

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 133/MP/2016

Coram:

Shri P.K. Pujari, Chairperson

Shri A.K. Singhal, Member

Dr. M.K. Iyer, Member

Date of Order: 8th of October, 2018

In the matter of

Petition under Section 79 of the Electricity Act, 2003 read with statutory framework governing procurement of power through competitive bidding and Article 13.2 (b) of the Power Purchase Agreement dated 7.8.2007 executed between Sasan Power Limited and the Procurers for compensation due to Change in Law impacting revenues and costs during the Operating Period.

And

In the matter of

Sasan Power Limited
C/o Reliance Power Limited
3rd Floor, Reliance Energy Centre
Santa Cruise East
Mumbai

....Petitioner

Vs.

- 1) The Managing Director
MP Power Management Company Limited
Shakti Bhawan, Jabalpur-482008
Madhya Pradesh
- 2) The Managing Director
Pashchimanchal Vidyut Vitran Nigam Limited
Victoria Park, Meerut-250001
Uttar Pradesh
- 3) The Managing Director
Purvanchal Vidyut Vitran Nigam Limited
Hydel Colony, Varanasi-221004, Uttar Pradesh
- 4) The Managing Director
Madhyanchal Vidyut Vitran Nigam Limited
4A-Gokhala Marg, Luckow-226001
Uttar Pradesh



- 5) The Managing Director
Dakshinanchal Vidyut Nigam Limited
220 kV Vidyut Sub-Station
Mathura Agra By-pass Road
Sikandra, Agra-282007
Uttar Pradesh
- 6) The Chairman and Managing Director
Ajmer Vidyut Vitran Nigam Limited
Hathi Bhata, City Power House
Ajmer-305001
Rajasthan
- 7) The Chairman and Managing Director
Jaipur Vidyut Vitran Nigam Limited
Vidyut Bhawan, Jaipur-302005
Rajasthan
- 8) The Chairman and Managing Director
Jodhpur Vidyut Vitran Nigam Limited
New Power House, Industrial Area
Jodhpur-342003, Rajasthan

Also at:

Chief Engineer (Power Trading)
Shed No. 5, Room No. 6, Vidyut Bhavan
Vidyut Marg, LalKothi
Jaipur-302005

- 9) The Managing Director
Tata Power Delhi Distribution Limited
Grid Substation Building, Hudson Lines
New Delhi-110009
- 10) Chief Executive Officer
BSES Rajdhani Power Limited
BSESB Bhawan, Nehru Place
New Delhi-110019
- 11) Chief Executive Officer
BSES Yamuna Power Limited
BSES Bhawan, Nehru Place, New Delhi-110019
- 12) The Secretary
Punjab State Electricity Board
The Mall, Patiala-147001
Punjab



13)The Chief Engineer (PP&R)
Haryana Power Generation Corporation Limited
Shakti Bhawan, Panchkula-134109
Haryana

Also at:

The Chief Engineer
Haryana Power Purchase Centre (HPPC)
Sector-6, Shakti Bhawan, Panchkula-134109
Haryana

14)The Chairman and Managing Director
Utarakhand Power Corporation Limited
Urja Bhawan, Kanwali Road
Dehradun-248001
Utarakhand

....Respondents

Parties present:

- 1) Shri Vishrov Mukhrjee, Advocate, SPL
- 2) Shri Janmali. M, Advocate, SPL
- 3) Shri Yashaswi Kant, Advocate, SPL
- 4) Ms. Swapna Seshadri, Advocate, PSPCL
- 5) Ms. Ranjitha Ramachandran, Advocate, Haryana & Rajasthan Discoms
- 6) Shri Rajiv Srivastava, Advocate, UPPCL & UP Discoms
- 7) Ms. Garima Srivastava, Advocate, UPPCL & UP Discoms
- 8) Ms. Gargi Srivastava, Advocate, UPPCL & UP Discoms
- 9) Shri G. Umapathy, Advocate, MPPMCL
- 10) Shri Aditya Singh, Advocate, MPPMCL
- 11) Dr. NavinKohli, MPPMCL

ORDER

The Petitioner, Sasan Power Limited (hereinafter referred to as the Petitioner or SPL) has filed the present petition under Section 79 of the Electricity Act, 2003 read with Article 13.2 (b) of the Power Purchase Agreement dated 7.8.2007 between the Petitioner and Respondents read with the statutory framework governing procurement of power through Competitive Bidding with the following prayers:

“(a) Declare the events set out in Paragraphs 30 to 48 above as Change in Law events;



(b) Approve the methodology/mechanism for recovery of the amounts incurred on account of the Change in Law events;

(c) Approve in-principle project cost based on the benchmark cost basis, subject to true up/final approval of Project Cost, to enable it to avail financing as well as ensure timely implementation of required corrective measures to ensure compliance as per the revised norms and devise a mechanism for payment of compensation by the Procurers to the Petitioner on account of the aforesaid Change in Law event in terms of and based on the principles under Article 13 read with Article 13.2 (b) of the PPA.

(d) Pass any such other and further reliefs as this Commission deems just and proper in the nature and circumstances of the present case.”

2. On 19.1.2005, Ministry of Power, Government of India issued "Guidelines for Determination of Tariff by Bidding Process for Procurement of Power by Distribution Licensees" under Section 63 of the Electricity Act which were amended on 28.2.2006, 27.9.2007 and 27.3.2009 ("Competitive Bidding Guidelines"). In order to meet the growing requirements for power in the economy, the Government of India decided to facilitate development of coal fired ultra-mega power projects based on super-critical technology each having capacity of 4000 MW by developer selected through competitive bidding route. Power Finance Corporation (PFC) was the nodal agency for initial development of UMPPs and selection of developers through tariff based international competitive bidding process. PFC was mandated to undertake the initial project preparation activities in the name of project specific special purpose vehicles incorporated under the Companies Act, 1956 and the special purpose vehicle was to be transferred to the successful bidder selected pursuant to the bidding process. The Petitioner was incorporated under the Companies Act, 1956 on 10.2.2006 as a wholly owned subsidiary of PFC to undertake the project development and to carry out the bid process for the selection of the successful bidder on account of the procurers of the project. PFC initiated the bid process on 31.3.2006 through the Petitioner as the authorised representative of the procurers.



Based on the bid process, RPower was declared as the successful bidder. RPower acquired 100% shareholding of the Petitioner and executed PPA on 7.8.2007 with the distribution companies in the States of Madhya Pradesh, Uttar Pradesh, Rajasthan, Delhi, Punjab, Haryana and Uttarakhand for supply of 3800 MW from Sasan UMPP for a period of 25 years, namely MP Power Management Company Limited, Pashchimanchal Vidyut Vitran Nigam Limited, Purvanchal Vidyut Vitran Nigam Limited, Madhyanchal Vidyut Vitran Nigam Limited, Dakshinanchal Vidyut Vitran Nigam Limited, Ajmer Vidyut Vitran Nigam Limited, Jaipur Vidyut Vitran Nigam Limited, Jodhpur Vidyut Vitran Nigam Limited, Tata Power Delhi Distribution Limited, BSES Rajdhani Power Limited, BSES Yamuna Power Limited, Punjab State Electricity Board, Haryana Power Generation Corporation Limited and Uttarakhand Power Corporation Limited (collectively referred to as “Procurers”) who have been arrayed as Respondents in the present petition. The tariff of the Sasan UMPP was adopted by the Central Commission under Section 63 of the Electricity Act, 2003 vide order dated 19.9.2007 in Petition No.18/2007. Sasan UMPP consists of 5 units of 800 MW each and all the Units have achieved commercial operation, the last unit having date of commercial operation as 22.3.2013. The Petitioner has set up a 4000 MW Ultra Mega Power Project at Sasan in the State of Madhya Pradesh (Sasan UMPP or the project) based on linked captive coal mine using super critical technology. The Petitioner has been generating and supplying the contracted capacity to the Procurers in terms of the PPA dated 7.8.2007.

3. On 7.12.2015, Ministry of Environment, Forest and Climate Change Government of India (MoFFCC) has notified the Environment (Protection) Amendment Rules, 2015 (hereinafter “MoFFCC Notification, 2015”) which



mandatorily requires all thermal power plants to comply with the revised norms on or before 6.12.2017 i.e. within two years of MoFFCC Notification (the date has since been changed to 2022). The revised norms are as under:

“S.O. 3305 (E).- In exercise of powers conferred by Sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:-

(1). (1) These rules may be called Environment (Protection) Amendment Rules, 2015.

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

2. In the Environment (Protection) Rules, 1986, in Schedule-I,

(a) After serial number 5 and entries relating to thereto, the following serial number and entries shall be inserted, namely:-

Sr. No.	Industry	Parameters	Standards
1	2	3	4
5A	Thermal Power Plant (Water consumption limit)	Water Consumption	I. All plants with Once Through Cooling (OTC) shall install Cooling Tower (CT) and achieve specific water consumption upto maximum of 3.5 m ³ /MWh within a period of two years from the date of publication of this notification. II. All existing CT-based plants reduce specific water consumption upto maximum of 3.5 m ³ /MWh within a period of two years from the date of publication of this notification. III. New plants to be installed after 1 st January 2017 shall have to meet specific water consumption upto maximum of 2.5 m ³ /MWh and achieve zero waste water discharged.”

(b) For serial number 25, and the entries related thereto, the following serial numbers and entries shall be substituted:

Ser No.	Industry	Parameters	Standards
1	2	3	4
25	Thermal Power Plant	TPPs (Units) installed before 31st December, 2003*	
		Particulate Matter	100 mg/Nm ³
		Sulphur Dioxide (SO ₂)	600 mg/Nm ³ (Units smaller



			than 500 MW capacity units) 200 mg/Nm ³ (for units smaller having capacity of 500 MW and above)
		Oxides of Nitrogen (NO _x)	600 mg/Nm ³
		Mercury (Hg)	0.03 mg/Nm ³ (for Units having capacity of 500 MW and above.
		TPPs (Units) installed after 1st January, 2003 upto 31st December 2016*	
		Particulate Matter	50 mg/Nm ³
		Sulphur Dioxide (SO ₂)	600 mg/Nm ³ (Units smaller than 500 MW capacity units) 200 mg/Nm ³ (for units smaller having capacity of 500 MW and above)
		Oxides of Nitrogen (NO _x)	300 mg/Nm ³
		Mercury (Hg)	0.03 mg/Nm ³
		TPPs (Units) to be installed from 1st 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

*TPPs (units) shall meet the limits within two years from the date of publication of this notification.

**Includes all the TPPs (units) which have been accorded environmental clearance and are under construction.”

4. The Petitioner has submitted that in terms of the MoEFCC Notification 2015, the Petitioner is required to comply with the following conditions:-

- (a) All existing Cooling Tower based thermal power plants to reduce specific water consumption up to Maximum of 3.5 m³/MWh.
- (b) Emission limit for Particulate Matter is 50 mg/Nm³ instead of 100 mg/Nm³ under the 1986 Rules. It is also submitted that in case of Petitioner, condition for Particulate Matter limiting emission of 50 mg/Nm³ was specified in the Environment clearance for the Sasan Power Station.



(c) Oxides of Nitrogen emission limited to 300 mg/Nm³ (new condition).

(d) Sulphur Dioxide emission limited to 200 mg/Nm³ (new condition).

(e) Mercury emission limited to 0.03 mg/Nm³ (new condition).

5. The Petitioner has submitted that it will be required to install additional equipment/systems for compliance with the revised norms of Sulphur Dioxide below 200 mg/Nm³, particulate matter emission limited to 50 mg/Nm³, Oxides of Nitrogen emission limited to 300 mg/Nm³, maximum water consumption of all existing cooling towers based plants to be reduced to 3.5 m³/MWh, and Mercury emission limited to 0.03 mg/Nm³ which will result in the following:-

(a) Expenditure on account of installation of equipment required to meet the revised norms.

(b) Increase in operating costs on account of operating the equipment in order to meet the revised norms.

(c) Increase in auxiliary consumption of the power station due to installation of additional equipment.

(d) Disruption in power generation during the installation phase of the above equipment.

6. The Petitioner has submitted that on 19.11.1986, MoEFCC notified the Environment Protection Rules, 1986 which, inter-alia, set out the standards for emission or discharge of environmental pollutants from Thermal Power Plants as specified under Serial No. 5 of Schedule 1. Subsequently, by notification dated



3.1.1989, Serial No. 25 was inserted in Schedule-I which specified the particular matter emissions norm for Thermal Power Projects. On 23.11.2006, MoEFCC issued the environmental clearance to the Petitioner for setting up and operating the Project. On 7.12.2015, MoEFCC issued the MoEFCC Notification, 2015 amending the 1986 Rules whereby the revised norms were introduced under Serial No. 5 A and Serial No. 25 of Schedule I.

7. The Petitioner has submitted that the introduction of the revised norms is a Change in Law events as the existing Environment (Protection) Rules, 1986 have been amended by way of the MoEFCC Notification, 2015 after the cut-of date of 21.7.2007 by MoEFCC which is an Indian Government Instrumentality. The Petitioner has submitted that the Petitioner is required to be compensated for the Change in Law in terms of Article 13.2 (b) of the PPA as it will result in increase in cost as well as decrease in revenue during the operating period. The Petitioner has further submitted that the Petitioner has given notice of the Change in Law events to the Procurers vide its letter dated 18.3.2016.

8. The Petitioner has delineated the implication of the implementation of revised norms in case of Sasan UMPP as under:-

(a) **Sulphur Dioxide (SO_x) emissions to be kept below 200 mg/Nm³:** The Petitioner has submitted that prior to the issuance of the MoEFCC Notification, 2015, no norms were specified with regard to SO_x emission from the Power Station. After the issue of the MoEFCC Notification, 2015, the Petitioner is required to keep the SO_x emissions from Sasan UMPP below 200 mg/Nm³. The Petitioner has submitted that in order to comply with the said



norms, it is required to install Flue Gas Desulfurization (FGD) system as a part of the project. The Petitioner is in the process of preparing a Detailed Project Report on the impact of installing and operating a FGD system at the project. The estimated cost of installation of FGD system is in the range of Rs. 4500 crore within an installation period of approximately 2 to 3 years. The indicative cost includes capital expenditure, interest during construction, pre-operative expenses, designing, engineering, project management cost and any other incidental costs during construction. However, the cost does not include the cost of waste power treatment plant which may have to be installed based on the type of FGD system installed. The Petitioner has further submitted that there will be recurring expenditure on limestone, disposal of waste and by-product, maintenance and spares, increase in auxiliary power consumption in the range of 2% resulting in corresponding reduction in contracted capacity, and consequential impact in the form of increase in electricity duty and energy development cess apart from the disruption in power generation in the course of the commissioning of the FGD system.

(b) Maximum specific water consumption of all existing Cooling Tower based plants to be reduced to 3.5 m³/MWh: The Petitioner has submitted that prior to the issuance of MoEFCC Notification, 2015, there was no restriction on consumption of water whereas after the notification, the maximum water consumption for all existing Cooling Tower based plants is limited to 3.5 m³/MWh. The Petitioner has submitted that it conducted a preliminary study which showed that the Petitioner is already in compliance



with the revised norms. The Petitioner has submitted that it will approach the Commission in the event any additional measures need to be implemented.

(c) **Particulate Matter Emission limited to 50 mg/Nm³:** Prior to the issuance of the MoEFCC Notification, 2015, the permitted Particulate Matter Emission for the Petitioner was 50 mg/Nm³ as per the conditions specified in the Environment Clearance for Sasan UMPP. As per the MoEFCC Notification, 2015, the particulate matter emission is limited to 50 mg/Nm³. The Petitioner has submitted that it conducted a preliminary study which showed that the Petitioner is already in compliance with the revised norms. The Petitioner has submitted that it will approach the Commission in the event any additional measures need to be implemented.

(d) **Oxides of Nitrogen emission limited to 300 mg/Nm³:** The Petitioner has submitted that as per MoEFCC Notification, 2015, the Petitioner is required to ensure that Oxides of Nitrogen Emission is limited to 300 mg/Nm³. Since there is a new condition, the Petitioner has conducted a preliminary assessment which indicates that additional measures are required to control emissions as per the revised norms and detailed study is being carried out to identify the technology. The Petitioner has further submitted that it reserves the right to approach the Commission in the event any additional measures need to be implemented involving additional cost to comply with the said condition.

(e) **Mercury emission limited to 0.03 mg/Nm³:** The Petitioner has submitted that as per MoEFCC Notification, 2015, mercury emissions are required to be limited to 0.03 mg/Nm³. This is a new condition. However, the Petitioner has



conducted a preliminary assessment which indicates that the Petitioner is already in compliance with the said condition. The Petitioner has submitted that it reserves the right to approach the Commission in the event any additional measures need to be implemented involving additional cost to comply with the said condition.

9. The Petitioner has submitted that the underlying principle of Article 13 (Change in Law) of the PPA is to determine the consequences of Change in Law and to compensate a party affected by Change in Law such that the party is restored to the same economic position as if Change in Law has not occurred. The Petitioner has further submitted that enactment or coming into force of any law, change in interpretation of any law, and change in consents, approvals or licences available for the project which came into effect after 21.7.2007 and which has an effect on the cost and revenue of the project are covered under change in law and the Petitioner is entitled for such change in law. The Petitioner has submitted that MoEFCC Notification, 2015, which has been issued by an Indian Government Instrumentality and which has amended the existing statutory Rules of 1986 subsequent to the cut-off date of 21.7.2007 amounts to Change in law. The Petitioner has submitted that it would be required to incur substantial cost and have reduction in revenue during the operating period on account of compliance with the revised norms and in terms of Article 13.2 of the PPA, the Petitioner is required to be restored to the same economic position and in terms of Article 13.2 (b) of the PPA, such compensation has to be on pass-through basis.



10. The Petitioner has submitted that since the impact of Change in Law is substantial, an in-principle approval is required to:

- (a) Obtain/deploy additional funds including debt funds, which will not be sanctioned by lenders in the absence of regulatory certainty with regard to the methodology/mechanism of arriving at compensation to be provided to the Petitioner to mitigate the impact of Change in Law event;
- (b) Ensure that the entire process of compliance is carried out in a transparent manner under the orders of this Commission and with the cooperation of the Respondents;
- (c) Prevent multiplicity of proceedings which may crop up on account of disputes in relation to change in law claims; and
- (d) Ensure that project economics and time value of money is secured, which will also be beneficial to the Procurers who can avoid incurring interest/carrying cost.

11. The Petitioner has further submitted that as per Article 13.2 (b) of the PPA, the threshold amount beyond which compensation for change in law can be claimed is 1% of the aggregate letter of credit amount for a Contract Year which will amount to about 3.1 crore. The Petitioner has submitted that since the aggregate amount claimed for Change in Law is about Rs. 4500 crore, it is more than the threshold amount prescribed under Article 13.2 (b) of the PPA and the Petitioner is entitled to be compensated for the same.



12. Notices were issued to the Respondents on the Change in Law claims of the Petitioner made in the petition. Replies to the petition have been filed by MP Power Management Company Limited (Respondent No. 1), Distribution Companies of Uttar Pradesh (Respondent No. 2 to 5), Rajasthan Discoms (Respondent No. 6 to 8), Punjab State Power Corporation Limited (Respondent No. 12) and Haryana Power Purchase Centre (Respondent No. 13). The Petitioner has also filed rejoinders to the replies of the Respondents.

Replies of the Respondents

13. MP Power Management Company Ltd. (Respondent No.1) in its reply dated 16.3.2017 has submitted as under: -

(a) The consistent stand of MPPMCL is that the claim for change in law has to be considered strictly as per Article 13 of the PPA. As per Article 13.2 (b), the compensation for any increase/decrease in the revenues or cost need to be determined with reference to Change in Law which has effect on the revenues or cost of business of selling of electricity. Further, the compensation is payable under Article 13 of the PPA only after the expenditure has been incurred. The Petition is pre-mature as no expenditure has been incurred.

(b) It is essential to consider all consents and clearances issued to the Petitioner as well as the laws existing as on the cut-off date, since the Petitioner was already subjected to the condition as on the cut-off date.

(c) It is an admitted case of the Petitioner that there was a requirement to maintain emission of particulate matters limited to 50 mg/Nm³ as per



Environment Clearance granted to the Petitioner even through the existent Rules generally provided for up to 150 mg/Nm³. This clearly establishes that these conditions were prior to the cut-off date and all conditions stipulated in the Environmental Clearance would be part of existing law.

- (d) The petitioner is required to place on record the standards prescribed by Central Pollution Board and Madhya Pradesh Pollution Control Board under Air (Prevention and Control of Pollution) Act, 1981 as on cut-off date.
- (e) The Central Government during 1986 had indicated to take all such measures as it deemed necessary or expedient for the purpose of protecting and improving the quality of the environment and preventing controlling and abetting environmental pollution. This will not be a change in law event. Thus, the expenditures of all kind, have to be borne by the Generator i.e. Petitioner.
- (f) The requirement to install a FGD cannot be termed as Change in Law. Environmental Clearance dated 23.11.2006 granted to the Petitioner has mandated provision for installation of the FGD at a later stage and further mandated that separate funds must be allocated for installation of the said FGD as well as for making such Environmental protection measures which are to be included in the project cost. Admittedly, this has not been complied with by the Petitioner after getting the Environmental Clearance. MoEFCC Notification, 2015 merely confirms the requirement of installation of the FGD intimated earlier.



- (g) The issue of installation of FGD being considered as Change in Law was considered by Appellate Tribunal for Electricity (Appellate Tribunal) in M/s JSW Energy Limited Vs. MSEDCL & Anr. (21.01.2013 in Appeal No. 105 of 2011). The Environment Clearance granted to JSW had similar conditions and the ruling of Appellate Tribunal is applicable to the facts of the present case.
- (h) The Commission by its order dated 26.09.2000 in Petition No. 24/2000 pertaining to purchase of power from HIRMA Mega Power Project while dealing with FGD inter-alia held that FGD is part of the capital cost.
- (i) The claim pertaining to the compensation on account of the alleged disruption in the power generation forms a part of a separate proceeding and cannot be a subject matter relating to Environmental Clearance. Such claims are adjudicated and allowed in terms of Article 12 of the PPA and Article 12.7 envisages the conditions which need to be satisfied for its invocation.

14. Discoms of Uttar Pradesh (Respondent No. 2 & 5) in its reply dated 16.4.2018 have submitted that the Petitioner has done precious little to comply with the MoEFCC Notification, 2015 except to prepare a plan to garner money from the Procurers by seeking in principle approval for the prospective expenditure to be incurred on account of purported Change in Law event. The Respondents have submitted that the question of compensating the Petitioner “to the same economic position as if the change in law has not occurred” would arise only upon the extent of actual erosion in the economic position of the Petitioner on account of expenditure incurred due to Change in law and therefore, without incurring the actual expenditure claimed in the petition under reply, the Petitioner could not have filed the present



petition. The Respondents have submitted that it is the admitted position in the Petition that the Petitioner is already in compliance of most of the requirements in MoEFCC Notification, 2015 except the requirement of keeping the Sulphur Dioxide below 200 mg/Nm³ and the Oxides of Nitrogen emission limited to 300 mg/Nm³ and since the Petitioner is in the process of preparing DPR on the impact of installing and operating FGD system for the project and is carrying out detailed studies to identify technology for keeping the Oxides of Nitrogen emission limited to 300 mg/Nm³, no actual cause of action has been shown.

15. Haryana Power Purchase Centre (Respondent No. 13) in its reply dated 20.12.2016 and Respondent Rajasthan Discoms (Respondent No. 6 & 8) in their consolidated reply dated 26.11.2016 have submitted as under: -

- (a) The Petitioner is entitled to only the increased rate as a result of any Change in Law subsequent to the Cut-off Date. Further, compensation is payable under Article 13 after the expenditure has been incurred and therefore, the Petition is pre-mature at this stage.
- (b) It is essential to consider all consents and clearances issued to the Petitioner as well as all laws existing as on the cut-off date.
- (c) The installation of FGD was already envisaged on the cut-off date and a provision for the same was required to be made. If the Petitioner is required to install the FGD subsequently, for any reason, the same cannot be considered as Change in Law.



- (d) The issue of installation of FGD being considered as Change in Law was considered by the Appellate Tribunal in the judgement dated 21.1.2013 in Appeal No. 105 of 2011 (M/s JSW Energy Limited vs. Maharashtra State Electricity Distribution Co. Ltd and Another). The Environment Clearance granted to JSW had the similar conditions as the cited above in Petitioner's Clearance and in the light of the decision of the Appellate Tribunal in JSW case, the cost of installation of FGD, including recurring cost as well as impact on auxiliary consumption is deemed to have been considered by the Petitioner at the time of the Bid.
- (e) The alleged disruption in power generation cannot be considered as Change in Law and if at all, can only be considered under Article 12 subject to satisfaction of the requirements thereunder. The relief, if any, is only as envisaged in Article 12.7. The Petitioner is required to file a separate Petition for the same as and when there is an interruption in supply.
- (f) As regards maximum specific water consumption and mercury emission, the Petitioner is in compliance with the amended limits. As regards the particulate matter emission, the limit was 50 mg/Nm^3 as on cut-off date which is the same as per the MoEFCC Notification, 2015. If the Petitioner incurs additional expenditure in future, the same cannot be considered since there is no Change in Law.
- (g) As regards the limits of Oxides of Nitrogen emission, the consents and clearances as existing on the cut-off date is required to be considered to determine the limits of the above emission for the Petitioner. If the

consents/clearances or standards as existing on the cut-off date already stipulated certain limits which are now confirmed by MoEFCC Notification, 2015, the same cannot be considered as change in law.

16. Punjab State Power Corporation Limited (PSPCL) (Respondent No. 12) in its reply dated 15.5.2017 has submitted as under: -

- (a) The Petitioner has claimed in-principle approval regarding the cited change in law events and for devising a mechanism for compensation to enable the Petitioner to approach lenders for sanction of debt to incur expenditure as stated in the petition. Such a course is not contemplated in the PPA.
- (b) Any relief can be provided only as per the terms of the PPA. No relief can be granted based on Article 79(1) (b). This has been held by the Full Bench of the Appellate Tribunal dated 7.4.2016 in Appeal No. 100 of 2013 and batch Petitioner.
- (c) The compensation is payable under Article 13 only after the expenditure has been incurred and therefore the Petition is premature at this stage.
- (d) The conditions stipulated in the Environment Clearance dated 23.11.2006 and the Madhya Pradesh Pollution Control Board are part of the existing law and therefore, the laws as prevailing on the cut-off date qua the Petitioner needs to be considered including the conditions imposed on the Petitioner's project.
- (e) The installation of FGD was already envisaged on the cut-off date and a provision for the same was required to be made. If the Petitioner is required to



install the FGD subsequently, for any reason, the same cannot be considered as Change in Law.

- (f) The issue of installation of FGD being considered as Change in Law event was considered by the Appellate Tribunal in the judgement dated 21.1.2013 in Appeal No. 105 of 2011 (M/s JSW Energy Limited vs. Maharashtra State Electricity Distribution Co. Ltd and Another). The Environment Clearance granted to JSW had similar conditions as in the Petitioner's Environment Clearance and in the light of the decision of the Appellate Tribunal in JSW case, Change in Law for installation of FGD is not applicable in the case of the Petitioner.
- (g) As regards the recurring cost and auxiliary consumption, the same is not admissible as the installation of FGD was already envisaged in the Environment Clearance. The Petitioner is seeking an advance ruling as regards the disruption in power generation during installation of FGD which cannot be permitted.
- (h) As regards maximum specific water consumption and mercury emission, the Petitioner is in compliance with the amended limits. As regards the particulate matter emission, the limit was 50 mg/Nm^3 as on cut-off date which is the same as per the MoEFCC Notification, 2015.
- (i) As regards the limits of Oxides of Nitrogen emission, the consents and clearances as existing on the cut-off date is required to be considered to determine the limits of the above emission for the Petitioner. If the



consents/clearances or standards as existing on the cut-off date already stipulated certain limits which are now confirmed by MoEFCC Notification, 2015, the same cannot be considered as change in law.

Rejoinders of the Petitioner

17. The Petitioner in its rejoinders to the replies of the Respondents has submitted as under:

(a) Prior to issuance of the MoEFCC Notification, no norms were specified with regard to SO_x emission from the Power Plant (stack emission i.e. emission at the Chimney of the power plant). Only ambient air quality standards for SO₂ emission was specified by Central Pollution Control Board. The requirement under the norms specified by CPCB towards SO₂ emission was 80 micro grams/m³ and the same was being complied with by the Petitioner. As on the cut-off date, there was no stipulation of Sulphur Dioxide being limited to 200 mg/Nm³ warranting installation of FGD system. As per the MoEFCC 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 system for each Unit.

(b) PFC was the authorized nodal agency mandated for initial development of UMPPs and accordingly, PFC had undertaken the initial project preparation activities, including (i) site identification and land acquisition required for the Project; (ii) obtaining environmental clearance; (iii) allocation of captive coal blocks/tying up fuel linkage with coal mine; and (iv) tying up water linkage. As



part of the mandate, PFC had prepared a detailed Environment Impact Assessment (EIA) study for the Project through a third party consultant named Desin Private Limited. Under the EIA study, various mitigation measures were proposed to reduce adverse impact on the environment. The EIA study and the Environmental Clearance obtained by PFC on behalf of the Petitioner at the pre-bid stage were subsequently handed over to the Petitioner after the bid. Both EIA Study and Environmental Clearance envisaged environmental protection measures of Rs. 865 Cr. which did not envisage allocation of cost towards implementation and maintenance of a FGD system. Therefore, installation of FGD was not part of original conditions of the Environmental Clearance and the same has been introduced by way of the MoEFCC Notification, 2015.

(c) Submission of the Respondents regarding the present Petition being premature is incorrect. As setting up the FGD System entails high cost, the Petitioner has approached the Commission for seeking in principle approval of the Change in Law event, so that the Petitioner can approach lenders for financing for setting up the FGD System. Further, Article 13 of the PPA does not prohibit approaching this Commission for determination/in principle approval of Change in Law. This is in accordance with the findings of this Commission in Petition No. 153/MP/2015 that approaching the Commission for Change in Law events is a time consuming process which results in time lag between the expenditure incurred and actual reimbursement by the Procurers and to address that the Commission devised a payment



mechanism in the said order for compensation payable to the Petitioner in the subsequent years of the contract period.

(d) The contention of the Respondents that the stipulation for setting up of the FGD System was part of the Environment Clearance dated 23.11.2006, is incorrect. The Environment Clearance dated 23.11.2006 only stipulated creation of space for the FGD System which does not imply that the cost of setting up the FGD system had to be factored in. This is evident from the fact that the FGD system has not been included in the capital cost in the EIA Report. As on the cut-off date, i.e. 21.07.2007, there was no requirement for installing the FGD system.

(e) There is a difference between the facts in Petition No. 24/2000 and the present case and hence, the findings in the said Petition would not be applicable in the present scenario. Petition No. 24/2000 dealt with the bid for a mega power plant by M/s Southern Energy Asia-Pacific Ltd. ("SEAP") for the Hirma Power Plant located in the state of Odisha. On a holistic reading of the entire order in Petition No. 24/2000, it is clear that the expenditure required to set up the Hirma project included an amount attributable to an FGD unit. On the other hand, there was no requirement for installation of the FGD System in the Environment Clearance for the Sasan UMPP and hence, there was no need to allocate separate funds for the FGD System. Thus, reliance placed on Petition No. 24/2000 is flawed.

(f) The Judgment dated 21.01.2013 in Appeal No. 105 of 2011 passed by the Appellate Tribunal for Electricity in the case of JSW Energy Limited VS.



MSEDCL & Drs. relied upon by the Respondents is not applicable in the present case as the facts and circumstances in the JSW Judgment were different from the facts in the present case. The Respondents while relying on the JSW Judgment have not quoted para 31 where the grant of prior Environmental clearance was conditional and the issue of installation of the FGD System was left to be decided at a later stage by allocation of separate funds and to include the same in the project cost. It was in the said background that environmental clearance dated 17.5.2007 was issued to JSW. Subsequently the Central Government issued the letter dated 16.4.2010 confirming the requirement for the installation of the FGD System based on which the Appellate Tribunal came to its findings in the JSW Judgment. In the present case of Sasan UMPP, the Environmental Clearance was obtained by the Petitioner while it was a wholly owned subsidiary of Power Finance Corporation. In terms of Recital B of the PPA, the Environmental Clearance was provided to the successful bidder only at the time of execution of the PPA, responsibility of which, as per the UMPP concept of obtaining major clearances before transfer of Project, was on PFC/Procurers. Further, the Procurers vide the EIA, had provided the indicative costs of the Environmental Measures, which did not include the cost of implementation and maintenance of the FGD system. Therefore, facts of the present case are very different from JSW case.

- (g) In order to comply with the Revised Norms, which is a Change in Law, the Petitioner will be required to install the FGD System which will result in 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 to the Petitioner for which Petitioner needs to be compensated as per Article 13.2 (b) of the PPA.

18. During the hearing of the Petition, learned counsel for the Petitioner reiterated the submissions made in its petition and rejoinders to the replies of the Respondents. In short, learned counsel submitted that the MoEFCC Notification, 2015 which mandatorily require all thermal power plants installed till December, 2016 to comply with the revised norms is in the nature of Change in Law. Learned Counsel submitted that the installation of FGD was not contemplated in the original EC and therefore, there was no need for allocation of separate funds for FGD System. Learned counsel further submitted that the cost of installation of FGD system is estimated to be Rs. 4500 crore apart from huge amount of limestone and other raw materials, including additional water requirement, recurring cost towards disposal of waste and by-products and increase in Auxiliary Power Consumption of the station by 2%. Learned Counsel submitted such huge expenditure has the impact of grossing up the tariff and reduction in the contracted capacity allocated to the Procurers. Learned counsel further submitted that in terms of Article 13.2 read with 13.2 (b) of the PPA, the Petitioner is required to be compensated and restored to the same economic position as if the Change in law event had not occurred. In response, the learned counsel for the respondent, MPPMCL submitted that EC dated 23.11.2006 granted to the Petitioner has mandated provision for installation of FGD at a later stage and mandated separate funds to be allocated for installation of FGD and for making environmental management plan which are to be included in the capital cost. The notification dated 7.12.2015 by MOEFCC merely confirms the



requirement of installation of FGD and hence does not constitute Change in law. The issue of installation of FGD as Change in law event was considered by the Appellate Tribunal in JSW Energy Ltd v/s MSEDCL & Anr, wherein after interpretation of the provisions of the EC, the Appellate Tribunal had rejected the said claim of Change in law event. The facts in the present case are similar as it involves interpretation of the same provision of EC. Learned Counsel for PSPCL, UP Discoms and Haryana Utilities adopted the submissions of learned counsel for MPPMCL. Additionally, they submitted that the application is pre-mature as no expenditure has been incurred for compliance of Change in Law. Learned counsel for the Petitioner in his rejoinder submitted that the judgement in JSW case cannot be made applicable to the case of the Petitioner as the facts and circumstances in both the cases are different from each other. Learned counsel further submitted that the order of the Commission in respect of Petition No. 104/MP/2017 (Adani Power) is applicable to the instant case of the Petitioner.

Analysis and Decision

19. In the light of the submission of the parties as recorded herein above, the following issues arise for our consideration:

- (a) **Issue No. 1:** Whether MoEFCC Notification qualifies to be considered as an event of Change in Law in terms of the PPA dated 7.8.2007 between the Petitioner and the Procurer-Respondents?
- (b) **Issue No. 2:** If so, whether the requirement of notice as per the provisions of Article 13 of the PPA have been complied with by the Petitioner?



(c) **Issue No. 3:** Whether the in-principle approval can be granted for implementation of the event covered under Change in Law in terms of the PPA?

(d) **Issue No. 4:** Whether any guidelines are to be issued for implementation of MoEFCC Notification, 2015?

Issue No. 1: Whether MoEFCC Notification qualifies to be considered as an event of Change in Law in terms of the PPA dated 7.8.2007 between the Petitioner and the Procurer-Respondents?

20. The Petitioner has entered into a PPA dated 7.8.2007 with the Procurers in the States of Madhya Pradesh, Uttar Pradesh, Rajasthan, Delhi, Punjab, Haryana and Uttarakhand after RPower was selected as a successful bidder to develop the Sasan UMPP based on the competitive bidding carried out by Power Finance Corporation in terms of Section 63 of the Act and Competitive Bidding Guidelines. Article 13 of the PPA which deals with Change in Law is extracted as under:-

"ARTICLE 13: CHANGE IN LAW

13.1 Definitions

In this Article 13, the following terms shall have the following meanings:

13.1.1 "Change in Law" means the occurrence of any of the following events after the date, which is seven (7) days prior to the Bid Deadline:

- (i) the enactment, bringing into effect, adoption, promulgation, amendment, modification or repeal, of any Law or (ii) a change in interpretation of any Law by a Competent Court of law, tribunal or Indian Governmental instrumentality provided such Court of law, tribunal or Indian Governmental Instrumentality is final authority under law for such interpretation or
- (ii) change in any consents, approvals or licenses available or obtained for the Project, otherwise than for default of the Seller, which results in any change in any cost of or revenue from the business of selling electricity by the Seller to the Procurers under the terms of this Agreement, or (iv) any change in the (a) Declared Price of Land for the Project or (b) the cost of



implementation of the resettlement and rehabilitation package of the land for the Project mentioned in the RFP or cost of implementing Environmental Management Plan for the Power Station mentioned in the RFP, indicated under the RFP and the PPA;

but shall not include (i) any change in any withholding tax on income or dividends distributed to the shareholders of the Seller; or (ii) change in respect of UI Charges or frequency intervals by an Appropriate Commission.

Provided that if Government of India does not extend the income tax holiday for generation projects under Section 80 IA of the Income Tax Act, upto the Scheduled Commercial Operation Date of the Power Station, such non-extension shall be deemed to be a Change in Law.

13.1.2 "Competent Court" means:

The Supreme Court or any High Court, or any tribunal or any similar judicial or quasi-judicial body in India that has jurisdiction to adjudicate upon issues relating to the Project.

21. Law has been defined in the PPA as under:-

"Law" means in relation to this Agreement, all laws including Electricity Laws in force in India and any statute, ordinance, regulation, notification or code, rule, or any interpretation of any of them by an Indian Governmental Instrumentality and having force of law and shall further include all applicable rules, regulations, orders, notifications by an Indian Governmental Instrumentality pursuant to or under any of them and shall include all rules, regulations, decisions and orders of the Appropriate Commission."

As per the above definition, Law means (a) all laws including Electricity Laws in force in India; (b) any statute, ordinance, regulation, notification or code, rule or their interpretation by an Indian Government Instrumentality which has force of law; (c) includes any statute, applicable rules, regulations, orders and any notifications by an Indian Government Instrumentality pursuant to or under any of them; and (d) all rules, regulations, decisions and orders of Appropriate Commission. Indian Government Instrumentality has been defined as "the GOI, Government of States where the Procurers and Project are located and any ministry or department of or board, agency or other, regulatory or quasi-judicial authority controlled by GOI or



Government of States where the Procurers and Project are located and includes the Appropriate Commission.”

22. MoEFCC is a Ministry under Government of India and therefore, is an Indian Government Instrumentality. The Environment (Protection) Rules, 1986 was issued by MoEFCC in exercise of powers conferred under Sections 6 and 25 of the Environment (Protection) Act, 1986 which qualify as “law” in terms of the PPA dated 7.8.2007. The norms for emission of environmental pollutants to be complied with by the thermal power plants were prescribed in Schedule I of Environment (Protection) Rules, 1986. The bid deadline was 28.7.2007. While quoting its tariff, RPower was expected to factor in the environmental norms prevailing as on 21.7.2007 which is seven days prior to the bid deadline. RPower was selected as the successful bidder and acquired the Petitioner which was an SPV of Power Finance Corporation. Madhya Pradesh Pollution Control Board prescribed certain conditions vide its approval dated 6.7.2006. MoEFCC issued the Environment Clearance on 23.11.2006 for Sasan UMPP. The Petitioner executed the Sasan UMPP in accordance with the Environmental Clearance issued by MoEFCC and clearance issued by Madhya Pradesh Pollution Control Board which is also Indian Government Instrumentality, being the Board constituted by Government of Madhya Pradesh where the Sasan UMPP is located. Therefore, the Petitioner executed Sasan UMPP in accordance with the Environment Clearance issued by MoEFCC, clearances issued by Madhya Pradesh Pollution Control Board, the prevailing environmental norms as per the Environment (Protection) Rules, 1986 and other environment laws. MoEFCC notified the Environment (Protection) Amendment Rules, 2015 on 7.12.2015 amending Schedule I of the Environment (Protection) Rules, 1986 which



provided for revised parameters for water consumption, particulate matters, Sulphur Dioxide, Oxides of Nitrogen and Mercury in respect of thermal power plants. The cut-off date of the Sasan UMPP is 21.7.2007 which is seven days prior to the bid deadline of 28.7.2007. Since the MoEFCC Notification which seeks to revise the environmental norms prescribed in the Environment (Protection) Rules, 1986 and has been issued after the cut-off date, the revised environmental norms qualify as events under change in law in terms of the PPA dated 7.8.2007. Sasan UMPP has achieved the commercial operation of the generating station on 27.3.2015 which is prior to the MoEFCC Notification. Therefore, the change in law events brought about through the MoEFCC Notification shall qualify as change in law during the operating period in terms of the PPA dated 7.8.2007.

23. It is further pertinent to mention that Ministry of Power, Government of India in its letter dated 30.5.2018 has issued directions to this Commission under Section 107 of the Act with regard to the implementation of the revised environmental norms as per MoEFCC Notification dated 7.12.2015. The said letter is extracted as under:

Quote

No.23/22/2018- R & R
Government of India
Ministry of Power

Shram Shakti Bhawan, Rafi Marg
New Delhi, 30th May, 2018

To
The Chairperson,
Central Electricity Regulatory Commission
Chanderlok Building,
Janpath, New Delhi-110001

Subject: Mechanism of implementation of new Environmental norms for thermal powerplants (TPP) supplying power to distribution licensees under concluded long term and medium term power purchase agreement (PPA)



Sir,

Ministry of Environment, Forest and Climate Change (MoEFCC) has notified the Environment (Protection) Amendment Rules, 2015 on 7th December, 2015 thereby introducing revised emission standards for Thermal Power Plants (TPPs). The revised emission standards are applicable to existing as well as upcoming TPPs. To meet the revised emission standards, the TPPs would have to install or upgrade various emission control systems like Flue-gas desulfurization (FGD) system, Electro-Static Precipitators (ESP) system etc.

2. As per implementation plan prepared by Central Electricity Authority (CEA), the existing TPPs are required to comply with the new emission standards by the year 2022.

3. Implementation of revised emission standards would face challenges relating to stringent timelines, availability of suppliers and technology, shut down for longer periods, and revenue loss during shutdown. It would also have significant implications on the tariff agreed under the long term and medium term Power Purchase Agreement (PPA) due to additional infrastructure and operational cost on account of large scale installations, renovations & retrofitting of existing plant and machinery to meet revised emission norms.

4. In view of the nature of cost involved in implementation of revised standards of emission and the provisions of Power Purchase Agreement, there is a need to develop the appropriate regulatory framework specifying the mechanism or enabling guidelines for providing regulatory certainty to the TPPs about recovery of such additional costs through tariff. It is important to ensure implementation of the revised standards of emission for TPPs for controlling pollution level in the larger public interest.

5. After considering all aspects and with due regard to the need for safeguards against environmental hazards, and accordingly to ensure timely implementation of new environment norms, the Central government has decided that-

5.1 The MOEFCC Notification requiring compliance of Environment (Protection) Amendment Rules, 2015 dated 7th December, 2015 is of the nature of Change in law event except in following cases:

(a) 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

(b) TPPs 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;

5.2 The additional cost implication due to installation or up-gradation of various emission control systems and its operational cost to meet the new environment norms, after award of bid or signing of PPA as the case may be, shall be considered for being made pass through in tariff by Commission in accordance with the law.

5.3 The respective TPPs may approach the Appropriate Commission for approval of additional capital expenditure and compensation for additional cost on account of this Change in law event in respect of the Power Purchase Agreement entered under Section 62 or Section 63 of the Electricity Act, 2003.



5.4 For the TPPs that are under the purview of the Central Commission, the Commission shall develop appropriate regulatory mechanism to address the impact on tariff, and certainty in cost recovery on account of additional capital and operational cost, under concluded long term and medium term PPAs for this purpose.

6. The Central Government, in exercise of the power conferred under Section 107 of the Electricity Act 2003 issues directions to the Central Electricity Regulatory Commission to implement the above decision of the Government. This direction is being issued to facilitate the smooth implementation of revised emission standards of the Environment (Protection) Amendment Rules, 2015 dated 7th December, 2015 for Thermal Power Plants in the larger public interest.

7. This issues with the approval of Minister of state (IC) for Power and NRE.

Yours faithfully
Ghanshyam Prasad
Chief Engineer

Unquote

24. The Central Government in exercise of its power under Section 107 of the Act has declared 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 except in cases (a) where the Power Purchase Agreements of such thermal power plants have been determined under Section 63 of the Act having bid deadline on or after 7.12.2015; or (b) thermal power plants 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. In the case of the Petitioner, the bid deadline was 28.7.2007 and therefore, the case of the Petitioner does not fall within the first exception. As regards the second exception, at (b) above, Sasan UMPP meets some of the revised environment norms based on the environment approval and in respect of such norms, Change in Law is not admissible. In fact, the Petitioner has not claimed the relief under Change in Law for particulate matters, water consumption and mercury. In respect of other norms, reliefs for Change in Law have been claimed by the Petitioner.



25. Next we consider the case of the Petitioner for Change in Law in respect of each of the revised parameters introduced through the MoEFCC Notification of 2015 and the comments/objections of the Procurers thereon. The Petitioner has submitted that it is required to install FGD for limiting the SO₂ emission within the norms. As regards the Oxides of Nitrogen, the Petitioner has submitted that it has carried out a preliminary assessment which indicates that additional measures are required to control emission within revised norms and detailed study is being carried out to identify the technology. As regards maximum water consumption, particulate matter and mercury emission, the Petitioner has submitted that as per the preliminary assessment, it is already in compliance with the revised norms and the Petitioner reserves the right to approach the Commission in the event any additional measures need to be implemented involving additional cost to comply with the additional condition. The case of the Petitioner for implementing the revised norms to limit Sulphur Dioxide has been discussed hereinafter, since Respondents have contended that the requirement of FGD installation was provided for in the Environmental Clearance granted on 23.11.2006.

Sulphur Dioxide (SO₂)

26. The Petitioner has submitted that as on the Cut-Off Date, there were no norms specified with regard to SO₂ emission from a thermal power station (stack emission i.e. emission at the Chimney of the power plant). Only, the ambient air quality standards for SO₂ were specified by Central Pollution Control Board (CPCB). The requirement under the norms specified by CPCB towards SO₂ emission was 80 micro gram/M³ and the same was being complied with by the Petitioner. Further, the



Thermal Power Plants were merely required to comply with the condition relating to stack height, as provided in Schedule I to the Environment (Protection) Rules, 1986. With the issue of MoEFCC Notification, 2015, the Petitioner is mandated to limit SO₂ emission from the project (stack emission basis) below 200 mg/Nm³ irrespective of Ground Level Concentration (GLC) and ambient air quality norms. The Petitioner has submitted that to meet the norms, FGD is required to be installed.

27. The Respondents have submitted that reduction in emission of Sulphur Dioxide which requires installation of FGD cannot be considered as a Change in Law as installation of FGD was envisaged as on the cut-off date, in terms of the environmental clearance dated 23.11.2006 as the Petitioner was required to install the FGD subsequently. The Respondents have further submitted that the issue of installation of FGD being covered under Change in Law was considered by the Appellate Tribunal in judgement dated 21.1.2013 in Appeal No. 105 of 2011 (M/s JSW Energy Limited Vs. Maharashtra State Electricity Distribution Co. Ltd. and Another, in which the Appellate Tribunal held that the condition of installation of FGD at a later stage in the Environment Clearance would mean that the generator was aware of the requirement of FGD and there was no change in law because of subsequent confirmation on installation of FGD. The Environment Clearance granted to M/s JSW had similar conditions as in Petitioner's Environment Clearance. The Respondents have further distinguished the case of the Petitioner from that of Adani Power Limited where the Commission allowed FGD under Change in Law. The Respondents have also relied upon the order of the Commission in Petition No.24/2000 to say that even the Commission has held in the said order that the cost of FGD is included in the capital cost.



28. The Petitioner has refuted the contention of the Respondents on the ground that no emission norms for Sulphur Dioxide were prescribed before the cut-off date and therefore, MoEFCC Notification imposing the norms of 200 mg/Nm³ for Sulphur Dioxide is a Change in Law event. The Petitioner has submitted that the environmental clearance dated 23.11.2006 which was issued before the cut-off date but was made available to the Petitioner on the date of signing of the PPA did not provide for any requirement to earmark/identify funds for setting up of FGD system and only provided for arrangement of space for FGD which has been complied with by the Petitioner. The Petitioner has also submitted that the facts of the case in Petition No. 24/2000 are distinguishable from the present case. According to the Petitioner, the requirement for installation of FGD fructified only after issue of MoEFCC Notification, 2015 prescribing stringent environmental norms and therefore, it qualifies for change in law.

29. We have considered the submissions of the Petitioner and Respondents. The Petitioner was selected for execution of the Sasan UMPP through a Case 2 competitive bidding. Clause 1.4(iii) of the RFP for Sasan UMPP provides as under:

“1.4 The Procurers through the Authorized Representative, have initiated development of the Project at Sasan, District Sidhi, Madhya Pradesh and shall complete the following tasks in this regard by such time as specified hereunder:

xx

- iii. Obtain necessary environmental and forest clearances for the Power Station, prior to the issue of the Letter of Intent. The draft environment management plan will be made available at least ninety (90) days prior to Bid Deadline. These clearances are being obtained in relation to a project of gross capacity of 4000 MW employing Supercritical Technology;”

xx

- vii. Indicative costs of the following:



- (a) land for captive coal mines and land for compensatory afforestation;
- (b) land for fuel transport system;
- (c) rehabilitation and resettlement for (a) and (b) above; and
- (d) compensatory afforestation, if any, for captive coal mine area.

shall be provided at least thirty (30) days prior to Bid Deadline.”

As per the above provisions in the RFP, the Procurers through their authorised representative were required to obtain the necessary environmental clearance and forest clearance for the power station prior to the issue of the Letter of Intent. Further, the indicative cost to be provided to the bidders 30 days prior to the Bid Deadline does not include the cost to be incurred in connection with environment clearance.

30. PFC carried out an EIA Study through Desin Private Limited. The Study recommended the details of pollution control system as under:

“xxxv.Pollution Control Aspects

A. details of pollution control systems:

S. No.	Control system for	Proposed to be installed
1.	Air	<p>“ESPs (efficiency about 99.89%) will be installed to control the emission of particulate matter to 50 mg/Nm³.</p> <p>Low NO_x generation technology will be used. NO_x emission in super critical boilers will be lesser than that of PF boiler.</p> <p>RCC stacks of height 275 m will be provided for proper dispersion of pollutants.</p> <p>Space will be left to install FGD, if required in future.</p> <p>Special precautions will be taken to control the fugitive dust emissions within and around coal handling plant. Coal dust extraction and suppression systems will be provided at different transfer points. Roof exhaust fans will be provided in key areas such as in the crusher house and boiler bunker floors and</p>



		pressurized ventilation in the control room. Maximum ash will be collected and any escaping dust will be entrapped in the air washer. Flow of air to vacuum pumps will contain negligible dusts.”
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Further, indicative cost for environmental protection measure was Rs.865 crore as under:

S. No.	Aspect	Recurring Cost per annum	Capital Cost
1.	Air Pollution Control (includes ESP cost)	10,000/-	60,000/-
2.	Water Pollution Control	3000/-	20,000/-
3.	Noise Pollution Control	-	Included in equipment cost
4.	Environment Monitoring and Management	100/-	2500/-
5.	Reclamation borrow/mined area	NA	-
6.	Occupational Health	80/-	2500/-

From the above, it is apparent that Rs. 600 crore was earmarked for Air Pollution Control. Further, the Pollution Control System for Air did not include the cost of FGD but only indicated that the space provision shall be made to install FGD, if required in future.

31. Madhya Pradesh Pollution Control Board issued a “No Objection Certificate” dated 7.6.2006 for obtaining the environmental clearance for the proposed Sasan UMPP. Para 6 and 7 of the said letter is extracted as under:-

“6. Continuous monitoring system shall be installed for monitoring of emission level of oxide of sulphur and nitrogen and S.P.M. both in the ambient air as well as stack. Permanent ambient air monitoring stations, in all the four directions shall be installed.

7. Industry shall adopt FGD (Flue Gas Desulphurisation) facility for control of sulphur dioxide.”



32. The environmental clearance dated 23.11.2006 was issued in favour of the authorized representative of the procurers namely, PFC. In the said environmental clearance, the cost of the project is indicated as Rs. 15000 crore including Rs. 865 crore for environment protection measure. It is pertinent to note that Rs. 865 crore corresponds to the amount envisaged in the EIA report prepared by PFC. The relevant conditions in the environmental clearance are extracted as under:-

“3. The proposal has been considered in accordance with para 12 of the EIA Notification dated 14.9.2006 read with sub-clause (i) of clause 2.1.1 of sub para 2.1 of para 2.0 of the Circular No. J-11013/41/2006-IA.II (I) dated 13.10.2006 and environmental clearance is hereby accorded under the provisions there of subject to implementation of the following terms and conditions:-

(i) All the conditions stipulated by Madhya Pradesh Pollution Control Board vide their letter no. S 688/TS/MPPCB/2006 dated 6.7.2006 shall be strictly implemented.

xxxxxxxxxxxxxx

(xii) Space provision shall be made for Flue Gas Desulphurisation (FGD) unit, if required at a later stage.

xxxxxxxxxxxxxx

(xxviii) Separate funds should be allocated for implementation of environmental protection measures along with item-wise break-up. This cost should be included as part of the project cost. The funds earmarked for the environment protection measures should not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.”

Though MP Pollution Control Board in its “No Objection” to Sasan UMPP had stipulated that industry shall adopt FGD facility for control of sulphur dioxide, MoEFCC in the environmental clearance dated 23.11.2006 has put the condition that “space provision shall be made for Flue Gas Desulphurisation (FGD) unit, if required at a later stage”. In other words, the environmental clearance only required the Petitioner to provide for space for FGD, if required at a later stage.



33. Recital B of the PPA dated 7.8.2007 notes the status of clearances as under:

“B. The Procurers, through their Authorised Representative, have completed the initial studies as contained in Project Report; and obtained Initial Consents required for the Project which are set out in Part 1 of Schedule 2 and have been made available to the Seller on date of execution of this Agreement, except Forest Clearance for the PowerStation and Section 6 notification by Government of Madhya Pradesh under Land Acquisition Act for the Power Station Land. The Clearance/ notification are being expedited and are expected shortly. Position of the Clearance/ notification which are not available and consequences will be reviewed on, November 30, 2007.”

Part 1 of Schedule 2 of the PPA is extracted as under:

“2. SCHEDULE 2: INITIAL CONSENTS

PART I

- i. Section 6 notification by Government of Madhya Pradesh under Land Acquisition Act;
- ii. Necessary environmental and forest clearances for the Power Station;
- iii. Allocation of Captive Coal Mine(s);
- iv. Water linkage for the reasonable Project requirements.”

It is therefore clear from the above that the environment clearance for Sasan UMPP was obtained by procurers on 23.11.2006 and was made available to the Petitioner on the date of execution of the PPA i.e. 7.8.2007 which was after the Bid Deadline. Therefore, the Petitioner did not have the occasion to factor the cost of FGD in the Bid as it was the obligation of the Procurers to obtain environmental clearance.

34. Respondent No. 1 in its written submission has enclosed a copy of the Environment and Social Impact Assessment (ESIA) Report of July, 2010 to MoEFCC. The compliance status as on June, 2010 in respect of FGD is as under:-



Stipulation	Compliance Status as of June 2010
Space provision shall be made for Flue Gas Desulphurisation (FGD) unit, if required at a later stage	Space provision has been kept in the layout for FGD, if required at a later stage.

The above report to MoEFCC shows that the Petitioner has complied with the space requirement for FGD, if required at a later stage. There is no provision for funds for FGD. No objection has been raised by MoEFCC with regard to non-allocation of funds for FGD as part of environment protection measures in terms of Condition 3 (xxviii) of the EC dated 23.11.2006.

35. The Respondents have argued that the case of the Petitioner stands on a similar footing as JSW case where the expenditure on FGD was disallowed under Change in Law. Brief facts in JSW case may be first noted. JSW sought prior environment clearance from MoEFCC vide its proposal dated 6.11.2006. MoEFCC issued environment clearance dated 17.5.2007 which among other conditions stipulated that space provision shall be made for installation of FGD of requisite efficiency of removal of SO₂, if required at later stage and separate funds should be allocated for implementation of Environmental protection measures along with item wise break up and cost thereof should be included as part of the project cost. MSEDCL initiated the process of competitive bidding in October, 2007 for procurement of power with cut-off date as 14.2.2008 (seven days prior to bid deadline). On 21.02.2008, the Appellant had submitted the bid for supply of 300 MW of power. The bid evaluation took place in March, 2008 and JSW was selected as the successful bidder. Power Purchase Agreement dated 23.02.2010 was entered into between MSEDCL and JSW for supply of 300 MW of power. Subsequently, MoEFCC sent a letter to JSW on 16.4.2010 directing that the FGD system would be



installed before commissioning the Project. The Appellate Tribunal in its judgement has specifically noted that “as on the cut-off-date, the prior Environmental clearance received by the Appellant stipulated that the cost relating to the implementation of the Environmental protection measures should be included as part of the Project cost.” After analysing the various provisions of the PPA and the Environment Clearance dated 17.5.2007 and MoEFCC Letter dated 16.4.2010, the Appellate Tribunal came to the conclusion that Clauses 5.4 and 3.1.ii of the PPA cast the obligation on JSW to provide for the cost of FGD in the capital cost and therefore, there is no Change in Law. Relevant para of the said judgement is extracted as under:

“30. As mentioned above, Environmental clearance dated 17.5.2007 provided for installation of the FGD at a later stage and further mandated that separate funds must be allocated for installation of the said FGD as well as for making such Environmental protection measures which are to be included in the project cost. Admittedly, this has not been complied with by the Appellant after getting the Environmental Clearance. The letter dated 16.4.2010 issued by the Central Government merely confirms the requirement of installation of the FGD intimated earlier. It merely informs the Appellant the stage of installation. Therefore, there was no ‘Change in Law’ which has been occasioned as claimed by the Appellant.”

36. In case of the Petitioner, the project was conceived as a UMPP. As per the RFP, it was the responsibility of the Procurers to obtain the initial consent which included environment clearance and provide the same to the successful bidder before the issue of Lol. On the contrary, JSW was an independent power producer which was required to obtain all clearances including the environment clearance on its own from MoEFCC. Further, in case of JSW, environment clearance was granted (17.5.2007) before the cut-off date (14.2.2008) and accordingly, JSW was aware of the conditions imposed in the environment clearance while quoting the bid. The Appellate Tribunal accordingly held that JSW should have taken into account the



capital expenditure towards FGD while submitting the bid. On the contrary, Sasan UMPP was granted environment clearance on 23.11.2006 before the cut-off date (i.e. 21.7.2007) but the environmental clearance was made available to the Petitioner on the date of execution of the PPA (7.8.2007). Further, condition in para 3 (xii) of the Environment Clearance dated 23.11.2006 provides for separate funds for environmental protection measures and reporting of year-wise expenditure to MoEFCC. The Petitioner has submitted that an amount of Rs.865 crore had been earmarked by the Petitioner for environment protection measures as per the EIA study which includes only provision for space, if required in future and not actual installation of FGD. Therefore, it cannot be said that the Petitioner was required to include the expenditure on FGD to be incurred in future if required at a later stage in terms of condition 3 (xii) of the EC dated 23.11.2006. In view of the above reasons, we hold that the judgement of the Appellate Tribunal in JSW case is not applicable in the case of the Petitioner. The requirement of installation of FGD for compliance with the revised norms for Sulphur Dioxide in terms of the MoEFCC Notification, 2015 is covered under Change in Law in terms of the PPA dated 7.8.2007.

37. The Respondents have also relied upon the Commission's order dated 26.9.2000 in Petition No. 24/2000 (M/s Power Trading Corporation India Limited Vs. M/s Southern Energy Asia-Pacific Limited &Anr). In the said petition, PTC had approached the Commission for approval of tariff for the proposed Mega Power Project with a net capacity of 3960 MW to be developed by M/s Consolidated Electric Power (Asia) Limited in the State of Orissa as a pithead plant. The Commission took up the said petition as a conciliation proceeding between two parties and appointed SBI Caps as experts for evaluation of the proposal of the Petitioner and



Respondents to arrive at the most competitive tariff. The experts applied the normative norms of the Government of India for MoU based projects to arrive indicative tariff level. While dealing with the area of disagreement, the Commission observed as under:-

“Fixed Charge Component of Tariff

The project cost has been estimated to be Rs. 20,477 crore. The assumptions behind these estimates are detailed in Annexure-2. It has been agreed by both the parties that installation of the FGD unit is necessary due to the stipulation laid down by OPCB. Therefore, the cost estimate includes outlay towards the FGD unit.”

In our view, the said decision cannot be considered as an authority that all thermal plants are required to include the cost of FGD in the capital cost.

38. In the light of the above discussion, we are of the view that as on the cut-off date there was no requirement for installation of FGD for Sasan UMPP. The Environment Clearance dated 23.11.2006 only provided for making provision for space for FGD if required at a later stage. Even the Environmental Clearance dated 23.11.2006 was made available to the Petitioner on the date of signing of the PPA and the Petitioner could not have been expected to factor the cost of FGD in its bid. MoEFCC Notification, 2015 prescribed a limit for SO₂ below 200 mg/ Nm³ for thermal power plants which require installation of FGD. Accordingly, we hold that the case of the Petitioner for installation of FGD at Sasan UMPP is covered under Change in Law in terms of the PPA dated 7.8.2007.

Issue No. 2: If so, whether the requirement of notice as per the provisions of Article 13 of the PPA have been complied with by the Petitioner?

39. Article 13.3 provides for the “Notification of Change in Law”. Article 13.3 of the PPA is extracted as under:



“13.3 Notification of Change in Law

13.3.1 If the Seller is affected by a Change in Law in accordance with Article 13.2 and wishes to claim a Change in Law under this Article, it shall give notice to the Procurers 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.

13.3.2 Notwithstanding Article 13.3.1, the Seller shall be obliged to serve a notice to all the Procurers under this Article 13.3.2 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 Procurers contained herein shall be material. Provided that in case the Seller has not provided such notice, the Procurers shall jointly have the right to issue such noticed to the Seller.

13.3.3 Any notice served pursuant to this Article 13.3.2 shall provide, amongst other things, precise details of:

- (a) the Change in Law; and
- (b) the effects on the Seller of the matters referred to in Article.”

40. As per the above provisions, if the Seller is affected by Change in Law under Article 13.2 and wishes to claim change in law under the said Article, it is required to give a notice to the Procurers about the Change in Law as soon as reasonably practicable after becoming aware of the same. MoEFCC Notification, 2015 was issued on 7.12.2015. This Notification has to be mandatorily implemented within a period of two years i.e. upto 2017 which has subsequently been extended till 2022. The Petitioner issued a Change in Law notice to the Procurers of power from Sasan UMPP vide its letter dated 18.3.2016 in terms of Article 13.3 of the PPA. In the said notice, the Petitioner had indicated that it was assessing the financial and other implications of change in law events and would communicate the same after the assessment. In our view, the Petitioner has partially complied with the requirement of notice under Article 13.3 of the PPA.



Issue No.3: Whether the in-principle approval can be granted for implementation of the event covered under Change in Law in terms of the PPA?

41. The Petitioner has submitted that in order to meet the revised norms as prescribed in MoEFCC Notification, 2015, substantial investment is required. The Petitioner has submitted that it is important not only to have certainty of regulatory treatment of these costs and charges, but in-principle regulatory approval would be critical for arranging funds from the lenders. The present Petition has been filed under Section 79 of the Act invoking regulatory powers of the Commission seeking in-principle approval for regulatory certainty qua the treatment of such costs and tariff impact for its recovery. The Petitioner has submitted that the Hon'ble Supreme Court by its judgement in the matter of Energy Watchdog Vs. Central Electricity Regulatory Commission & Others {(2007) 14 SCC 80} has upheld the regulatory powers of the Commission under Section 79 of the Act to grant relief even in cases where tariff is determined under Section 63 of the Act.

42. The Respondents have submitted that there is no provision in the PPA for in-principle approval before the expenditure has been incurred and the compensation, if any, is payable under Article 13 only after the expenditure has been incurred. The Respondents have further submitted that the obligation to comply with the environmental norms is that of the Petitioner and the same is not subject to any approval by the Commission or reimbursement, if any, of costs by the Procurers. The Respondents have further submitted that the Hon'ble Supreme Court's judgement in Energy Watchdog Case clearly states that the powers of the Commission are to be exercised as per the provisions of the Competitive Bidding Guidelines and the PPA.



43. We have considered the submissions of the Petitioner and Respondents. We have already come to the conclusion in the earlier part of this order that MoEFCC Notification, 2015 is in the nature of Change in Law in terms of Article 13.1.1 (i) of the PPA. Being mandatory statutory requirements, the revised environment norms in respect of thermal power plants have to be implemented by the Petitioner by 2022. The relevant provisions of the PPA as regards the principles for computation of relief and tariff adjustment payment on account of Change in Law are extracted as under:

“13.2 Application and Principles for computing impact of Change in Law

While determining the consequence of Change in Law under this Article 13, 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 Payments, to the extent contemplated in this Article 13, the affected Party to the same economic position as if such Change in Law has not occurred.

a) Construction Period

As a result of any Change in Law, the impact of increase/decrease of Capital Cost of the Project, in the Tariff shall be governed by the formula given below:

For every cumulative increase/decrease of each Rupees Fifty crore (Rs. 50 crore) in the Capital Cost over the term of this Agreement, the increase/decrease in Non Escalable Capacity Charges shall be an amount equal to zero point two six seven (0.267%) of the Non Escalable Capacity Charges. Provided that the Seller provides to the Procurers documentary proof of such increase/decrease in Capital Cost for establishing the impact of such Change in Law. In case of Dispute, Article 17 shall apply.

It is clarified that the above mentioned compensation shall be payable to either Party, only with effect from the date on which the total increase/decrease exceeds amount of Rs. fifty (50) crore.

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 **Central Electricity Regulatory Commission** whose decision shall be final and binding on both the Parties, subject to rights of appeal provided under applicable Law.



conditions mentioned in Article 13.1.1 but also to determine the increase or decrease in revenues or cost to the Seller on account of operation of Change in Law keeping in view the restitution principle and the effective dates from which such compensation can be paid. There is no concept of in-principle approval in the PPA, and we find no reason to accord such approval as prayed for by the Petitioner. The consequential implementation of Change in Law and compensation will flow from the declaration and recognition that revised norms under MoEFCC Notification, 2015 are Change in Law events in terms of the PPA as well as the directions issued by the Central Government under Section 107 of the Act. Further, the Change in Law will be applicable on those items of cost or revenue which the Petitioner has claimed and is approved by the Commission. The Petitioner shall implement the revised environmental norms to comply with the MoEFCC Notification, 2015 and approach the Commission for determination of the increase in cost or/and revenue expenditure on account of implementation of such Change in Law in terms of guidelines to be prepared by CEA as stated in para 47 of this Order. At that stage, the Commission will determine the mode of recovery of the cost or/and revenue expenditure for the Petitioner through monthly tariff which shall be incurred for compliance with the MoEFCC Notification, 2015.

Issue No.4: Whether any guidelines are to be issued for implementation of MoEFCC Notification, 2015?

45. The compliance of the revised norms specified under the MOEFCC Notification, 2015 by the Petitioner would require identification of suitable technology depending upon location of plant and existing level of emission from such plant. The Petitioner has projected a one-time Capital Expenditure of Rs. 4500 crore



to set up additional plant, machinery and equipment such as Flue Gas Desulphurization Plant ("FGD").The Petitioner has also submitted that there will be disruption in power generation in the course of commissioning phase of the FGD system, resulting in decrease in revenue to the Petitioner for which Petitioner needs to be compensated as per Article 13.2 (b) of the PPA.

46. In para (b) and (c) of para 65 of the Petition, the Petitioner has prayed for the following:

“(b) Approve the methodology/mechanism for recovery of the amounts incurred on account of the Change in Law events;

(c) Approve in-principle project cost based on the benchmark cost basis, subject to true up/final approval of Project Cost, to enable it to avail financing as well as ensure timely implementation of required corrective measures to ensure compliance as per the revised norms and devise a mechanism for payment of compensation by the Procurers to the Petitioner on account of the aforesaid Change in Law event in terms of and based on the principles under Article 13 read with Article 13.2 (b) of the PPA.”

47. In our view, a mechanism also needs to be devised for addressing the issues like identification of suitable technology for each plant for implementation of ECS, its impact on operational parameters and on tariff, and the recovery of additional capital and operational cost. The Commission in the order dated 20.7.2018 in Petition No. 98/MP/2017 has directed the CEA to prepare guidelines specifying the following:

(a) Suitable technology with model specification for each plant, with regard to implementation of new norms.



(b) Operational parameters of the thermal power plants such as auxiliary consumption, O&M expenses, Station Heat Rate etc., consequent to the implementation of ECS.

(c) Norms of consumption of water, limestone, ammonia etc., required for operation of the plants after implementation of ECS.

(d) Any other detailed technical inputs.

48. The Petitioner is accordingly directed to implement the revised norms for Sasan UMPP in consultation with CEA.

Summary of our Decisions

49. Summary of our decisions in this order is as under:

(a) MoEFCC Notification, 2015 prescribing the revised environmental norms in respect of thermal Power plants which have been issued after the cut-off date of Sasan UMPP is Change in Law in terms of the PPA dated 7.8.2007 and the MoP directions issued under Section 107 of the Act.

(b) The Petitioner is required to take steps to implement revised norms in respect of Sulphur Dioxide. As regards Oxides of Nitrogen, the Petitioner is carrying out a study about the level of emission and if as a result of the study, the level of emission of Oxide of Nitrogen exceeds the prescribed limit, the Petitioner shall implement the necessary environment measures in consultation with CEA.



- (c) Sasan UMPP meets the norms prescribed in MoEFCC Notification, 2015 with regard to particulate matters, water consumption and mercury, and accordingly, the Petitioner has not claimed the relief for these items under Change in Law.
- (d) The Commission has directed CEA vide its order dated 22.7.2018 in Petition No. 98/MP/2017 to prepare guidelines specifying the suitable technology for each plant and operational parameters such as auxiliary consumption, Station Heat Rate, O&M expenses, norms of consumption of water, lime stones etc.for implementation of revised environmental norms. The Petitioner shall implement the revised norms as per the MoEFCC Notification, 2015 in consultation with CEA.
- (e) There is no provision for in-principle approval in the PPA. However, the Commission has decided that revised norms under MoEFCC Notification, 2015 are Change in Law events. Accordingly, the Petitioner shall approach the Commission for determination of increase in cost or/and revenue expenditure on account of implementation of revised norms in accordance with the Guidelines to be issued by CEA to give effect to MoEFCC Notification, 2015 and the mode of recovery of the same through monthly tariff.

50. Petition No.133/MP/2016 is disposed of in terms of the above.

sd/-
(Dr. M.K. Iyer)
Member

sd/-
(A. K. Singhal)
Member

sd/-
(P. K. Pujari)
Chairperson

