hence, the cause of action for filing the instant Petition restarted again on 28.06.2018 and PPGCL has filed the instant Petition in 2019 which is well within the limitation period of 3 year as prescribed under the Limitation Act.

34. Further, Petitioner has contended that PPGCL was under stressed asset category and was at the brink of insolvency, the entire focus was channelized to revive PPGCL and to save severe financial losses to the stakeholders which would have also prejudiced the public interest at large. Therefore, there exists sufficient cause for delay if any caused in filing the present Petition under Section 86 (1) (b) and hence the Hon'ble Commission ought to consider the same in terms of Section 5 of the Limitation Act. The Petitioner has referred to the Judgment of the Hon'ble Supreme Court in *APPC vs. Lanco Kondapalli Power Limited (2016) 3 SCC 468* relief upon by the Respondents are only in relation to proceedings initiated under Section 86 (1)(f) of the Electricity Act, 2003.
35. The Petitioner has filed the instant Petition under 86(1)(b) and 86(1) (f). The Petitioner has invoked Regulatory Powers of the Commission under Section 86(1)(b) of the EA,03. The Commission has gone through the Judgment of the Hon'ble Supreme Court in *APPC vs. Lanco Kondapalli Power Limited (2016) 3 SCC 468* relief upon by the Respondents are only in relation to proceedings initiated under Section 86 (1)(f) of the Electricity Act, 2003. The Hon'ble Supreme Court in *APPC (Supra)* itself held that the provisions of the Limitation Act do not apply to proceedings initiated under other powers of this Hon'ble Commission. The relevant extracts of the Judgment are being reproduced as follows:

*"31..., in the absence of any reason or justification the legislature did not contemplate to enable a creditor who has allowed the period of limitation to set in, to recover such delayed claims through the Commission. Hence we hold that a claim coming*



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*before the Commission cannot be entertained or allowed if it is barred by limitation prescribed for an ordinary suit before the civil court. But in an appropriate case, a specified period may be excluded on account of the principle underlying the salutary provisions like Section 5 or Section 14 of the Limitation Act. **We must hasten to add here that such limitation upon the Commission on account of this decision would be only in respect of its judicial power under clause (f) of sub-section (1) of Section 86 of the Electricity Act, 2003 and not in respect of its other powers or functions which may be administrative or regulatory.***

36. The Commission has noted that date of commercial operation of the three units of PPGCL which is as under:

S. No.	Particulars	Date of Commissioning
1.	Unit I	29.02.2016
2.	Unit II	10.09.2016
3.	Unit III	26.05.2017

As such the Plant was declared under commercial operation w.e.f. 26.05.2017, after MOEF&CC notification dated 07.12.2015. Thereafter, once CEA vetted the technology to be used by the Petitioner which was done 28.02.2019 and the Petitioner issued change in law notice to the Respondents on 01.05.2019, Petitioner has filed this Petition in July 2019.

37. The Commission has also noted that on 22.01.2018, a Request for Proposal ("RFP") was issued by the Lender to select a competent, experienced and capable entity, with adequate financial strength and technical expertise, as the Investor, for the Petitioner's plant. On 27.08.2018 and 13.11.2018, SBI issued in-principle and final Letter of Intent respectively to Resurgent Power confirming it to be the successful bidder. Thereafter, Petition No. 1403 of 2019 was filed before this Commission seeking for transfer of 75.01% of equity

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shares and 100% preference shares in favor of the Renascent Power, which was approved by the Commission vide order dated 29.03.2019.

**Commission's View**

Therefore, in view of above, the Commission is of the considered opinion that the claim of Petitioner is not barred by Limitation.

**B(ii) In Principle approval of estimated / revised estimated capital cost**

38. The Petitioner has referred to the Ministry of Power, Government of India ("MoP, GoI") issued Directions under Section 107 of the Electricity Act, 2003 to CERC. In the said letter, the MoP, categorically recognized that to meet the proposed expenditure regulatory certainty to Generating Companies must be provided. Further, the Petitioner has submitted that CERC vide Order dated 23.04.2020 in Petition No.446/MP/2019 titled as Sasan Power Limited ("SPL") Vs MP Power Management Company Limited ("MPPMCL") & Ors has held that in cases, where there is no explicit provision with regard to methodology for compensation for Change in Law events comprising of capital expenditure, which occur during the operation period, the generating company is required to be restored to the same economic position as if the Change in Law event had not occurred. CERC also approved the provisional capital cost and other related costs to the FGD Installation.
39. The Petitioner, through its Petition filed in July 2019, placed on record estimated cost of Rs. 1328.68 Crs and has further updated the provisional capital cost of Rs. 1514.75 Crs excluding Variable Cost and additional O&M expenses on account of change in law event. **The revised estimated cost is through tendering process for FGD package**, out of the four packages into which the total works of FGD installation has been divided- namely FGD package, Electrical Supply package, waste-water treatment and extension of existing DCS system. The CEA has estimated the Hard



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Cost for implementation at Rs 0.37 Per MW (at Rs 732.6 Crs) as the base cost excluding opportunity cost related to interconnection of FGD, Taxes & Duties and IDC & IEDC.

The Petitioner has submitted that the revised cost estimates are subject to any further escalation in price and actual cost of the FGD will be known only after implementation of the same along with actual IDC & IEDC, which will be submitted before this Commission for approval on completion of the FGD project.

#### **Commission's View**

40. In view of above, the Commission is of the considered opinion that revised cost estimate to comply with the MOEF&CC notification dated 07.12.2015 as placed on record by the Petitioner is subject to revision. Further, the estimated cost of only one package has been discovered through tendering process and balance three packages are yet to be opened. The Commission has also noted that opportunity cost, as part of the estimated cost, is a function of time taken for installation of FGD system under terms and condition of the tender invited by LPGCL. Therefore, the Commission can't not consider the opportunity cost at this stage.
41. Thus, the Commission, at this stage, is not inclined to grant "In Principle" approval of estimated capital cost as prayed by the Petitioner. The Capital cost of compliance to the emission norms as per MOEF &CC notification dated 07.12.2015 shall be approved by the Commission after timely installation of FGD and associated system, subject to the Prudence check and Petitioner demonstrating that it is fully complying to the emission norms notified through MOEF&CC notification dated 07.12.2015. The Commission directs the petitioner to synchronize the interconnection of FGD with annual overhaul and consult the beneficiaries in this respect.

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**C. Compliance in Particulate matter emission, mercury emission, water consumption and NoX emission norms**

42. The Petitioner has submitted that it is to meet following emission Norms in terms of MOEG&CC notification dated 07.12.2015 and it is meeting water consumption, mercury, and particulate matter emission norms:

Year of Commissioning	Particulate Matter	Sulphur Dioxide (SO <sub>2</sub> )	Oxides of Nitrogen (NO <sub>x</sub> )	Mercury (Hg)
2004-2016 (For Unit 1 & 2)	50mg/Nm <sup>3</sup>	200 mg/Nm <sup>3</sup> Units having capacity of 500 MW and above	600mg/Nm <sup>3</sup>	0.03mg/Nm <sup>3</sup>
From 1 <sup>st</sup> January 2017 onwards (For Unit 3)	30mg/Nm <sup>3</sup>	100 mg/Nm <sup>3</sup>	100mg/Nm <sup>3</sup>	0.03mg/Nm <sup>3</sup>

43. The Commission is aware that as per Order dated 05.08.2019 passed by the Apex Court in W.P. (Civil) No. 13029 of 1985 titled as M.C. Mehta vs. Union of India revision in the limit of NO<sub>x</sub> emission norms is to be extended to 450 mg/Nm<sup>3</sup>. MOEF & CC. Subsequently, on 19.10.2020, MOEF & CC has further revised the NO<sub>x</sub> emission limits. **Therefore, the above table submitted by the Petitioner would stand modified as below:**

Year of Commissioning	Particulate Matter	Sulphur Dioxide (SO <sub>2</sub> )	Oxides of Nitrogen (NO <sub>x</sub> )	Mercury (Hg)
2004-2016 (For Unit 1 & 2)	50mg/Nm <sup>3</sup>	200 mg/Nm <sup>3</sup> Units having capacity of 500 MW and above	450mg/Nm <sup>3</sup>	0.03mg/Nm <sup>3</sup>
From 1 <sup>st</sup> January 2017 onwards (For Unit 3)	30mg/Nm <sup>3</sup>	100 mg/Nm <sup>3</sup>	100mg/Nm <sup>3</sup>	0.03mg/Nm <sup>3</sup>



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**D. How are ambient air quality norms are different from MOEF&CC emission norms issued vide Notification dated 07.12.2015**

44. The Commission had raised the following queries during the hearing on 27.05.2021:

- (a) Ambient air quality standard of 80 microgram/m<sup>3</sup> was there in 2008 and is applicable even today and ambient quality would include stack emission as well, therefore whether the 2015 norms of 200 mg<sup>3</sup> are stringent or lenient considering that new emission norms are much higher than 80 micrograms/m<sup>3</sup> and
- (b) If 80 microgram was stringent and required to be met anyhow, whether through installation of FGD or otherwise, why the cost of FGD should be allowed now if that norm is breached.

The Petitioner has filed additional affidavit dated 02.06.2021 in this regard.

45. The Commission has analyzed the documents placed on record. The following emerges from the documents:

- (a) As per IS 54167, Ambient has been defined as physical properties of air (temperature, humidity, pressure, etc) or air pollution concentration in the open air **which is measured at Ground level, whereas the emission standards refer to the standards which are to be met at the Point of emission** in the atmosphere, i.e. at Chimney or stack outlet, which is at a specified height from the Ground Level. The measurement of ambient air quality is done at monitoring stations to be fixed on ground around the thermal power plant at locations to be decided in consultation with State Pollution Control Board.
- (b) On 19.11.1986, the MoEF notified the Environment (Protection) Rules, 1986 ("**EP Rules**") which prescribed the Standards for Emission or discharge of Environment



Pollutants. the relevant extract of the said Rules is reproduced hereunder:

"3[(3B)] The combined effect of emission or discharge of environmental pollutants in an area, from industries, operations, processes, automobiles and domestic sources, shall not be permitted to exceed the relevant concentration in ambient air as specified against each pollutant 4[in columns (4) and (5) of Schedule VII."

- (c) Subsequently, vide amendment dated 03.01.1989 bearing No. S.O. 8(E), the emission standards for TPPs were also specified but only for one pollutant namely, Particulate Matter ("PM") and that also in concentration terms i.e., mg/Nm<sup>3</sup>. Relevant extract of Rules is as follows:

"3. STANDARDS FOR EMISSION OR DISCHARGE OF ENVIRONMENTAL POLLUTANTS

(1) For the purpose of protecting and improving the quality of the environment and preventing and abating environmental pollution, the standards for emission or discharge of environmental pollutants from the industries, operations or processes shall be as specified in Schedule I to IV."

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Schedule I

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Sr. No.	Industry	Parameter	Standards
25.	THERMAL POWER PLANTS	Particulate Matter Emissions	
		- generation capacity 210 MW or more	150 milligramme per normal cubic metre
		- generation capacity less than 210 MW	350 milligramme per normal cubic metre

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- (d) Thereafter, on 11.04.1994 (subsequently amended in 2009), the Central Pollution Control Board ("CPCB") in exercise of its powers under Section 16(2) (h) of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981) issued/notified the National Ambient Air Quality Standards ("NAAQ"). **The aforesaid standards were the prescribed standards at the time of submission of bid in the instant case.** The relevant NAAQ standards (24 hour) for industrial areas is as follows:

Sl.No	AAQ parameter (24 hour)	Prescribed standard in $\mu\text{g}/\text{m}^3$ at the time of Bid submission
i)	Sulphur Dioxide ( $\text{SO}_2$ )	120
ii)	Nitrogen dioxide ( $\text{NO}_x$ )	120
iii)	Particulate matter - size less than $10 \mu\text{m}$ (PM 10)	150
iv)	Suspended Particulate matter	500

- (e) On 07.12.2015 that the Stack Emission Limit was notified for 1<sup>st</sup> time under MoEF&CC Gazette notification for  $\text{SO}_2$ ,  $\text{NO}_x$  & Hg emission and limit for Suspended Particulate Matter (SPM) was revised. On 19.10.2020, the MoEF&CC has further revised the  $\text{NO}_x$  emission limits. The emission limit applicable for the Petitioner is as shown below for Units above 500 MW:

S.No	Emission Parameter	As on Bid Submission Date	Prescribed limit as per Gazette Notification dated 07.12.2015 and 19.10.2020 for		
			Units installed up to 31.12.2003	Units installed Up to 31 <sup>st</sup> Dec 2016	Units installed after 1 <sup>st</sup> January 2017
	Unit of Measurement	( $\text{mg}/\text{Nm}^3$ )	( $\text{mg}/\text{Nm}^3$ )	( $\text{mg}/\text{Nm}^3$ )	( $\text{mg}/\text{Nm}^3$ )
i)	Particulate Matter (PM)	150	100	50.0	30.0



ii)	Sulphur Dioxide (SO <sub>2</sub> )	-	200	200.0	100.0
iii)	Oxides of Nitrogen (NO <sub>x</sub> )	-	600	450.0	100.0
iv)	Mercury (Hg)	-	0.03	0.03	0.03

47. As far as AAQ is concerned, the same is measured in Micro gram / Cubic Meter ( $\mu\text{g}/\text{m}^3$ ) and is compared with NAAQS notified by MoEF. The same is tabulated/summarised hereunder:

Sl.No	AAQ parameter (24 hour)	Prescribed standard in $\mu\text{g}/\text{m}^3$ at the time of Bid submission	Prescribed standard in $\mu\text{g}/\text{m}^3$ w.e.f. 16.11.2009	Equivalent value in $\text{mg}/\text{m}^3$
i)	Sulphur Dioxide (SO <sub>2</sub> )	120	80.0	$80 \times 10^{-3}$
ii)	Nitrogen dioxide (NO <sub>x</sub> )	120	80.0	$80 \times 10^{-3}$
iii)	Particulate matter - size less than 10 $\mu\text{m}$ (PM 10)	150	100.0	$100 \times 10^{-3}$
iv)	Particulate matter - size less than 2.5 $\mu\text{m}$ (PM 2.5)	-	60.0	$60 \times 10^{-3}$

While monitoring AAQ, gas volume is considered in M<sub>3</sub> and while monitoring Stack emissions gas volume is considered in NM<sub>3</sub> i.e. at Normal Temperature and Pressure (NTP) and thus; gas parameters measured at stack are required to be converted at Normal/Standard pressure and temperature.

48. From the above, it is amply clear that the AAQ standard is the maximum limit of the combined effect of emission of all polluting projects in a



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specified area measured through various stations located at ground level. Further, this limit being in micrograms/m<sup>3</sup> (10<sup>-6</sup> g/m<sup>3</sup>) is much lower than emission limit prescribed in milligrams/Nm<sup>3</sup> (10<sup>-3</sup> g/Nm<sup>3</sup>) for a particular pollutant as the level of pollution at the point or source of pollution will be much higher than at a distance from it on ground.

49. The Petitioner has been meeting all environmental norms related to AAQ and emission till the last submission of report to UPSPCB as per the requirements of EC. These reports have been submitted to Hon'ble Commission vide I.A. dated 02.03.2021. Hence, the 07.12.2015 notification introduced a new limit on emission thereby making it more stringent than before.

50. Further, CERC vide its Order dated 20.11.2019 passed in 346/MP/2018 in the matter of UPCL vs. PKTCL held as follows:-

***"41. The Petitioner has submitted that Udupi Power Project was mandated to only meet Ambient Air Quality Standards as per NAAQS. However, vide 2015 MoEF&CC Notification, for the first time the norms for control of emission of SO<sub>2</sub> and NO<sub>x</sub> in stack emissions has been introduced. The Petitioner has submitted that Ambient Air Quality criteria require measurement of concentration of pollutants in the air, typically referred to, as outdoor air or Ambient Air. However, the stack emission norms were introduced only on 7.12.2015. The monitoring for stack emission is carried out for emission or exit gases (flue gas) from Chimney/Stack/Flue (Source) of any plant process. This is also called stationary or point source of emission. Therefore, the standards and monitoring methods of Ambient Air and stack emissions are different.***

**Commission's View:**

**In view of the above, the Commission is of the considered opinion that Ambient air quality norms and emission norms are different in terms of participating pollutants, place, and method of measurement.**



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**E. Whether MOEF&CC notification dated 07.12.2015 is Change in Law in terms of bidding documents, Environmental clearance and PPA.**

The Commission has gone through the bidding documents placed on record by UPPCL and Petitioner in detail, heard the extensive arguments of the learned Counsels of both the parties extensively on this issue and has analyzed each of the document as below:

**51. PPA:** For the Change in Law provision, the laws and obligations prevailing on the cut-off date i.e. seven days prior to Bid Deadline i.e. 21.02.2009 is to be considered, including the requirement for various consents and clearances to be obtained and the conditions imposed therein.

**52.1 The Commission's order dated 24.01.2008 issued by this Commission in Petition No. 503/2007:** UPPCL has submitted that the RFP approval order specifically provides that installation of FGD may be required to be done in future and the Petitioner /successful bidder/ all bidders were made aware such an eventuality (installation of FGD) may arise in course of the implantation.

**52.2** The Commission has gone through the order dated 24.01.2008 issued by this Hon'ble Commission in Petition No. 503/2007:

*"(2) The Petitioner has passed through RFQ stage in which 8 bidders have qualified for RFP stage. **The RFP document is proposed to have certain deviations from CBG and the Commission is prayed to consider them and approved RFP documents.***

...

*The Petitioner has stated that the procedure for issuing notice under section 6 is in under process, rapid EIA is expected by Jan, 08 fuel supply agreement shall be signed between the seller and the fuel supplier as per the terms of PPA, the selected bidder shall submit the performance guarantee and execute the share purchase agreement within 8 days of issue of letter of intent, the*



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*commercial operation date under no event shall be earlier than 36 months and synchronization of unit prior to 33 months from NTP.*

*CBG states that prior to issuance of RFP, notification under section 6 should have been issued, proposal for environmental clearance submitted for final approval. The clause 2.1.3 of Standard Bid Documents (SBD) provide for signing of a fuel supply agreement between procure & the fuel supplier with a right to the procurer to assign the agreement to a selected bidder, however, this clause shall not be applicable in case the bidder has to arrange fuel. The submission of performance guarantee and execution of share purchase agreement is to be made by the selected bidder within 60 days of the issue of letter of intent as per clause 2.1.3.2 of SBD. As per Annexure 6, Format 3 of SBD, COD is to be decided by the procurer which shall not be less than 48 months.*

*(8) The prospective bidders have commented on the provisions of RFP and draft PPA to which the Petitioner has submitted replies. These comments are as below:*

*...*

*(11)*

*...*

*(vii) Procurers shall do following actions prior to bid opening:*

- a. Section 6 notice under the Land Acquisition Act, 1894 shall be issued by 15.2.08*
- b. Secure Letter of assurance from coal company of Ministry of Coal*
- c. Provide Hydrological, geological, metrological & seismological data to bidders*
- d. Provide R&R as determined by appropriate authority and EMP*
- e. Provide R&R as determined by appropriate authority of EMP*
- f. Approach MoP, GoI for extending the benefits to power generation projects under mega power policy to be taken up by the selected bidder after issue of LoI.*

*In case above conditions are not fulfilled, the date of bid the opening shall be extended till the compliance is made.*



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(viii) The cost of land, R&R and any other cost incurred by the Petitioner shall be intimated on the firm basis in RFP 15 days prior to bid deadline. Any change subsequent to issue of RFP shall be shared by the procures in proportion to their share in installed capacity.

**(ix) Environmental norms: for the purpose of bidding, the following environment shall be considered:**

- a. Flue gas emission without flue gas conditioning as per present requirement of MoEF.
- b. Water zero discharge
- c. Ash high density disposal
- d. FGD not required but provision for its incorporation in future be made.

(x) Time from issue of RFP to the date of bid opening shall be 60 days

**(xi) The condition precedent to be fulfilled before letter of intent.**

- a. Environment report to MoEF is submitted
- b. Possession, free from all encumbrances of land taken
- c. Forest clearance obtained, if required

The date of issuance of LoI shall be extended in case above conditions are not met

**(xii) The condition to be fulfilled after letter of intent-**

- a. Environment clearance is obtained within 6 months

In case the above, the clearance is not obtained the date of COD shall be extended by the margin of time such clearances obtained.

.....

**(13) This order shall be essential part of RFP. If any question arises as to the interpretation of any provision of the RFP document, the intent of this order shall be final."**

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### Commission' View

The Commission's order clearly stated that for the purpose of bidding, Flue gas emission without flue gas conditioning as per present requirement of MoEF be considered and that FGD not required but provision for its incorporation in future be made. Further, Environment Report is to be submitted to MOEF before issuance of LOI and within six months of issue of LOI, Environment clearance is to be obtained.

53. **RFP document:** Subsequently, Request for Proposal (RFP) document for Generation and Transmission projects for PPGCL was submitted to the Commission for approval. The Commission, vide order dated 4.11.08, directed that Generation and Transmission project proposals be segregated. PPGCL floated the RFP dated 05.11.2008 wherein, the aforesaid approved conditions qua the environmental norm for the purpose of bidding were incorporated in the RFP document. The relevant extract of the RFP dated 05.11.2008 is excerpted herein below:

*"1.1.4.2. Environmental Clearance for the power station:*

*M/s BHEL have been appointed as consultants for getting clearance from MoEF as per ToR granted by MoEF, which is available on the website for MoEF, Moreover, Rapid EIA report has been submitted to MoEF, Moreover, Rapid EIA report has been submitted to MoEF. Further, the final Environment Clearance shall be obtained within 6 months from the date of issue of Letter of Intent to successful bidder.*

*The bidders are required to note, for the purpose of bidding following Environmental norms;*

- a. Flue gas emission without flue gas conditioning as per present requirement of MoEF.*
- b. Water zero discharge;*
- c. Ash-high density disposal;*
- d. **No FGD required but provision for its incorporation at further date be made...***

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### Commission's View

The RFP reiterates that Rapid EIA report has been submitted to MOEF and Final Environmental Clearance shall be obtained within six 6 months from the date of issue of Letter of Intent to Successful bidder. The Environmental norms as approved by the Commission were made part of RFP in *verbatim*.

54. **Rapid EIA Report:** UPPCL has argued that the Rapid Environmental Impact Assessment Report (EIA) report for the Project which was issued before the bid cut-off date also contemplated that the Project shall have space provision for the installation of FGD which might be installed in future. The relevant extract of the Rapid EIA report is excerpted herein below:

*"Space will be provided for retrofitting the Flue Gas De-Sulphurisation system. The design and layout of steam generator and auxiliaries be such that a wet/dry FGD system can be installed in future, if required...."*

The aforesaid requirement in the Rapid EIA report read with RFP conditions mandated the Petitioner to account the cost towards the installation of FGD. MOEF&CC notification only confirms the requirement of installation of the FGD intimated earlier by Procurers at the time of bid and informs the Petitioner the stage of installation. Thus, there has been no 'Change in law'.

### Commission's View

55. **The Commission is of the considered opinion that above provision in Rapid EIA stipulates the Project shall have only space provision for installation of FGD so that a wet/dry FGD system can be installed in future, if required.**
56. **EIA:** UPPCL has submitted that EIA Report prescribed for pollution control measures to be undertaken by the Petitioner during the post operational phase of the plant. The Petitioner was also to ***ensure that the emission norms prescribed by regulatory bodies are met during operation***





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**of the power plant.** The relevant extracts from the EIA Report are excerpted herein below:

**"7.3 Environmental Monitoring Schedule**

*Regular monitoring of pollutants in different environmental disciplines like air, water, etc. will be undertaken during the post operational phase of the plant. The monitoring locations will be finalized in consultation with State Pollution Control Board. The monitoring of various environmental aspects is necessary because of following reasons:*

- *To quantify environmental impact*
- *Development of green belt*
- *Performance evaluation of noise control measures*
- *Performance evaluation of effluent treatment plant*
- *To generate data for taking corrective measures*
- *To check assumptions made with regards to development and detect deviations to take necessary measures.*

*The following monitoring program is proposed at 3 x 660 MW coal fired thermal power project, Bara for air as well as water quality monitoring. This program indicates the parameters, which have been identified as critical or sensible. It comprises of collection of data and samples from different monitoring stations.*

...

*Thermal power plants invariably have potential environmental effects during both the construction and operational phases including effects on air, water, noise & land environments as well as socioeconomic conditions during construction phase. The significance of construction impacts will be limited, however the mitigation measures will be taken for traffic management, appropriate timing and routing of materials, delivery, maintenance of sanitary facilities etc.*

***In addition to the above, the potential for environmental impacts is also associated with the operation of thermal power stations. The environmental effects on air quality will be minimized through implementation of mitigation measures viz. installation of high efficiency (99.89 %) ESPs for collection of fly ash from the boilers, ESP designed for 50 mg/Nm<sup>3</sup> in operation and installation of tall stacks of 275 meters for better dispersion of gaseous pollutants. It***



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**would be ensured that the emission norms prescribed by regulatory bodies are met during operation of the power plant.**

The effluent generated during operational phase will be treated to meet the permissible norms and will be utilized for green belt development. The fly ash and bottom ash from the plant is proposed to be collected and used for various applications. PPGCL will also explore various other avenues for utilisation of ash in value added products such as cement, fly ash bricks etc.

In order to provide quality dry fly ash to users such as, manufacturers of cement, concrete and its allied products like Cellular Concrete etc., the plant shall provide systems and facilities for 100% extraction of dry fly ash."

57. PPGCL has submitted the EIA Report to MoEF&CC as part of additional documents vide application dated 02.03.2021. From the perusal of the Report the following emerges before the Commission:

- (i) PPGCL appointed Pollution Control Research Institute BHEL, Hardwar as consultants to carry out comprehensive EIA/ Scope of ToR. **MoEF&CC in its ToR directed PPGCL[UPPCL] to provide complete one season AAQ data and this should include SO<sub>2</sub> and NO<sub>x</sub>. (Clause xi at of the report)**
- (ii) Clause 3- PPGCL carried out the Ambient Air Quality Study as per the ToR and **at Table 3.13 PPGCL reproduced the National Ambient Air Quality Standards, 1994** basis which the modeling was carried out. **PPGCL concluded that total concentration of pollutants would be well below the allowable limits of residential areas as per the National Air Ambient Quality Standards.**
- (iii) Clause 2.20 of the Final EIA report deals with the Technology – PPGCL stated that in Pulverized Fuel Boiler Technology **"Oxides of Sulphur are controlled by disbursing the**



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**flue gasses at a height such that ground level concentrations are limited”.**

- (iv) PPGCL stated that Space provision for FGD system to be installed in future (if required) shall be kept behind chimney.
- (v) Fuel Oil Unloading and Storage System, Coal Handling System, Ash handling system, Chimney, Water System and Plant Utilities, Ash Water Re-Circulation System, Effluent Treatment System, Fire Protection System etc. are specific items of the Project were also placed before MoEF&CC.

**Commission’s View**

**After perusing the EIA report, the Commission is of the considered opinion that there was no proposal of installation of FGD. However, to ensure compliance of emissions norms of MOEF&CC, FGD installation was envisaged through provisioning of space.**

**58. Environmental Clearance:** UPPCL has contended that (a) Environmental Clearance (EC) accorded to the Petitioner’s Project was not a part of the initial consents that were required at the time of bidding as per Schedule 2 of the PPA. (b) EC granted for the Petitioner’s Project already postulated an environment protection fund (for an amount of INR 300 Crores), to be used specifically for implementation of environmental measures. (c) Regular monitoring of ground level of SO<sub>2</sub>, NO<sub>x</sub>, RSPM and Hg was to be carried out by the Petitioner. Further, if at any stage these levels were found to exceed the prescribed limits, necessary control measures were to be provided immediately. (d) Petitioner’s Project was subject to imposition of new conditions to be an integral part of the EC.

59. The Commission has dealt with the objections of UPPCL in following paragraphs.

59.1 The RFP document stipulated that Environmental clearance is to be issued within six months of issue of LOI else *the the date of COD shall be extended by the margin of time such clearances obtained.* Based on this,



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the PPA was signed on 21.11.2008, meaning thereby that bidders were aware that issuance of LOI was subject to issuance of EC. The Rapid EIA report prepared by BHEL, as consultant, appointed by UPPCL prior to bid submission contained details of environmental norms to be met by the bidders. The LOI to the successful bidder was issued on 02.09.2009 and EC was issued on 08.09.2009. **Therefore, the Commission is of the firm opinion that EC dated 08.09.2009 was integral part of the PPA.**

59.2 The EC dated 08.09.2009 mandates Rs. 300 Crs to be kept for environmental protection measures and include in the Project cost. The Petitioner has placed six monthly compliance report of EC conditions as submitted to the competent authorities which confirm that Rs. 300 Crs have been kept in a separate fund. **The Commission is of the view that the Petitioner need to utilize this fund under the directions of competent authorities viz; CPCB to which these compliance reports are submitted.**

59.3 Ministry of Environment & Forest accorded environmental clearance to the project under the provisions of Environment Impact Assessment Notification, 2005, based on the Petitioner's proposal considered by the Expert Appraisal Committee for Thermal Power and coal Mine projects, on 08.09.2009 subject to implementation of the prescribed terms and conditions. Let us look at certain conditions enumerated in EC dated 08.09.2009:

.....Total cost of the project will be Rs. 10,000 Crores including Rs. 300 Crs for environmental protection measures.

(xx) **regular monitoring of ground level concentration of SO<sub>2</sub>, NO<sub>x</sub>, RSPM and Hg** shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the regional office of this Ministry. The data shall also be put up on website of Company.



- (xxii) An amount of Rs.32 Cr. as capital and Rs.6 Cr/annum as recurring should be earmarked for activities to be taken up under CSR by above proponent. Details of the activities to be undertaken in this regard should be submitted within one month from the date of issue of this letter.
- (xxvii) The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the regional office of MOEF, the respective Zonal Office of CPCB and the SPCB. **The criteria pollutant levels namely, SPM, RSPM, SO2, NOX (ambient levels as well as stack emissions) shall be displayed** at a convenient location near the main gate of company in the public domain.
- (xxxi) Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break up. These costs shall be included as part of the project cost. **The funds earmarked for the environment protection measures shall not be diverted for other purposes and year wise expenditure should be reported to the Ministry.**

.....

The above stipulations would be enforced among others under the water (prevention and control of Pollution) Act, 1974 , the Air( prevention and control of Pollution)Act, 1981, Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the Public Liability Insurance Act, 1991 and its amendments.

#### Commission's View

59.4 The EC dated 08.09.2009 granted in favor of PPGCL did not envisage space to be provided for installation of FGD. Subsequently, MoEF&CC on 23.03.2015 extended the validity of



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EC with addition of certain terms to the EC dated 08.09.2009 granted to the Petitioner. The EC dated 23.03.2015, issued after a period of 6 years prescribed the condition of providing space for FGD for future installation as additional point No. (xxxvi). However, still there was no mandate for any emission standard to be met for SO<sub>x</sub> or NO<sub>x</sub> or for installation of FGD. The EC also at no point prescribed the limit for NO<sub>x</sub> and SO<sub>x</sub> emissions to be ensured by PPGCL and mandated only monitoring emissions and submission of report to the statutory authority

59.5 UPPCL has submitted that the EC granted for the Petitioner's Project was subject to imposition of new conditions to be an integral part of the EC. The relevant extract from the EC is excerpted herein below:

*"4. The Ministry of Environment and Forests reserves the right to revoke the clearance. If conditions stipulated are not implemented to the satisfaction of the Ministry, MOEF may impose additional environmental conditions or modify the existing ones, if necessary."*

60. The Commission has gone through the Hon'ble APTEL judgement dated 28.08.2020 rendered in Appeal No. 21/2019 and 73/2019 (**Talwandi Saboo Judgement**) in this regard, which is reproduced below:

*"137. Then coming to Clause "xxv" condition of ECs it has to be read to understand under what context what was mandated as measures or conditions. In other words, Clause "xxv" should be read to include only the stipulated measures and not anticipated or potential measures.*

Therefore, the Commission of the view that what conditions are prescribed in the EC dated 08.09.2009 are to be complied till any further addition / amendment by the competent authority.

61. UPPCL has argued that Ministry of Power (MoP) letter dated 30.05.2018 clearly states that if the FGD requirement was mandated under the environment clearance of the plant or envisaged otherwise then the Notification will not qualify as a Change in Law event. As the



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Petitioner was already subjected to incorporate the cost towards the installation of FGD in terms of the RFP, therefore the Notification is not a Change in Law as being claimed by the Petitioner. The relevant extracts of the MoP direction dated 30.05.2018 is excerpted herein below:

*"5.1 The MoEFCC Notification requiring compliance of the Environment (Protection) Amendment Rules, 2015 dated 7<sup>th</sup> December 2015 is of nature of Change in Law event except in the following cases:*

*...*

*(b) TPPs where such requirement of pollutions system was mandated under the environment clearance of the plant or envisaged otherwise before the notification of the amendment rules"*

62. After perusing the documents, viz; RFP, EIA report and Environmental clearance(s) etc. it is clear that circumstances requiring FGD installation for Petitioner's plant at the time of issuing ECs were absent, therefore, the Commission cannot opine that such installation was mandatory or envisaged as a statutory requirement in other documents before the MOEF & CC Notification. The condition (xxxvi) in the EC dated 23.03.2015 and certainly refers to installation of FGD if required in future as a mandate. This would mean the necessity may arise or may not arise in future since it depends upon environmental protection measures from time to time which may be statutorily mandated by MoEF & CC and other concerned authorities.

63. The Commission has also gone through the Hon'ble APTEL judgement dated 28.08.2020 rendered in Appeal No. 21/2019 and 73/2019 **(Talwandi Saboo Judgement)** in the context of the interpretation given by the Hon'ble APTEL to the limiting conditions contained in the MoEF&CC's letter dated 30.05.2018. The relevant extracts from the said judgment are excerpted herein below:

*"132. One of the above contents of MoP letter dated 30.05.2018 reads as follows:*

*"TPPs where such requirement of pollution control system was mandated under the environment clearance of the plant or*



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**envisaged otherwise before the notification of amended rules”.**

133. This letter refers to two situations. First one is where thermal power projects have requirement of pollution control system like FGD as a mandate under the environmental clearance of the plant. It would mean that it must be a requirement which has to be mandatorily complied with in terms of environmental clearance of the plant. That means it should be one of the conditions in the EC. The second situation refers to requirement of pollution control system envisaged otherwise before the Notification of amended rules. The expression used is "or envisaged otherwise" before the Notification in question. There has to be a literal interpretation of the word 'or envisaged otherwise'. The expression "or envisaged otherwise" in para 5.1 (b) is to be interpreted to mean **"envisaged in any document but the Environment Clearances"...**

134. The context, under which the expression 'or envisaged otherwise' before the Notification in question, if compared with the first situation, certainly would mean that such condition of pollution control system was indicated in any other document other than the environmental clearance that must have come into existence before the Notification in question. **Therefore, we entirely agree with the arguments of Appellants that the scope of condition at para 5.1(b) of the aforesaid letter would actually mean that a party is not entitled to seek Change in Law claim in respect of any control system, which is already installed in terms of environmental clearance or otherwise required by any other document other than EC.** For example, both the Appellants have already complied with some of the parameters envisaged i.e., particulate matter, mercury, specific water consumption, but Appellants have not sought Change in Law claim for these parameters."

135. **Pertaining to the stand of Respondent No.2 that if installation of FGD is opined as Change in Law event in compliance of conditions of Notification in question, it would vitiate bidding process since it would prejudice other bidders, on this point, we accept the arguments of the 211 Appellants.** The Change in Law event in question has

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occurred six years after cut-off date. Having regard to the wording of the condition (vi) in the ECs in question, if read with other preparatory documents including competitive bidding guidelines, we are of the opinion that no other bidder could have anticipated/contemplated emerging of new emission norms for SO<sub>2</sub> and NO<sub>x</sub> of the present nature.

136. In short, from the above analysis, what is noticed is a presentation was made before issuance of ECs and said presentation could be only on the basis of prevailing environmental norms. The mechanism required for the control of emissions in terms of the procedure and norms are quite different from what is required so far as the projects of the Appellants is concerned in terms of Notification of the MoEF & CC in 2015. **Therefore, in the absence of circumstances requiring FGD installation for these plants at the time of issuing ECs, one cannot opine that such installation was mandatory or envisaged as a statutory requirement in other documents before the notification in question. Condition (vi) in the ECs definitely and certainly refers to installation of FGD if required in future as a mandate, therefore, the general/standard condition at (vi) would mean provision of 212 space for FGD system alone was the requirement. This would mean the necessity may arise or may not arise in future since it depends upon environmental protection measures from time to time which may be statutorily mandated by MoEF & CC and other concerned authorities.**

64. In view of all the above analysis at Para 51 to 63, the Commission is of the considered opinion that, there being no emission norms prescribed for compliance by the Petitioner, 7 days before the Bid dated i.e. 21.02.2009, the MOEF & CC notification dated 07.12.2015 mandating emission norms read with subsequent MOEF & CC Notification dated 28.06.2018 mandating Chimney height, is of the nature "Change in Law".



65. Summary of the Commission's finding:

- (i) Ambient air quality norms and emission norms are different in terms of participating pollutants, place, and method of measurement.
- (ii) The MOEF & CC notification dated 07.12.2015 mandating emission norms read with subsequent MOEF & CC Notification dated 28.06.2018 mandating Chimney height, is "Change in Law".
- (iii) The emission limit applicable for the Petitioner is as shown below for Units above 500 MW:

S. No	Emission Parameter	As on Bid Submission Date	Prescribed limit as per Gazette Notification dated 07.12.2015 and 19.10.2020 for		
		Units above 210 MW	Units installed up to 31.12.2003	Units installed Up to 31 <sup>st</sup> Dec 2016	Units installed after 1 <sup>st</sup> January 2017
	Unit of Measurement	(mg/Nm <sup>3</sup> )	(mg/Nm <sup>3</sup> )	(mg/Nm <sup>3</sup> )	(mg/Nm <sup>3</sup> )
i)	Particulate Matter (PM)	150	100	50.0	30.0
ii)	Sulphur Dioxide (SO <sub>2</sub> )	-	200	200.0	100.0
iii)	Oxides of Nitrogen (NO <sub>x</sub> )	-	600	450.0	100.0
iv)	Mercury (Hg)	-	0.03	0.03	0.03

- (iv) The "In Principle" approval of estimated capital cost as prayed by the Petitioner is declined. The Capital cost of compliance to the emission norms



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as per MOEF &CC notification dated 07.12.2015 shall be approved by the Commission after timely installation of FGD and associated system, subject to the Prudence check and Petitioner demonstrating that it is fully complying to the emission norms notified through MOEF&CC notification dated 07.12.2015. The Commission directs the petitioner to synchronize the interconnection of FGD with annual overhaul and consult the beneficiaries in this respect.

The Petition is disposed of in terms of directions above.

(Vinod Kumar Srivastava)  
Member

(Kaushal Kishore Sharma)  
Member

(Raj Pratap Singh)  
Chairman

Place: Lucknow  
Dated: 18.08.2021

