

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION

5th Floor, "Metro Plaza", Bittan Market, Bhopal - 462016



Petition No. 33 of 2019

PRESENT:

Dr. Dev Raj Birdi, Chairman

Mukul Dhariwal, Member

Shashi Bhushan Pathak, Member

IN THE MATTER OF:

In the matter of petition filed by of M/s. Jaiprakash Power Ventures Limited seeking in-principal approval for installation of FDG (Flue Gas Desulphurization) in its 2X660 MW Jaypee Nigrie thermal power station in compliance to the notification for the new environment norms issued by the Ministry of Environment Forest and Climate Change vide notification dated 7th December 2015 and 28th June 2018 as events of Change in Law.

**M/s Jaiprakash Power Ventures Ltd.,
Sector 128, Noida, Uttar Pradesh -201304 -**

Petitioner

//Versus//

1. **The Managing Director
M.P. Power Management Company Ltd.,
Block No. 2, Shakti Bhawan, Rampur, Jabalpur – 482008**
2. **The Managing Director
M. P. Poorv Kshetra Vidyut Vitaran Co. Ltd.
Shakti Bhawan, Rampur, Jabalpur – 482008.**
3. **The Managing Director
M. P. Madhya Kshetra Vidyut Vitaran Co. Ltd.
Nishtha Parisar, Govindpura, Bhopal – 462023**
4. **The Managing Director
M. P. Paschim Kshetra Vidyut Vitaran Co. Ltd.
GPH Compound, Pologround, Indore – 452003**
5. **Government of Madhya Pradesh -Energy Department
VB-2, Vallabh Bhawan Annex,
Mantralay, Bhopal, Madhya Pradesh**

Respondents

ORDER
(Date of Order: 27th December' 2019)

Ms Gayatri Aryan, Advocate, Shri Ajeya Kumar Tripathi, DGM and Shri Nakul Mehrotra, Chief Manager appeared on behalf of petitioner.

Shri Ravin Dubey, Advocate appeared on behalf of Respondent No. 1.

Shri Ajasra Gupta, GM (Commercial) appeared on behalf of Respondent No.1 and Respondent No. 5.

1. M/s. Jaiprakash Power Ventures Limited (hereinafter referred to as “the petitioner” or “JPVL”) has filed the subject petition seeking in-principal approval for installation of FDG (Flue Gas Desulphurisation) in its 2X660 MW Jaypee Nigrie super critical thermal power station in compliance to the notification for the new environment norms issued by the Ministry of Environment Forest and Climate Change vide notification dated 7th December 2015 and 28th June 2018 as events of Change in Law. The subject petition is filed under Section 86(1)(b), Section 86(1)(f) of the Electricity Act, 2003 and Article 12.3 of the Power Purchase Agreement dated 05.01.2011 entered into between the petitioner and Respondents.
2. The petitioner owns and operate a thermal power station consisting of two units of 660 MW located at Nigrie, Madhya Pradesh. The unit-wise date of commercial operation (COD) are as follows:

Unit No.	Date of Commercial Operation
Unit No. 1	3 rd September' 2014
Unit No. 2	21 st February' 2015

3. The Power Purchase Agreement (PPA) was executed on 5th January' 2011 between the Jaiprakash Power Ventures Limited and M.P. Power Trading Company Limited (wherein the three Distribution Companies i.e. Respondent No. 2 to 4 were confirming parties) for supply of 30% of installed capacity of 2x660 MW of the power station on long term basis for a period of 25 years. Subsequently, another PPA was executed on 20th July' 2011 between the petitioner and Government of Madhya Pradesh (Respondent No. 5) for procurement of 7.5% of the net power generated from the power station at variable charges determined by the Commission.
4. Vide Notification No. S.O. 3305 dated 7th December' 2015, Government of India, Ministry of Environment, Forest & Climate Change (MoEFCC) notified the Environmental (Protection) Amendment Rules, 2015 (hereinafter called 'the MoEFCC

Notification) amending/introducing the standards for emission of environmental pollutants to be followed by all existing as well as future thermal power plants. By the said Notification, all thermal power plants are mandatorily required to comply with the revised norms within the period of two years from the date of the said notification. By the said amendment, MoEFCC has revised the norms as given below:

- a. Revised the emission parameters for Particulate Matters for thermal power plants;
- b. Introduced following additional parameters / limits for thermal power plants
 - i. Emission norms for Sulphur dioxide (SO₂), Oxides of Nitrogen (NO_x) and Mercury (Hg),
 - ii. Amount of Cooling Water to be used per unit,
 - iii. Directed all thermal plants with Once-Through Cooling (OTC) to install Cooling Towers (CT).

5. With the above background, the petitioner has broadly submitted the following in the subject petition:

i. *The MOEF& CC, vide notifications dated 7th December 2015 and 28th June 2018 (Notifications), the Environment (Protection) Rules, 1986 were amended, thereby introducing new standards / parameters applicable to coal fired thermal power plants. The said new environment norms have brought about modifications in the existing norms related to air emissions including Oxides of Nitrogen (NO_x), Sulphur Dioxide (SO₂), Particulate Matter, Mercury, quantum of water use and stack height post Fuel Gas De-sulphurisation (FGD) for abatement of Sulphur Dioxide emissions. A final amendment for stack height post FGD under Schedule I of the 1968 Rules, was brought about on 28.06.2018. The copies of Notifications dated 07.12.2015 and 28.06.2018 are annexed as Annexure P-3.*

ii. *Article 12 of the PPA dated 05.01.2011 deals with Change in Law and the consequences thereof. As per Article 12.1.1 of the PPA dated 05.01.2011, the definition of Change in Law is as follows:*

“ The occurrence of any of the following events after the date, which is seven (7) days prior to the execution of this PPA, resulting into any additional recurring/non- recurring expenditure by the Company or any income to the Company:

- a) *The enactment, coming into the effect, adoption, promulgation, amendment, modification or repeal (without re-enactment or consolidation) in India, of any Law, including rules and regulations and framed pursuant to such Law;or*
- b) *A change in the interpretation of any Law by any Indian Governmental Instrumentality having the legal power to interpret or apply such Law or any Competent Court of Law;or*
- c) *The imposition of a requirement for obtaining any Consents, Clearances and permits which was not required earlier; or -----”*

- iii. Article 12 of the PPA dated 06.09.2011 deals with Change in Law the following manner:
- “Since the Variable charge is being determined by the Appropriate Commission based on actual cost components of Variable Charge at the relevant time and there being no aspect of capacity or fixed charges payment under this agreement the provisions relating to change in law are not required. However, it is clarified that Appropriate Commission while determining the Tariff will take into consideration any change in taxes, duties, cess and any other such impositions that may have financial implications on such Tariff.”*
- iv. Therefore, it is submitted that the Commission must, at the time of revision of Tariff, take into consideration the impact of the Change in Law event on the variable costs.
- v. It is to be noted that as per Article 12.3.2 of the PPA dated 05.01.2011, the Petitioner has duly notified the Respondents of the ‘Change in Law’ event i.e. amendment of the 1986 Rules and the consequently changed environment norms, vide its notice dated 01.05.2019. The Petitioner further states that vide its notice dated 01.05.2019 it duly notified the Respondents as per Article 12.3.3 of the PPA dated 05.01.2011, of the event of Change in Law and the effect of the same on the Project in a way that in complying with the MOEFCC Notifications, the Petitioner is likely to entail certain costs. Therefore, the Petitioner has diligently informed the Respondents that as per Article 12.1.1 of the PPA dated 05.01.2011, it is a Change in Law event which has a material direct impact on Project cost and tariff, for supply of power to Respondents 2 to 4 through Respondent no. 1. A copy of notice dated 01.05.2019 is annexed hereto and marked as Annexure P-4.
- vi. As per Article 12.2 of the PPA dated 05.01.2011, 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. It is clear from a combined reading of the above said provision of PPA dated 05.01.2011, that the party affected by any Change in Law event is to approach the Commission for appropriate relief.
- vii. The present Notifications modify the 1986 Rules thereby introducing new standards/parameters for TPP under Schedule I of the 1986 rules. The Notifications thus modify existing norms related to air emissions including particulate matter, SO₂, NO_x and Mercury from the TPPs. It also specifies modified limits for water use and waste-water discharge. It is to be noted that the JNSTPP Nigrie is in compliance with the emissions of particulate matter, mercury and water use and waste-water discharge norms, as applicable. With regard to the emissions of Oxides of Nitrogen, it is submitted that in consideration of various pilot studies being carried out to ascertain the impact of emissions of NO_x, the CEA is yet to

issue guidelines for the required norms. With regard to SO₂ emissions, the Notifications stipulate the stack heights after installation of the FGD system.

- viii. *The Notifications envisage installation of FGD system as per the new SO₂ emission norms. It is to be noted that SO₂ is generated as result of oxidation of Sulphur present in the coal at combustion zone of boiler. The SO₂ emission levels vary depending upon the Sulphur contents in the coal fired. However, the emission levels of SO₂ of coal from Amelia North Block assigned for Nigrie Thermal Power Plant and Coal procured through e-auction observed to be in the range of 1254 to 1650 mg/Nm³ which exceeds the applicable norm of 200mg/Nm³ under the amended 1986 Rules. Hence, abatement of SO₂ is required as per the Notifications.*
- ix. *For installation of FGD system having a design adept with the requirement by the JNSTPP Nigrie, a Feasibility Report dated February 2019 was prepared by the Tata Consulting Engineers. This Feasibility Report took into consideration the extent of Sulphur Dioxide absorption required, the flexibility of fuel firing and large volume of flue gas to be treated. For the same, a wet limestone based FGD, having SO₂ absorption efficiency of 95%, was proposed as the optimum and best suited technology. Copy of the Feasibility Report dated February 2019 is annexed as Annexure P-5.*
- x. *It is submitted that prior to issuance of the MoEF&CC Notification, the Petitioner was compliant with the environmental norms. The same is reflected from the environmental clearance dated 13.07.2012 received by the Petitioner. The copy of the environmental clearance dated 13.07.2012 awarded to the Nigrie power plant is annexed as Annexure P-6. It is submitted that before the date seven days prior to execution of the PPA, was no stipulation of SO₂ being limited to 200 mg/Nm³ warranting installation of FGD system. As per the MoEF&CC Notification, the Petitioner is now required to keep SO₂ emissions from the unit (stack emission basis) below 200 mg/Nm³ irrespective of ground level concentration and ambient air quality norms and in order to comply with the said norm, the Petitioner is required to install FGD system for each Unit.*
- xi. *Therefore, in order to comply with the revised norms, which qualify as Change in Law, the Petitioner will be required to install the FGD System which will result in additional capital cost and certain recurring costs as detailed in the Petition. There will be disruption in power generation in the course of commissioning phase of the FGD System, resulting in decrease in revenue for which Petitioner needs to be compensated as per Article 12 of the PPA.*
- xii. *The MoP, vide its letter dated 30.05.2018, notified the Central Electricity Regulatory Commission (CERC), of the need to develop the appropriate regulatory framework required for such change in the environmental norms. Further, the need to specify the mechanism or enabling guidelines was also recommended for providing regulatory certainty to the TPPs about recovery of additional costs incurred through*

tariff for meeting the new environmental norms. It was further notified that the Central Government has decided that the MoEF & CC Notifications are of the nature of a 'Change in Law' event.

- xiii. The hard cost of construction for implementation is expected to be approximately Rs 927.61 Crores (excluding Interest During Construction & Incidental Expense During Construction i.e (IDC & IEDC) and the additional Operation & Maintenance (O&M) expenses will be a sum of Rs 80.66 Crores per annum. The CEA vide letter dated 15.03.2019, on the basis of the Feasibility Report dated February 2019, has issued advisory 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 488.4 Crs) as the base cost only and does not include opportunity cost related to interconnection of FGD, Taxes & Duties and IDC & IEDC. Additional Operational Expenditure given by CEA are Rs 57.04 Crores per annum. That the CEA has further mentioned in its report that:*
- i) The cost estimation for FGD project is based on the price of equipment, infrastructure and related services discovered during transparent and open bidding being carried out by Central and State Undertakings.*
 - ii) An indicative base cost estimation is done by CEA in order to facilitate JNSTPP determine the price for installation of FGD on the major heads of CAPEX and OPEX. The cost estimation given is only indicative in nature.*
 - iii) The cost of retrofitting FGD for the plant should be discovered through open competitive bidding in consultation with representatives of major PPA stakeholders. The major PPA stakeholders may participate in bidding process (to be invited by JNSTPP) till award of FGD contract.*
- xiv. The above-mentioned cost estimates are tentative and based on assessment without including all expenses. 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. The actual cost will be submitted before the Hon'ble Commission for approval on completion of the bidding process, subject to any further escalation in price due to fair and genuine reasons. Nonetheless, in order to secure bankability of the project and to get the necessary funding for commencing work on the project, it is imperative that this Hon'ble Commission may give in-principle approval for the estimated cost of the project.*
- xv. It is submitted that the Hon'ble CERC has also acknowledged, declared, and approved the enactment of new Environment norms and Regulation as 'Change in Law' events on multiple occasions and granted relief to various developers on that account. Upon due consideration of the views and concerns submitted by the stakeholders, the Hon'ble CERC was pleased to hold that the enactment of new Environment Rules and Regulation Laws is a 'Change in Law' event and granted*

appropriate relief vide order dated 20.03.2017 in Petition No. 72/MP/2017. Petitioner craves leave to refer to such decision of CERC at the time of hearing, if necessary.

- xvi. In Petition No. 77/MP/2016, the Hon'ble CERC extensively examined the impact of new Environment Rules and Regulation on the cost components of thermal power projects and was pleased to hold that the enactment of new Environment Norms amounts to 'Change in Law'. The Commission further held that the relief for the same will be computed on the basis of the quantum of increase in the hard cost and operation and maintenance cost in compliance of the new environment norms. Petitioner craves leave to refer to such decision of CERC at the time of hearing, if necessary.*
 - xvii. Further in Petition bearing no. 133/MP/2016, the Hon'ble CERC has held that MoEF & CC Notification qualify as Change in Law in terms of the PPA dated 07.08.2007, since the MoEF & CC Notification seeks to revise the environmental norms prescribed in the Environment (Protection) Rules, 1986 and has been issued after the cut-off date.*
 - xviii. In light of the above, the Petitioner seeks this Commission to grant adhoc / provisional relief under Article 12.4 of the PPA for the additional expenditure amounting to INR 927.61Crore (excluding Interest During Construction& Incidental Expense During Construction i.e IDC & IEDC) on account of the enactment of the new Environment norms and Regulation, Variable Cost and Additional Operation & Maintenance Expenses (estimated as per the Feasibility Report) with effect from CoD of FGD to avail necessary financial arrangements on such basis. The Petitioner reserves its right to approach the Commission from time to time with updated figures based on the outcome of the bidding process and finalization of work, to have the actual cost of Change in Law determined by the Commission.*
6. With the above submission, the petitioner has prayed the following in the subject petition:
- a) Acknowledge and approve the promulgation of the new Environment rules and Regulation vide Notifications dated 7th December 2015 and 28th June 2018, as a Change in Law event under Article 12 of the PPA;*
 - b) Allow the Petitioner ad hoc / provisional relief under Article 12.4 of the PPA dated 05.01.2011 for capital cost of Rs. 927.61 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;*

- c) *Allow the Petitioner to approach this Hon'ble 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;*
7. Motion hearing in the subject matter was held on 17th September' 2019, wherein the petitioner informed that it has already served the copy of petition to all Respondents in the subject matter. The Respondent No. 1 objected the petition with the contention that the subject petition is not maintainable in terms of MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2015 since there is no provision in MPERC Generation Tariff Regulations, 2015 for any adhoc/in-provisional approval on account of Change in Law event as sought in prayer of the subject petition.
8. In response to the above objection raised by Respondent No.1 during motion hearing, the petitioner stated that it has only prayed to acknowledge and approve the promulgation of the new environmental rules and Regulation issued by the Ministry of Environment Forest and Climate Change as Change in Law event under Article 12 of PPA. The petitioner further stated that the Government of India, Ministry of Power vide No. 23/22/2018-R&R dated 30th May' 2018 have issued directions to the Central Electricity Regulatory Commission under Section 107 of the Electricity Act, 2003 to implement the decision of Central Government mentioned in its said letter and also to facilitate the smooth implementation of revised emission standards of the Environment (Protection) Amendment Rules 2015 for thermal power plants in the larger public interest.
9. The Commission observed that the copy of aforesaid communication by the Government of India, Ministry of Power is also endorsed to all State Governments however, no such directions have been received by this Commission from Respondent No. 5 i.e. GoMP, Energy Department Bhopal. Therefore, the Respondent No. 5 was directed to file its reply to the subject petition by 10th October' 2019. The Respondent No. 1 was asked to file his written submission on the subject petition by 30th September' 2019 after serving a copy of same on other side also. The petitioner was also directed to file its response on the above observations of the Commission in this order and file its rejoinder on the reply to be filed by Respondent No. 1.
10. By affidavit dated 30th September' 2019, Respondent No. 1 filed its response on the subject petition. By affidavit dated 29th November' 2019' the petitioner filed its reply to the observations of the Commission and rejoinder on aforesaid reply filed by Respondent No. 1. However, the representative of Respondent No.5 (GoMP) sought three weeks' time for filing their reply to the subject petition. Therefore, the Respondent

No. 5, GoMP, Energy Department was directed to file its response on the subject petition and on the observations of the Commission by 20th November' 2019 after serving a copy of the same on other side also.

11. By affidavit dated 5th December 2019, Respondent No. 5 (GoMP, Energy Department) filed its response on the subject petition.

Submissions of Respondents: The Respondent No.1 (MPPMCL) and Respondent No.5 (GoMP, Energy Department) have broadly submitted the following:

(A) Submission of Respondent No.1 (MPPMCL):

12. The Respondent No. 1 stated that the subject petition has been filed by the petitioner under Sections 86(1)(b) and 86(1)(f) of Electricity Act 2003. The Section 86(1)(b) of the Electricity Act defines power of the Commission to regulate process and price of purchase and procurement of electricity by distribution licensees. While exercising powers under the Act to regulate electricity purchase and procurement process of distribution licensees including the price of electricity, the Commission is guided by MPERC (Terms and Conditions of Tariff), Regulations 2015 made under the Electricity Act'2003. Therefore, any impact of Change in Law event, if any, on Tariff may only be considered by the Commission in accordance with the provisions of Tariff Regulations, 2015 which are currently in force.
13. The Respondent No. 1 submitted that the provisions of the Tariff Regulations, 2015 pertaining to "Change in Law" event and "Additional Capital Expenditure" summarized as below :
- (i.) The claim in respect of Additional Capital Expenditures actually incurred due to "Change in Law" shall be made by way of a Petition filed under Regulations 8.4 to 8.12 of Tariff Regulations, 2015 for truing-up of the said Additional Capital Expenditure.
 - (ii.) Under Regulation 8.12, the generating company has to submit details of actual capital expenditure incurred for the period from 1.4.2016 to 31.3.2019, duly audited and certified by the auditor.
 - (iii.) Additional Capital Expenditure purported to be claimed by the Generating Company under "Change in Law" event for an existing Generating Station (which is petitioner's case) is to be considered by the Commission under Regulation 20.3 after prudence check.
 - (iv.) There is no provisions for "ad-hoc/ provisional/ in-principle" recognition/ declaration of "Change in Law" event and/ or for approval of "tentative/ estimated"

Additional Capital Expenditure by this Hon'ble Commission under existing provisions of 2015 Tariff Regulations.

14. With the above, the Respondent No. 1 submitted that the subject petition is not maintainable under Section 86(1)(b) of the Act. With regard to Section 86(1)(f) of the Electricity Act, the Respondent No.1 submitted that this Commission has jurisdiction to adjudicate disputes between licensees and generating companies however, the petitioner has failed to demonstrate existence of any dispute in the present petition. Therefore, the present petition is not maintainable even under Section 86(1)(f) of the Electricity Act 2003. According to the contention of Respondent No. 1, the subject petition has been erroneously filed by the petitioner invoking Sections 86(1)(b) and 86(1)(f) of the Act hence Respondent No.1 requested the Commission to dismiss the present petition.
15. The Respondent No.1 (MPPMCL) has also submitted that the Tariff Regulations, 2015 clearly describe the criteria for an event being qualified as "Change in Law" event and procedure for making claim for Additional Capital Expenditure incurred on account of such an event of Change in Law, duly certified by Auditors. Such a claim can only be made under Regulation 8 to 11 of 2015 Regulations during True up of Tariff. The Article 12.1.1 and 12.3.2 of PPA dated 05.01.2011 define event of Change in Law and rights and liabilities of the parties in such event. Therefore, under 2015 Tariff Regulations, upon filing of a petition for true-up along with Audited and Certified Accounts by the Generation Company, the Commission shall evaluate the correctness of claim of "Change in Law" event and approve any associated claim for Additional Capital Expenditure, after applying appropriate prudence check.
16. The Respondent No. 1 also stated that this Commission is not bound by the directions issued by MoP to the Central Commission under Section 107 of the Electricity Act' 2003. Further, there is no such letter/ directions issued by the State Government of Madhya Pradesh under Section 108 to this Commission on the aspect of MoEF & CC Notification dated 7th December 2015. Therefore, while dealing with the present petition, the Commission may not take in cognizance of the letter dated 30.05.2018 issued by MOP, GOI to CERC and be guided by its own Tariff Regulations, 2015.
17. While challenging the maintainability of subject petition, the Respondent No.1 has contended that the Tariff Regulations, 2015 do not provide for grant of in-principle approval of the capital expenditure or any other such associated reliefs claimed by the petitioner. The petitioner should approach the Commission once the expenditure has been incurred.

(B) Submission of Respondent No.5 (Energy Department, GoMP):

18. Respondent No. 5 (GoMP, Energy Department) has broadly stated the following:

“The answering respondent without going into the merits of the petition only submitting reply to the limited issue of “Issuance of directions” by the answering respondent to the State Commission, in line with the directions issued by the Central Govt. to the Central Commission, regarding facilitating the smooth implementation of revised emission standards of the Environment (Protection) Amendment Rules, 2015 dated 7th December 2015 for Thermal Power Plants, which is as under –

- (i) That, on the similar matter, M/s NTPC Ltd. had filed a petition no. 98/MP/2017 before Hon’ble CERC, inter alia praying for allowing in-principle for the capital cost of approximately Rs. 0.86 Crore / MW for Singrauli STPS and Rs.0.78 crore / MW for Sipat STPS Stage –I required to be incurred towards installation of the Emission Control System and other associated facilities for the Projects on account of revised Emission standards. The Hon’ble Central Commission under para 23 to 51 of the order dated 20th July 2018 passed in the petition has discussed the issue in details and held that there is no need to issue broad guidelines for implementation of the ECS as directed by the Ministry of Power, Government of India. It was further held that Revised Emission Standards is a “Change in Law Event” and any Additional Capital Expenditure incurred on account of this “Change in Law Event” is to be dealt with as per the Provisions of Regulation 14 of CERC “Tariff Regulations 2014”. The Central Commission, therefore disposed of the petition without any relief to the petitioner with the directions to approach the Commission with an appropriate Petition in this regard. The copy of the order dated 20th July 2018 is annexed as (Annexure –I).*
- (ii) That, the “Regulation 4.1(i)” & “Regulation 20” of MPERC (Terms and Condition for Determination of Generation Tariff) Regulations’2015, also have similar provisions regarding approval/ admissibility of “Additional Capital Expenditure” due to “Change In Law” event and therefore, there is neither any need to issue broad guidelines for implementation of the ECS by this Commission nor it is required by the Energy Department, Government of Madhya Pradesh to issue any directions to the State Commission .*
- (iii) that, it is pertinent to mention here that, the Central Commission has already notified CERC (Terms and Condition for Determination of Generation Tariff) Regulations 2019 for the control period 2019-24 on 7th March 2019, wherein adequate provisions regarding dealing the Additional Capitalization on account of Revised Emission Standards have been made. This Commission is also likely to*

notified Tariff Regulations for the control period 2019-24 shortly in line with the Regulations notified by the Central Commission and shall have adequate provisions regarding dealing the Additional Capitalization on account of Revised Emission Standards. Therefore, there is no need to issue any directions by the GoMP to the State Commission. Further, most of the Additional capitalization on account of Revised Emission Norms is likely to be incurred by the Generators in Control Period 2019-24 and shall have to be dealt accordance with the “MPERC (Terms & Conditions for determination of Tariff) Regulations 2019” which are likely to be notified by the Commission shortly and any Capital expenditure on account of Revised Emission Standards has to be dealt accordingly.

- (iv) *In view of the above, it is submitted that, the Government of Madhya Pradesh – Energy Department is of the view that, there is no need to issue directions by the Government of Madhya Pradesh to State Commission in line with the directions issued by the Government of India, Ministry of Power vide no. 23/22/2018-R&R dated 30th May 2018.*

Commission’s Observations:

19. On perusal of the contents in subject petition and the documents placed on record in the subject matter, the Commission has observed the following:
- i. The subject petition has been filed for seeking the following:
 - (a) acknowledgement and approval of the promulgation of the new Environment rules and Regulation vide Notifications dated 7th December 2015 and 28th June 2018, as a Change in Law event under Article 12 of the PPA
 - (b) ad hoc / provisional relief under Article 12.4 of the PPA dated 05.01.2011 for capital cost of Rs. 927.61 Crore (excluding Interest During Construction & Incidental Expense During Construction i.e IDC & IEDC), variable cost and Additional Operation & Maintenance expenses on account of said Change in Law Events.
 - ii. Vide Notification dated 7th December’ 2015, Ministry of Environment Forest and Climate Change amended the existing norms related to emission in thermal power stations and introduced new norms for emission of SO₂, NO_x and Mercury from thermal power plants. The MOEF&CC also modified limits for specific water consumption by thermal power plants. In the aforesaid notification, limits for different emission parameters are specified based on capacity of power plant and year of installation as given below:

Parameters	Standards
TPPs (units) installed before 31st December, 2003:	
Particulate Matter	100 mg/Nm ³
Sulphur Dioxide (SO ₂)	600 mg/Nm ³ (Units Smaller than 500MW capacity units) 200 mg/Nm ³ (for units having Capacity of 500MW and above)

Oxides of Nitrogen (NO _x)	600 mg/Nm ³
Mercury (Hg)	0.03mg/Nm ³ (for units having capacity of 500MW and above)
TPPs (units) installed after 01st January, 2004 upto 31st December, 2016:	
Particulate Matter	50 mg/Nm ³
Sulphur Dioxide (SO ₂)	600 mg/Nm ³ (Units Smaller than 500MW capacity units) 200 mg/Nm ³ (for units having Capacity of 500MW and above)
Oxides of Nitrogen (NO _x)	300 mg/Nm ³
Mercury (Hg)	0.03 mg/Nm ³
TPPs (units) installed on or after 01st January, 2017:	
Particulate Matter	30 mg/Nm ³
Sulphur Dioxide (SO ₂)	100 mg/Nm ³
Oxides of Nitrogen (NO _x)	100 mg/Nm ³
Mercury (Hg)	0.03 mg/Nm ³

- iii. Two units of 660 MW of Jaypee Nigrie thermal power station were commissioned on 3rd September' 2014 and 21st February' 2015 respectively. The applicable air emission norms for this plant are as follows:

Year of Commissioning	Particulate Matter	Sulphur Dioxide (SO ₂)	Oxides of Nitrogen (NO _x)	Mercury (Hg)
2003 - 2016	50mg/Nm ³	200 mg/Nm ³ For Units having Capacity 500 MW and above	300 mg/Nm ³	0.03 mg/Nm ³

- iv. The petitioner has submitted that in consideration of various pilot studies being carried out to ascertain the impact of emissions of NO_x, the CEA is yet to issued guidelines for the required norms. The petitioner also submitted that the Jaypee Nigrie thermal power station is in compliance with the emissions of particulate matter, mercury and specific water consumption along with waste water discharge norms of the MOEF&CC.
- v. Based on the feasibility report, the petitioner has filed the estimated cost for installation of FGD in the 2X660 MW Nigrie TPP, as given below:

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

Particulars	Amount (in Rs. Crore)
Base Cost (including Taxes & Duties, Contingency, Engineering and Project Management) without IDC & IEDC	774.12
Loss of capacity Charges due to shutdown of Generation for both units for 30 days on account of duct interconnection	153.49
Total cost	927.61
Cost per MW (1320 MW Nigrie STPP) without IDC & IEDC	Rs 0.70 Cr./MW

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

Particulars	Amount (in Rs. Crore)
Cost of reagent	19.60
Additional Auxiliary power consumption	45.17
Additional clarified water FGD	4.51
O & M Cost for FGD	14.28
By product Associated costs	-2.90
Total cost	80.66

- vi. Vide letter dated 15th March' 2019, CEA issued an advice to the petitioner on suitable technology and indicative cost in installation of FGD to meet the new MOEF&CC Emission norms in Jaypee Nigrie Super Thermal Power Plant based on the petitioner's feasibility report and plant specific data provided by the petitioner. CEA also issued an advisory report detailing suggestive technology and indicative cost in installation of FGD Nigrie thermal power plant.
- vii. It is observed that the CEA in its advisory report for Jaypee Nigrie works out indicative base cost for Limestone based FGD to Rs. 0.37 Crore/MW which does not includes opportunity cost related to interconnection and Taxes & Duties. CEA also works total annual operating cost to Rs. 57.04 Crore which comes to Rs. 4.32 Lakh/MW. Regarding the operating cost, the CEA mentioned that the operating cost will include Reagent cost, Additional water consumption associated with FGD, Manpower cost, Auxiliary power consumption, By-product handling and revenue earned from disposal of bi-product.
- viii. On perusal of the details of estimated expenditure for installation of FGD filed by the petitioner, it is observed that there is huge difference between the cost estimates given by the Consultant i.e. TCE (Rs. 927,61 Crore and Annual Operating Cost as Rs. 19.23 Crore) and the Central Electricity Authority i.e. CEA (Rs. 488.4 Crore).
- ix. The subject petition has been filed under Article 12 of the Power Purchase Agreement dated 5th January' 2011 and provisions under MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2015. Therefore, the Commission has examined the subject petition in light of the provisions under Tariff Regulations, 2015 and the provisions under PPA dated 1st January' 2011.

Provisions under Regulations:

20. The relevant provisions of 2015 Tariff Regulations pertaining to approval/ admissibility of "Additional Capital Expenditure" due to "Change In Law" event (considered as a "Uncontrollable Parameter"), as applicable to "Existing Units" of a Thermal Power Plant,

are as follows :

4. Definitions and Interpretations :

4.1 *In these Regulations, unless the context otherwise requires-*

(i) 'Change In Law' means occurrence of any of the following events :

- (i.)** *enactment, bringing into effect or promulgation of any new Indian law; or*
- (ii.)** *adoption, amendment, modification, repeal or re-enactment of any existing Indian law; or*
- (iii.)** *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*
- (iv.)** *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*
- (v.)** *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 regulated under these Regulations.*

.....

8.4 *A generating company shall file a petition at the beginning of the Tariff period. **A review shall be undertaken by the Commission to scrutinize and true up the Tariff on the basis of the capital expenditure and additional capital expenditure actually incurred in the Year for which the true up is being requested.** The generating company shall submit for the purpose of truing up, details of capital expenditure and **additional capital expenditure incurred** for the period from 1.4.2016 to 31.3.2019, duly audited and certified by the auditors.*

.....

8.8 The Commission shall carry out truing up of tariff of generating station based on the performance of following Uncontrollable parameters :

- (i)** *Force Majeure;*
- (ii)** **Change in Law;** and
- (iii)** *Primary Fuel Cost.*

.....

8.11 *The generating company shall make an application, in hard and soft copy in the same formats specified under these Regulations **for carrying out truing up exercise for each year** in respect of the generating station or a unit or block thereof by 15th November each year.*

8.12 *The generating company shall submit for the purpose of truing up, details of actual capital expenditure and additional capital expenditure incurred for the period from 1.4.2016 to 31.3.2019, duly audited and certified by the auditor.*

.....
18.2 The “**uncontrollable factors**” shall include but shall not be limited to the following :

- (iv) Force Majeure events.; and
- (v) **Change in law.**

.....
20. Additional Capitalisation and De-capitalisation:

20.1 The **capital expenditure in respect of the 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 up to the cut-off date** may be admitted by the Commission, subject to prudence check:

- (i) Un-discharged liabilities recognized to be payable at a future date;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 19;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and
- (v) **Change in law** or compliance of any existing law:

Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff.

20.2 The **capital expenditure incurred or to be incurred in respect of the new project** on the following counts within the original scope of work after the cut-off date may be admitted by the Commission, subject to prudence check -----:

20.3 The **capital expenditure, in respect of existing generating station incurred or projected to be incurred on the following counts after the cut-off date**, may be admitted by the Commission, subject to prudence check :

- (a) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;
- (b) **Change in law** or compliance of any existing law;

.....
Provided further that any capital expenditure other than that of the nature specified above in (a) to (d) in case of coal based station shall be met out of Compensation Allowance:

.....”

Provisions Under PPA:

21. Regarding change in law, Article 12 of the PPA dated 05.01.2011 has provisions related to Change in Law like events of Change in Law, application and principles for computing impact of Change in Law, notification of Change in Law and tariff adjustment payment on account of Change in Law. The relevant Articles under PPA dated 05.01.2011 are reproduced below:

12.1.1. **'Change in Law'** means

The occurrence of any of the following events after the date, which is seven (7) days prior to the execution of this PPA, resulting into any additional recurring/non- recurring expenditure by the Company or any income to the Company:

- i) The enactment, coming into the effect, adoption, promulgation, amendment, modification or repeal (without re-enactment or consolidation) in India, of any Law, including rules and regulations and framed pursuant to such Law; or*
- ii) A change in the interpretation of any Law by any Indian Governmental Instrumentality having the legal power to interpret or apply such Law or any Competent Court of Law; or*
- iii) The imposition of a requirement for obtaining any Consents, Clearances and permits which was not required earlier; or*
- iv) A change in the terms and conditions prescribed for obtaining any Consents, Clearances and Permits or the inclusion of any new terms or conditions for obtaining such Consents, Clearances and Permits; or*
- v) Any change in tax or introduction of any tax made applicable for supply of power by the Company as per the terms of this Agreement*

But shall not include

- i) any change in any withholding tax on income or dividends distributed to the shareholders of the Company. Or*
- ii) change in respect of UI Charges or frequency intervals by an Appropriate Commissions; or*
- iii) any change on account of regulatory measures by the Appropriate Commissions including calculation of availability*

- iv) *THE DECISION DIRECTION AND ORDERS OF THE* Appropriate commission including the orders passed on the petition seeking approval to this Agreement

12.2 Application and Principles for computing impact of Change in Law

While determining the consequence of Change in Law under this Article 12, the Parties shall have due regard to the principle that the purpose of compensating the Party affected by such Change in Law, is to restore through Monthly Tariff Payment, to the extent contemplated in this Article 12, the affected Party to the same economic position as if such Change in Law has not occurred and such impact shall be as decided by the Appropriate Commission.

12.3 Notification of Change in Law:

12.3.1. *If the Company is affected by a Change in Law in accordance with this Article 12 and the Company wishes to claim relief for such a Change in Law under this Article 12, it shall give notice to the procurer of such Change in Law as soon as reasonably practicable after becoming aware of the same or should reasonably have known of the Change in Law.*

12.3.2. *Notwithstanding Article 12.3.1, the Company shall be obliged to serve a notice to the procurer under this Article 12.3.2, even if it is beneficially affected by a Change in Law. Without prejudice to the factor of materiality or other provisions contained in this agreement, the obligation to inform the procurer contained herein shall be material.*

Provided that in case the Company has not provided such notice, the procurer shall have the right to issue such notice to the Company as and when the procurer comes to know the change in law and claim the effect to be given retrospectively.

12.4 Tariff Adjustment Payment on account of Change in Law

12.4.1. *Subject to provisions mentioned above, the adjustment in Monthly Tariff Payment shall be effective from:*

- i) The date of adoption, promulgation, amendment, re-enactment or repeal of the Law or Change in Law; or*
- ii) The date of order/judgement of the Competent Court or tribunal or Indian Governmental Instrumentality, if the Change in Law is on account of a change in interpretation of Law.*

Analysis of the petition:

22. The Notification dated 7.12.2015 has been issued by MOEFCC in exercise of the powers conferred on it by Sections 6 and 25 of the Environment Protection Act, 1986 (29 of 1986). Under the amended norms prescribed by the MOEFCC Notification for compliance, all Thermal Power Plants have been categorized as (i) Units installed before 31.12.2003 (ii) Units installed between 1.1.2004 and 31.12.2016 and (iii) Units which are commissioned after January, 2017. The Nigrie thermal power station of the petitioner falls under the second category. In the present Petition, the petitioner has sought approval for installation of FGD in Nigrie thermal power projects which represent second categories under the MOEFCC Notification. Further, the petitioner has submitted indicative capital cost for installation of FGD and other associated expenditure.
23. The petitioner has submitted that in order to meet the revised norms as prescribed in MoEF&CC Notification, 2015, substantial investment is required to be carried out on retrofits and installation of FGD apart from its impact on the Operation & Maintenance costs, plant efficiency parameters such as Auxiliary Consumption, Unit Heat Rate etc. The petitioner has claimed that the MOEFCC Notification dated 07.12.2015 and 28.06.2018 are covered under Change in Law provisions as per Power Purchase Agreement dated 05.01.2011. With regard to 'Change in Law', Articles 12.3.1 and 12.3.2 of PPA dated 05.01.2011 provide as under:
- "12.3.1 If the Company is affected by a Change in Law in accordance with this Article 12 and the Company wishes to claim relief for such a Change in Law under this Article 12, it shall give notice to the Procurer of such Change in Law as soon as reasonably practicable after becoming aware of the same or should reasonably have known the Change in Law.***
- 12.3.2 Notwithstanding Article 12.3.1, the Company shall be obliged to serve a notice to the Procurer under this Article 12.3.2, even if it is beneficially affected by a Change in Law. Without prejudice to the factor of materiality or other provisions contained in this Agreement, the obligation to inform the Procurer contained herein shall be material......"***
24. 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. Through the Environment (Protection) Amendment Rules, 2015 notified by the Central Government vide Notification dated 7.12.2015, the standards of emission of

environmental pollutants to be followed by the thermal power plants have been revised. The revised norms/standards are mandatory in nature and are to be complied with within a stipulated timeframe.

25. Ministry of Power in its directions under section 107 of the 2003 Act has recognised that the MoEFCC Notification requiring compliance of Environment (Protection) Amendment Rules, 2015 dated 7th December, 2015 is of the nature of 'Change in Law' event with two exceptions namely, where Power Purchase Agreements of such TPPs whose tariff is determined under section 63 of the Electricity Act 2003 having bid deadline on or after 7th December, 2015; or where such requirement of pollutions control system was mandated under the environment clearance of the plant or envisaged otherwise before the notification of amendment rules.
26. As per Article 12.3.2 of the PPA dated 05.01.2011, vide its notice dated 01.05.2019 the petitioner issued notice to the Respondent in relation to the MoEF&CC Notification dated 7 December, 2015 and amendment of the 1986 Rules and consequently changed environment norms.
27. In light of the above, the aforesaid MoEFCC Notifications requiring the thermal generating stations to implement the revised environmental norms amounts to "Change in Law" in accordance with the Policy directions issued by the Ministry of Power to CERC under section 107 of the Act.
28. The Tariff Regulations, 2015 do not provide for any "ad-hoc/ in-principle" approval by the Commission for any proposed/ contemplated Additional Capital Expenditure due to alleged Change in Law event. Under the Tariff Regulations, 2015, all such expenditure shall be considered after examining fact of occurrence of Change in Law event and then applying prudence check on Audited and Certified Accounts submitted during True-up.
29. In the subject petition, the petitioner submitted that the cost estimates for installation and operation and maintenance of FGD are tentative and based on assessment without including all expenses. The petitioner further submitted that 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.
30. The expenditure/costs submitted by the petitioner are only indicative and based on preliminary studies carried out by the consultant. However, the actual adjustment of tariff will be based on actual amount spent, subject to prudence check.
31. In the background of the contention in the subject petition, the petitioner has sought in

principle approval of the capital cost of Rs. 927.61 Crore for Nigrie thermal power station towards installation of FGD and other associated facilities under Section 86 of the Electricity Act, 2003 and the Tariff Regulations, 2015.

32. The Tariff Regulations, 2015 only provide for allowance of Additional Capital Expenditure on account of Change in Law during True up exercise, on the basis of Annual Audited Accounts and expenditures certified by an Auditor and not otherwise. There is no provision in the Tariff Regulations, 2015 to consider “ad-hoc” or “in-principle” approval by the Commission. Further, there is no provision of any in-principle approval of capital cost or additional capitalisation in the Power Purchase Agreement. Therefore, the request of the petitioner for ad-hoc/in principle approval of capital cost is not considered by the Commission at this stage.
33. The Central Commission has already notified CERC (Terms and Condition for Determination of Generation Tariff) Regulations 2019 for the control period 2019-24, wherein adequate provisions dealing the Additional Capitalization on account of Revised Emission Standards have been made. This Commission is also likely to notified Tariff Regulations for the control period 2019-24 shortly in line with the Regulations notified by the Central Commission which may have adequate provisions for the Additional Capitalization on account of Revised Emission Standards. Further, most of the Additional capitalization on account of Revised Emission Norms is likely to be incurred by the petitioner in next control period of FY2019-24 and shall have to be dealt in accordance with the “MPERC (Terms & Conditions for determination of Tariff) Regulations 2019” and any Capital expenditure on account of Revised Emission Standards has to be dealt with accordingly. Therefore, the petitioner shall be at liberty to approach the Commission for approval of additional capitalization on account of revised emission standards in terms of provisions under applicable Tariff Regulations at the appropriate stage based on the actual expenditure incurred duly reconciled with the Annual Audited Accounts.

With all aforesaid observations and findings, the subject petition is disposed of.

(Shashi Bhushan Pathak)
Member

(Mukul Dhariwal)
Member

(Dr. Dev Raj Birdi)
Chairman

Dated: 27th December' 2019

Place: Bhopal (M.P.)