CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No: 104/MP/2017

Coram:

Shri P.K.Pujari, Chairperson Shri A.K. Singhal, Member Shri A.S. Bakshi, Member Dr. M.K. Iyer, Member

Date of Order: 28th March, 2018

In the matter of

Petition under Section 79 of the Electricity Act, 2003 read with Article 13 ("Change in Law") of the Power Purchase Agreements dated 7.8.2008 executed between Uttar Haryana Bijli Vitran Nigam Limited / Dakshin Haryana Bijli Vitran Nigam Limited and Adani Power Limited.

And

In the matter of

Adani Power Limited "Adani House" Near Mithakhali Six Roads, Navarangpura Ahmedabad-380009

.....Petitioner

Vs

- 1. Uttar Haryana Bijli Vitran Nigam Limited Shakti Bhawan, Sector 6 Panchkula, Haryana- 134109
- 2. Dakshin Haryana Bijli Vitran Nigam Limited Vidyut Sadan, Vidyut Nagar Hisar, Haryana-125005

..... Respondents

Parties present:

Shri Amit Kapur, Advocate, APL
Ms. Abiha Zaidi, Advocate, APL
Shri Jignesh Langalia, APL
Shri G. Umapathy, Advocate, HPPC
Shri Aditya Singh, Advocate, HPPC
Shri Avinash Mirajkar, HPPC
Shri Ravi Juneja, HPPC
Shri M.G. Ramachandran, Advocate, Prayas
Ms. Ranjitha Ramachandran, Advocate, Prayas
Ms. Anushree Bardhan, Advocate, Prayas



ORDER

Background

Adani Power Ltd. (hereinafter referred to as the "Petitioner" or APL) has filed the present petition seeking reimbursement of expenditure for installation and operation of Flue Gas De-Sulfurization (hereinafter referred to as 'FGD') Plant in Units 7,8 and 9 of Mundra Power Plant under 'Change in Law' provisions of the Power Purchase Agreements dated 7.8.2009 between the Petitioner and Uttar Haryana Bidyut Vitran Nigam Limited (UHBVNL) and Dakshin Haryana Bidyut Vitran Nigam Limited (DHBVNL) (hereinafter "Haryana Utilities").

- 2. The Petitioner has set up a 4620 MW Thermal Power Plant (hereinafter referred to as "Mundra Power Project") in Special Economic Zone at Mundra, Gujarat consisting of four Units of 330 MW in Phase I and II Units, two Units of 660 MW in Phase III and three Units of 660 MW in Phase IV (7, 8 and 9). In response to the Request for Qualification and Request for Proposal invited by the Haryana Power Generation Company Limited, the Petitioner submitted the bids for supply of 1424 MW of power from Units 7,8 and 9 (Phase IV) of the Mundra Power Project. After being declared as the successful bidder, the Petitioner entered into two separate long term PPAs dated 7.8.2008 with Uttar Haryana Bidyut Vitran Nigam Limited (UHBVNL) and Dakshin Haryana Bidyut Vitran Nigam Limited (DHBVNL) for supply of 712 MW each at a levelised tariff of ₹2.94 per unit at the Haryana Peripherry.
- 3. Petition No. 156/MP/2014 was filed by the Petitioner seeking directions to the Haryana Utilities for paying compensation on account of certain events of 'Change in law' including the installation of FGD in terms of Article 13 of the PPAs dated 7.8.2008. The Petitioner in the said Petition had stated that certain events of change in law namely installation of FGD as per Environment Clearance (EC) granted by the

Petitioner Ministry of Environment & Forests (MOE&F), levy of customs duty, Green Energy Cess, etc. have adverse financial impact on the cost/revenue of the Petitioner and accordingly the Petitioner had sought restitution/restoration to the same economic position as if the change in law events had not occurred.

- 4. The Commission by order dated 6.2.2017 disposed of the claims of the Petitioner on merits. At this stage, we intend to clarify that the environmental clearances for the project were accorded for three phases, namely, Phase I clearance consisting of two units of Phase I (2x 330 MW), Phase II clearance consisting of two units of Phase III and two units of Phase III (2x330 + 2x660 MW) and Phase III clearance consisting of three units of Phase IV (3 x 660 MW). Since the Phase IV consisting of Units 7, 8 & 9 in has been referred to as Phase III in the environment clearance dated 20.5.2010, the terminology "Phase III of the project" has been used in connection with consideration of the claim of the Petitioner for FGD in the order dated 6.2.2007 as well as this order. In the order dated 6.2.2017 in Petition No.156/MP/2014, the Commission directed as under with regard to the claims of the Petitioner for the expenditure incurred on installation and operation of FGD under Change in Law as per EC dated 20.5.2010 granted by MOE&F:
 - "95. The Petitioner has made huge investment on FGD in order to comply with the conditions laid down in the environment clearance dated 20.5.2010. In order to consider the claims of the Petitioner under Change in Law for compensation for the installation and operation of FGD in Phase III of the Mundra Power Project, the following information/documents are considered relevant:
 - (a) Copy of the application made to MoEF for environment Clearance for Phase III of the Mundra Power Project;
 - (b) Copy of the Terms of Reference issued by MoEF for phase I, II & III prior to grant of environment clearance;
 - (c) Copies of the Minutes of the Expert Appraisal Committee in connection with the application of the Petitioner for Environment Clearance for phase III;
 - (d) Copy of the Financial Closure indicating the expenditure on different heads in respect of Phase III of Mundra Power Project;

- (e) The Petitioner was granted environmental clearance for Phase I of the project on 13.8.2007 and or Phase II of the project on 21.10.2008. One of the conditions of environment clearance is that "separate funds should be allocated for implementation of Environmental Protection measures alongwith item-wise break-up. These cost should be included as part of the project cost. The funds earmarked for the environmental measures should not be diverted for other purposes and year-wise expenditure should be reported to the Ministry." The Petitioner shall place on record the year-wise expenditure submitted to MoEF in compliance with the environmental clearance dated 13.8.2007 and 21.10.2008.
- (f) Any other information considered relevant for the purpose of consideration of the claim for FGD under Change in Law."
- 96. The Petitioner is granted liberty to submit the claim for FGD through a separate application including the information sought in terms of para 95 above."
- 5. In terms of the liberty granted by the Commission as above, the Petitioner has filed this Petition along with the information sought for by the Commission and has prayed for the following reliefs:
 - "(a) Declare that the event mentioned above is a Change in Law event as per the PPAs.
 - (b) Grant compensation under Change in Law for the additional capital cost, operational expenditure and auxiliary consumption on account of installation of FGD as per the methodology suggested herein above.
 - (c) Direct the Respondents to make the payment of the compensation in accordance with the methodology as indicated in the petition for the aforementioned Change in Law event from the date of commencement of power supply under the respective PPA's
 - (d) Direct the Respondents to pay in the interim 95% of the amount payable towards Change in Law from the date of commencement of supply till date subject to adjustment based on final orders of the Hon'ble Commission.
 - (e) Direct the Respondents to pay Carrying Cost for the period of delay from the date of Notification of Change in Law.
 - (f) Pass such further Order(s) as this Hon'ble Commission may deem just and proper in the fact and circumstances of the case and in the Interest of Justice."
- 6. The Petition was admitted and the Commission directed the parties to complete pleadings in the matter. Reply to the petition has been filed by Haryana Utilities vide affidavit dated 25.8.2017. Also, M/s Prayas (Energy Group) has filed its reply vide affidavit dated 7.8.2017. The Petitioner has filed its rejoinder to the above replies vide its affidavit dated 26.8.2017 and 8.8.2017 respectively.

Submissions of Petitioner

- 7. The Petitioner in this Petition has submitted as under:
 - (a) As on the cut-off date (i.e. 19.11.2007), the National Ambient Air Quality ("NAAQ") Standards, notified by the Central Pollution Control Board (CPCB) vide Notification No. S.O. 384(E) dated 11.4.1994 in exercise of its powers conferred under section 16(2)(h) of the Air (Prevention and Control of Pollution) Act, 1981(14 of 1981) were in force.
 - (b) In June, 2008, the CPCB had circulated the Draft Notification for amendment of NAAQ Standards which proposed stricter emission norms than were prevalent since 1994.
 - (c) On 03.10.2008, the Petitioner made application to Ministry of Environment & Forest (MoEF), Govt. of India (GoI) to obtain Terms of Reference (ToR) for environmental clearance for Phase III of the Mundra power plant. During the 34th Expert Appraisal Committee (EAC) meeting held on November 10-11, 2008, the Committee recommended ToR for Phase III and the MoEF granted the same on 18.12.2008.
 - (d) The draft NAAQ Standards issued in June, 2008 was finally notified by MoEF vide Notification No. G.S.R. 826 (E) dated 16.11.2009 in exercise of powers conferred under Section 6 and 25 of the Environment (Protection) Act, 1986, revising the NAAQ Standards which were prevalent since 1994. The said revised NAAQ Standards were also notified by Central Pollution Control Board vide Notification No. B29016/20/90/PCI-1 dated 18.11.2009 in exercise of powers conferred under Section 16(2)(h) of Air (Prevention and Control of Pollution) Act, 1981 and in supersession of Notification No. S.O. 384(E) dated 11.04.1994. Revised NAAQ Standards notified by MoEF on 16.11.2009 constitute a Change in Law in terms of Article 13 of the PPAs.
 - (e) Subsequent to the grant of ToR, the Petitioner approached MoEF, GOI for grant of final Environment Clearance and was forced to propose for installation of FGD in the light of the stricter NAAQ Standards proposed by the CPCB vide draft Notification issued in June, 2008 in modification of the standards prevailing since 1994. Taking cognizance of the change in NAAQ Standards, the MoEF in the Environment Clearance dated 20.05.2010 stipulated the condition for installation

of FGD for Phase III of the Mundra Power Plant. It is pertinent to note that the requirement of FGD would not have arisen had there been no change in NAAQ standards. The imposition of a condition mandating Adani Power to install FGD is only consequential to the CPCB notification, which specified stricter NAAQ standards than what had been prevalent at the time of cut-off date.

(f) It is evident that MoEF, GOI imposed the condition for installation of FGD under the Phase III Environment Clearance dated 20.5.2010, in terms of the Notifications dated 16.11.2009/18.11.2009 which were not applicable on the cut-off date. The change in NAAQ standards leading to imposition of condition requiring installation of FGD falls within the definition of Change in Law under Article 13 of the PPA as the new Standards were notified by MoEF in exercise of powers conferred under Section 6 and 25 of the Environment (Protection) Act, 1986. The amended NAAQ Standards notified by MoEF have force of law, as held by the Hon'ble Supreme Court in its Judgment dated 11.04.2017 in Civil Appeal No. 5399-5400 of 2016. In the said Judgment, the Hon'ble Supreme Court has held that any Notification issued by Government Instrumentality amending the conditions prevalent as on the cut-off date would entitle the affected party to claim compensation under Change in Law and to be restored to the same economic position as if such change has not occurred.

(g) The SO₂ concentration was well within the norms at the time of cut-off date (i.e. 19.11.2007) as per the prevalent NAAQ Standards, 1994 and therefore, as on cut-off date, the Petitioner was not required to install FGD. Due to the change in NAAQ Standards, the Petitioner had to incur additional capital expenditure of Rs. 646.22 crore towards installation of FGD system and had to incur additional recurring expenditure in terms of operating cost and auxiliary energy consumption. The per unit impact due to additional capital expenditure, incurred by the Petitioner for installing FGD, for the month of March, 2017 using the methodology in accordance with the formula provided in Article 13.2 of the PPA is as follows:-

Particulars	Formula	UOM	Amount
Net Contracted Capacity with Haryana Discoms	А	MW	1,424
Gross Contracted Capacity corresponding to net Contracted Capacity	B=A / (1-% AEC) / (1-L)	MW	1,580
Gross Capacity of Phase IV	С	MW	1,980
% Share of Haryana Discoms in Gross Capacity of 1980 MW of Ph- IV	D=B / C	MW	79.82%
Total Capex of FGD as on date of capitalization	E	Rs. Crore	646.22
Share of Haryana in FGD Capex	F=E*D	Rs. Crore	515.82
% increase in Capacity Charges @ 0.227% per Rs. 8.9 Cr increase in Capex	G=F * (0.227% / 8.9)	%	13.16%
Quoted Capacity Charges applicable for Mar'17	Н	Rs./kWh	1.011
Per unit increase in Capacity Charges for Mar' 17 due to capex in FGD	I=H*(1+G)-H	Rs./kWh	0.133
Declared Energy at Mundra for the month of Mar'17	J	MU	1,086.23
Declared Energy at Dhanonda for the month of Mar'17	К	MU	1,053.05
Weighted Average Losses to be applied for Declared Capacity	L= 1 - (K/J)	%	3.05%

(h) The compensation payable for a month on account of increase in capital expenditure in installing FGD will be as under:-

Compensation for the month

= Declared energy at Haryana periphery for the month X

Per unit impact calculated as per methodology in the table above

(i) The installation of FGD has resulted in higher auxiliary consumption. This has led to blockage of capacity required for generating additional auxiliary consumption which impacts per unit capacity charges. The per unit impact of additional auxiliary consumption on capacity charges for the month of March, 2017 is as follows:-

Particulars	Formula	UOM	Amount
Capacity Charge (FY 2016-17)	Α	Rs./kWh	1.011
Normative auxiliary consumption without FGD	В	%	6.50%
Normative auxiliary consumption with FGD	С	%	8.42%
Revised capacity charges	D=A * (1-B) / (1-C)	Rs./kWh	1.03
Impact on capacity charges due to increase in auxiliary consumption because of FGD	E=D-A	Rs./kWh	0.21

(j) The compensation payable for a month on account of increase in capacity charges due to increase in auxiliary consumption will be as under:-



Declared energy at Haryana periphery for the month

<u>Compensation for the month</u> = Per unit impact as per methodology in the table

(k) The installation of FGD has also resulted in higher expected operating expenses of ₹48 crore per annum. The per unit impact due to additional operating expenditure of running FGD for the month of March, 2017 is as under:-

Particulars	Formula	UOM	Amount
Increased Operating Expenditure for Month	A	Rs. Crore	4.00
Total Gross Generation for the Month	В	MU	1,288.27
Actual Auxiliary Consumption	С	%	7.06%
Transmission losses based on Schedule	D	%	3.05%
Per unit impact of Increased Operating Expenditure because of FGD	E=A / (Energy Sold)	Rs./kWh	0.345

(l) The compensation payable for a month on account of additional operating cost of FGD will be as under:-

above

Declared energy at Haryana periphery for the month

Per unit impact as per methodology in the table

Compensation for the month

- (m) The Commission after consideration of the arguments by both the parties and the material placed on record, observed in its order dated 6.2.2017 in Petition No.156/MP/2014 that the Petitioner has made huge expenditure on installation of FGD to comply with the environment clearance dated 20.5.2010 and sought for additional information/documents to consider the claim of the Petitioner.
- 8. Based on the above, the Petitioner has filed the present Petition and has prayed for the reliefs in para 5 above.

Submissions of Respondents

- 9. The Respondent Nos. 1 and 2 vide their reply affidavit dated 25.8.2017 have submitted as under:
 - (a) EC dated 20.5.2010 could not be considered as a Change in law within the meaning of Article 13 of the PPAs. The Petitioner was fully aware at the time of

issue of RfQ, RfP, receipt of bidding documents and participation at the competitive bidding process that it was required to obtain all the relevant consents for the installation and operation of Power station.

- (b) In terms of Article 5.4 of the PPA and clause 2.7.2.4 of the RfP, it is the obligation of the Petitioner to apply for and obtain all ECs for establishing, operation and maintenance of the project. Prior ECs are required under the provisions of Environment Protection Act, 1986. Thus, the Petitioner was fully aware that while granting EC under the provisions of the Environmental Laws, authorities entitled impose such conditions the were to considered appropriate allowing establishment of generating units. The for Environmental Laws remained the same as on the cut-off date i.e. 7 days before the Bid Deadline date (i.e. 19.11.2007) and there has been no change in the provisions of the Law relating to environment. The Environmental Law as were prevailing at the relevant time did not provide that FGD would not be required to be installed. The prevalent law was that Petitioner would be required to undertake all such things as directed by the Environment Authorities as per the provisions of EPA Act, 1986 read with EA notification dated 14.9.2006.
- (c) The Petitioner was required to take prior approval of the Environmental Authorities and it was fully within the knowledge that the approval would be on terms and conditions to be specified by the said Authorities. Such terms and conditions were specified as per law existing as on the cut-off date. There is no change whatsoever on the above aspects of laws to constitute a change in law under the PPAs. The Petitioner applied and obtained the consent from the Environment Ministry subsequent to the bid deadline date and in the first instance, the Environment Ministry in its clearance dated 20th May 2010 specified

the condition of FGD to be installed. Such conditions imposed by the Environmental Ministry were related to the Laws of Environment existing as on the cut-off Date. Accordingly, the environment clearance requiring the Petitioner to install FGD cannot be considered as a subsequent Change in Law within the meaning of Article 13.1.1 of PPAs nor the effect thereof could be given in terms of Article 13.2 (a) of PPAs. The requirement to put FGD was in reference to Environment Laws as on cut-off date.

- (d) Even otherwise, there cannot be any consideration of auxiliary consumption or other operating expenditures on account of installation of FGD. These tariff elements were not to be considered separately in a tariff quoted in pursuance of a competitive bidding process. The Petitioner quoted non-escalable capacity charges and is therefore not entitled to any such claim for additional expenditure.
- (e) The claim made by the Petitioner relating to the additional expenditure of ₹646 crore towards installation of FGD and additional recurring expenditure on account of auxiliary consumption due to FGD installation, besides the cost of FGD is totally unjustified. It is not open to the Petitioner to go on the normative auxiliary consumption with or without FGD when the basis for quoted non-escalable capacity charges in the bid is not known.
- (f) In any event, the EC dated 13.8.2007 for Phase-I granted to the Petitioner did envisage the installation of FGD (refer para 3 (vi) & xxii of the EC). In the present case, the installation of FGD was envisaged for 2 \times 330 MW power plant of the Petitioner which was the first phase of Petitioner's project. If the space for FGD was envisaged for 2 \times 330 MW, then the Petitioner cannot be allowed to contend

that it could not have envisaged cost of installation of FGD for its 3x 660 MW units being Units 7 to 9 (Phase III) while bidding under Case-I. The issue of installation of FGD as Change in Law was disallowed by APTEL in M/s JSW Energy Limited v. Maharashtra State Electricity Distribution Co. Ltd and Another dated 21.1.2013 in Appeal No. 105 of 2011.

Accordingly, the Respondents have prayed that the claim of the Petitioner is liable to be dismissed.

M/s Prayas Energy Group

- 10. M/s Prayas Energy Group, the Consumer Group registered with the Commission to represent the interests of the consumers, vide its affidavit dated 8.8.2017 has submitted as under:
 - (a) The change in law has to be considered with reference to law existing as on the cut-off date defined in Article 13 of the PPA dated 7.8.2008. The matter in issue relates to the scope and application of Article 13 of the PPA. Accordingly, there has to be a law which deviates from the existing law as on cut-off date and the law has been defined in the PPA. In case of change in consents and clearances, there has to be an existing consent, which is subsequently changed. This has been held by the Commission in CGPL & Sasan case in Petition No. 157/MP/2015 dated 17.3.2017 and 16/MP/202016 dated 17.2.2017 respectively.
 - (b) The Petitioner has claimed the change in law with regard to the condition being imposed by the Ministry of Environment and Forests while according environmental clearance which has also been mentioned in the Notice dated 04.09.2012 to the Haryana Utilities in terms of the PPAs. Thus, the Petitioner had not claimed change in National Ambient Air Quality Standards (NAAQ) as change in law and had only claimed that imposition of requirement of installation of FGD

in the Environment Clearance was a Change in Law. The Petitioner has now sought to expand the scope of the claim by relying on NAAQ.

- (c) There is no change in the conditions imposed under the Environmental Clearance. No EC was granted to the Petitioner as on cut-off date and therefore, any condition imposed by the environmental authority for the grant of Environment Clearance could not qualify as a change in law. The requirement of Environment Clearance and the imposition of conditions as considered appropriate by the Ministry of Environment and Forests was there as on the cut-off date and the Petitioner was aware of it.
- (d) The Petitioner has claimed that the change in law in respect of the Environment Clearance for its Phase III generating units on the basis that the Clearances granted to Phase I and Phase II did not provide for FGD. The Petitioner could not have proceeded on the assumption that the Ministry of Environment and Forests would impose the same conditions for its Phase III units as per the Environment Clearance granted to Phase I units.
- (e) In any event, the EC dated 13.8.2007 for Phase I (2 x 330 MW) granted to the Petitioner did envisage for the installation of FGD. If the installation of FGD was envisaged for 2 x 330 MW, then the Petitioner cannot be allowed to contend that it could not have envisaged installation of FGD for Units 7 to 9 (3 x 660 MW).
- (f) The issue of installation of FGD as Change in Law was considered by the Appellate Tribunal in M/s JSW Energy Limited v Maharashtra State Electricity Distribution Co. Ltd and Another dated 21.1.2013 in Appeal No. 105 of 2011. The Tribunal has held that the condition of installation of FGD at a later stage in the Environment Clearance meant that the generator was aware of the requirement

of FGD and there was no change in law because of a subsequent confirmation on installation of FGD. Thus, if the Petitioner was required to install the FGD in Phase I, the same would not have been considered as Change in Consent/Change in Law as per the judgment of the Tribunal. If the installation of FGD could not have been considered as Change in Law for Phase I, then the consideration of the same as change in law for Phase III was not possible. The above judgment has been challenged before the Supreme Court and is pending in Civil Appeal No C.A. No. 002967/2013. However, pending the decision in the Civil Appeal and unless the Supreme Court modifies the decision of the Appellate Tribunal, the above decision dated 21.1.2013 passed in Appeal No. 105 of 2011 is binding.

- (g) The Tribunal has held that the condition of installation of FGD at a later stage in the EC meant that the generator was aware of the requirement of FGD and there is no change in law because of a subsequent confirmation on installation of FGD. Thus, if the Petitioner was required to install FGD in Phase I, the same would not have been considered as change in consent/change in law as per judgment of the Tribunal. If installation of FGD was not considered as change in law for Phase-I, then the consideration of the same as change in law for Phase-III is not possible.
- (h) The Petitioner in the present Petition has stated that the requirement of installation of FGD is solely due to the new NAAQ standards. This is an afterthought, which is clear from the fact that no notice of Change in Law was issued with respect to the notification of the NAAQ standards in 2009. Even on merits, the basic requirements of installation of FGD in the present case were not due to any revision in NAAQ standards. The Petitioner has wrongly claimed that the requirement of installation of FGD was only in pursuance of the Notification

dated 16.11.2009 and 18.11.2009 regarding NAAQ Standards. The Petitioner has sought to draw a relation between conditions of Environment Clearance and Air Quality Standards. However, the Petitioner has not submitted any document or evidence that the installation of FGD is only related to such Standards in pursuance of the Notification dated 16.11.2009 and 18.11.2009 regarding NAAQ Standards.

- (i) The Environmental Laws as on the cut-off date envisaged the imposition of conditions as deemed necessary by the MOE&F. The MOE&F was entitled to impose such conditions and standards as considered appropriate from the basis of Environment Impact Assessment (EIA) carried out to the proposed site. The proposed site was the choice of the Petitioner and therefore, any environment conditions imposed due to choice of site cannot be considered as change in law.
- (j) In any event, the Petitioner has merely stated that it would have met the standards of 1994 Notification with regard to sulphur dioxide or other pollutants indicating that the same would have been done without FGD but has not submitted any proof thereof. Even in the Petition No.156/MP/2014, the Petitioner had not submitted any supporting documentation to demonstrate that it would have met the standards of 1994 notification. The Petitioner has submitted the data in the Written Submissions without any supporting documentation and without even an affidavit. It is not clear how the data was collated and for what period. However, even as per the data submitted by the Petitioner, the resultant ground level concentration in Wandh area (which is close to the Plant site) was 102.5 ug/m3, without FGD which is higher than the Annual Average under the National Ambient Air Quality Standards as per the Notification dated 11.04.1994 and is sufficiently close to 24 hourly standards of 120 ug/m3. In such cases, even as

per the 1994 standards, the Ministry of Environment and Forests could have imposed the condition of installation of FGD.

- (k) The Petitioner was required to install the FGD even prior to the Notification dated 16.11.2009 revising the NAAQ Standards. This is also clear from the Minutes of EAC Meeting held in September 2009 (i.e. prior to the Notification dated 16.11.2009). In the said Meeting, the Petitioner had given a presentation wherein it was stated "FGD shall be installed in Phase III Units". The Petitioner had itself stated that FGD would be installed and this was prior to any revision in the NAAQ Standards. There has not been any change in law or NAAQ standards that the requirement of installation of FGD for Phase III units was decided. Thus, the contention of the Petitioner that the requirement of FGD was solely on account of revised NAAQ standards notified in November, 2009 is erroneous.
- (I) The computation of the impact of installation of FGD is not correct as the Petitioner has wrongly considered 1580 MW as Haryana's share, instead of the contracted capacity of 1424 MW. The Petitioner has also not submitted any proof for the total capital expenditure of ₹646.22 crores for FGD. As per Article 13.2(a), every cumulative increase of ₹8.90 crores is to be considered and even assuming a total of ₹515.82 crore, the amount to be considered would be up to ₹ 507.30 crore. The increase of percentage on capacity charges to be considered is thus 12.939% and not 13.16%. The Petitioner is also required to supply the dates on which the cost was incurred.
- (m) There cannot be any consideration of auxiliary consumption or other operating expenditure on account of the installation of FGD. Without prejudice to the above, even the computation of the impact on auxiliary consumption is

incorrect. There is no proof of the normative auxiliary consumption of 8.42%. This is in contrast to the Petitioner's own admission of actual auxiliary consumption in March, 2017 of 7.06%.

(n) With regard to operating expenditure, the Petitioner has not submitted any proof of the claim of higher additional operating expenses. The Petitioner has claimed that the expected operating expenses shall be ₹48 crores per annum. Since the Petitioner's plant is operational with FGD for a few years, the Petitioner should have furnished the actual expenses. There can be no consideration of auxiliary consumption and transmission loss for computation of the units. Further, the computation of per unit impact cannot be based on energy sold. If the Petitioner is unable to generate full quantum of energy, then the expenditure in respect of that energy cannot be added to the energy sold to Haryana. The computation of per unit has to be based on the possible generation from the 1980 MW plant of the Petitioner and not actual generation.

Accordingly, M/s Prayas has submitted that the claim of the Petitioner may be rejected.

Rejoinder of Petitioner

- 11. The Petitioner vide separate affidavits dated 25.8.2017 has filed its Rejoinders to the Replies of Haryana Utilities and M/s Prayas and has submitted as under:
 - (a) The MOE&F in exercise of its powers under section 6 and 25 of the Environment Protection Act, 1986 had issued notification dated 16.11.2009 revising the NAAQ standards to be maintained which was prevailing since 1994. The same was also published by CPCB on 18.11.2009.

- (b) The MOE&F imposed a condition in EC dated 20.5.2010 requiring APL to install FGD for setting up Units 7 to 9 subject to notification dated 16.11.2009 which has led to additional capital expenditure. Therefore, imposition of a condition mandating APL to install FGD was due to change in environmental laws.
- (c) The imposition of condition requiring installation of FGD falls within the definition of change in law and Article 13 of the PPAs as the installation of FGD is pursuant to revision in NAAQ standards. As per PPA dated 7.8.2008, the Petitioner is obligated to apply for and obtain EC for establishing, operation and maintenance of the project. At the time of the cut-off date (19.11.2007) there was no condition of stipulation requiring APL to install FGD for operating Units 7 to 9.
- (d) The condition to install FGD was imposed for the first time on APL by Environmental Clearance dated 20.5.2010 i.e. post the cut-off date as well as execution of the PPAs on 7.8.2008. Therefore, the condition requiring APL to install FGD classifies as change in law in terms of Article 13 of the PPA and APL is required to be compensated for the same. The condition imposed by EC which otherwise was not mandatory under the law qualifies as change in law under Article 13 of PPA.
- (e) The clauses 2.7.2.4 and 2.7.3.1 of the RfP do not cast any responsibility on APL to take into account future changes in taxes, levies or costs on account of change in law. The said clauses clarify that bidders are required to take into account loss and regulations prevailing at the time of bid submission which is evident from the phrase "law and regulations in force in India". The clauses nowhere mandate the bidder to foresee the future taxes and duties and include the same in guoted tariff.
- (f) The Tribunal by judgment dated 19.4.2017 in Sasan Power Ltd. v/s CERC & ors had upheld the principle that the PPA gives express rights to the affected parties to

claim change in law if the event qualifies under the applicable provisions of the PPA and the RfP cannot override this right. Article 18.4 of the PPA provides that the PPA supersedes any other agreement between the parties and the terms of PPA shall be final and binding.

- (g) The contention that APL had not claimed change in law in NAAQ standards in its earlier Petition is incorrect. As APL contentions have been recorded in para 91 and 92 of the order dated 6.2.2017 in the said Petition. The change in NAAQ standards has an impact on future consents as well and therefore APL cannot be barred from raising the same before this Commission.
- (h) The condition of installation of FGD was imposed on APL for Phase III (Units 7, 8 & 9) only subsequent to the cut-off date and therefore in terms of the provisions of PPA, it qualifies as a change in law event. It is noteworthy that foreseeability of a change in law event is not a condition precedent and Article 13 of the PPA.
- (i) In JSW Energy case, the EC was available prior to submission of bid. The EC in JSW case had a condition that developer would keep space for FGD and provide separate funds for installation of environment protection measures and had specific condition that study regarding impact of the project on Alphonso mango and fisheries would be conducted and cost of study and safeguard measures had to be provided by JSW. The MOE&F had asked JSW to install FGD in view of the directions of Bombay High Court vide its judgment dated 18.9.2009. Therefore, the JSW case proceeds on a different ground and cannot be equated with the present case. While in JSW case owing to plant's location on the ecological sensitive zone, the threshold level for ground level concentration of SO2 was 30 μ g/m³, in the case of APL, the EC

was notified post bid and stipulation to install FGD due to change in emission norms from 120 $\mu g/m^3$ to 80 $\mu g/m^3$ was notified after the bid but before issuance of EC.

- (j) Further, all ECs for power projects at Mundra (CGPL, Adani Phase I & II) which were issued prior to change in emission norms did not have conditions for FGD. Therefore, the Petitioner could not have predicted FGD condition at the time of bid and therefore, could not have factored the same in the bid. The condition for keeping space for installation of FGD at a later date did not bind the bidder/project developer to build in the cost of FGD while bidding of sale of power from the project as it could be the case that FGD would not at all be required for its entire life or term of the PPA. Therefore, even expecting that the bidder should have considered the cost of FGD in its bid while quoting tariff just because it was specified in the EC, is totally absurd. Even in case of cost plus PPA under Section 62 of the 2003 Act, the Commission while approving the capital cost of the project does not consider the cost of any equipment/machinery on which actual cash expenditure has not been made. The Commission has been approving capital cost for FGD after the cut-off date only under the provisions of change in law in terms of the tariff regulations.
- (k) In the case of Vindhyachal Stage-V power station of NTPC, EC was obtained subsequent to the capital cost approved by the NTPC Board which did not contain cost towards FGD. However, as per EC dated 2.5.2012, NTPC was required to install the same and the cost towards FGD was approved by the Commission under change in law. There cannot be any distinction made while approving any event as change in law for project under section 62 and 63 of the Act. The PPA does not envisage any notice to be given to consumer representatives. APL has issued notice to procurers and in fact, the impact of FGD on APL was deliberated in detail in proceedings of

Petition No. 156/MP/2014 and the Commission has accepted to consider its impact under change in law.

- (l) The NAAQ standards specified the norms for different environmental pollutants, one of which is SO_2 . The MOE&F while granting EC stipulates certain conditions and such conditions are necessary to be based on environmental standards and provisions of law under which the conditions are specified.
- (m) The change in law provision would apply in both cases, whether the site has been selected by the bidder or provided by the procurer. Under competitive bidding process, the project developers are required to identify inputs for the projects such as land, water, fuel, etc. Change in law provisions relate to laws and regulations prevailing at the time of bid submission and subsequent change in them for such identified inputs.
- (n) The contracted capacity of 1424 MW is at Haryana periphery. Hence, to deliver 1424 MW at Haryana periphery, the capacity that is to be generated at the power station which is situated in the State of Gujarat has to necessarily include the auxiliary power requirement and transmission losses. The proof of capital expenditure of ₹646.22 crore has already been provided by APL during the proceedings in petition No. 156/MP/2014. Once it is admitted that there will be additional auxiliary consumption for FGD then the consequential relief has to be necessarily granted in order to put the Petitioner in the same economic position as mandated in the PPAs.
- (o) Therefore, the objections raised by the Respondents and Prayas deserve no consideration and the prayers of the Petitioner be allowed.

- 12. The Commission after hearing the parties directed the Petitioner vide Record of Proceedings dated 28.9.2017 to submit the following information:
 - "(i) Whether the Petitioner has adopted the transparent process of ICB/ DCB for carrying out the procedure for selection of successful bidder for installation of FGD. If not, justify how the cost of FGD installation was competitive and reasonable.
 - ii) Copy of the NIT alongwith bid documents with regards to installation of FGD.
 - iii) Name of the bidders participated in the bid. Copy of the Evaluation Report of Technical & Financial Bid
 - iv) Copy of the contract executed with the successful bidder"
- 13. In compliance with the above directions, the Petitioner vide affidavit dated 25.9.2017 has furnished the information. It has submitted that the cost of installation of FGD was competitive since it was procured through competitive bidding and order was placed on the successful bidder vide contract dated 7.12.2009/10.12.2009. The Petitioner has also submitted that the FGD installation cost claimed is also reasonable considering the costs claimed by various other generators in respect of projects like, Maithon Power Ltd, Bongaigaon TPP, Vindhaychal-V STPS, Unchahar TPS, Stage-IV. The Petitioner has further submitted that the requirement of water for FGD system is substantially higher than the requirement of power plant without FGD and in view of this, the contract awarded to MPSEZ for construction of intake channel for sea water was amended. It has added that the construction of 220/66 kV substation for supply of water to FGD plant were required for the operation of the FGD system.

Analysis and Decision

14. Based on the submissions of the parties and the documents available on record, the following issues emerge for consideration:

Issue No.(A). Whether the requirement for installation of FGD in Phase III of the Mundra Power Project is covered under any provisions of Article 13 of the PPA?

Issue No.(B). Whether the Petitioner is entitled to be reimbursed the expenditure on FGD, auxiliary power consumption and O & M expenses on FGD?

Issue No.(A): Whether the requirement for installation of FGD in Phase III of the Mundra Power Project is covered under any provisions of Article 13 of the PPA?

15. Before we proceed to examine whether the Petitioner's claim fulfils the requirement of change in law in terms of the PPAs dated 7.8.2008, we consider it appropriate to refer to the chronology of events leading to the issuance of Environmental Clearance on 20.5.2010 in the table given below:

Sl.No	Dates	Events Occurred
1.	11.4.1994	NAAQ Standards notified by CPCB
2.	25.5.2006	HPGCL issued RFQ for procurement of 2000 MW power on long term basis on behalf of Haryana Discoms
3.	14.9.2006	Environment Impact Assessment (EIA) notification, directing that from then on, construction of new projects or expansion or modernisation of existing projects listed in the Schedule shall be undertaken after prior EC from the Central/State level EIA Authority.
4.	4.6.2007	HPGCL issued RFP to the bidding companies qualified in RFQ stage.
5.	13.8.2007	Environmental Clearance for Phase -I; 660 MW (2 x330 MW). No Terms of Reference (ToRs) given for Phase-I, with provision for space for FGD and separate funds for environmental measures
3.	19.11.2007	Cut-off date of Phase-IV (7 days prior to Bid deadline date of 26.11.2007)
4.	26.11.2007	Bid deadline date
5.	8.12.2007	Application made to MOEF for Environmental Clearance for Phase-II & Phase-III; 1980 MW (2 x 330 MW & 2 x 660 MW)
6.	14.12.2007	ToR prescribed by MoEF for preparing draft EIA report by APL for Phase-II & III without mentioning SO ₂ control measures.
7.	June,2008	CPCB circulated the Draft Notification for amendment of NAAQ Standards which proposed stricter emission norms than that prevalent since 1994, which later became law on 16.11.2009.
8.	07.08.2008	PPA signed with Haryana Discoms for supply of 1424 MW of power from Units 7 to 9 of Phase IV of the Project
9.	21.10.2008	Environmental Clearance granted to Phase II & Phase-III (2x330 + 2x660 MW)= (1980 MW) with provision for space for FGD
10.	31.10.2008	Application made to MOEF for environmental clearance for Phase IV.
11.	10-11, November, 2008	34th Meeting of Expert Appraisal committee (EAC) & presentation of APL mentioning FGD shall be installed.

12.	18.12.2008	MoEF Letter to APL prescribing the draft TOR for preparing EIA Report which also included Proposed SO_2 control measures to be detailed in the EIA report.
13.	10.9.2009	54th Meeting of the reconstituted Expert Appraisal Committee (T) on Environmental Impact Assessment recommended the project for environmental clearance.
14.	16.11.2009	MoEF notification for amendment in NAAQ Standards including revision of SO_2 emission norms to 50 mg/Nm3.
15.	19.3.2010	67th Meeting of the reconstituted Expert Appraisal Committee (T) on Environmental Impact Assessment of Thermal Power and coal mine projects.
16.	20.5.2010	Environmental Clearance granted to Phase IV (1980 MW) with condition of installation of FGD.

- 16. Article 13.1.1 of the PPAs dated 7.8.2008 deals with Change in Law which is extracted hereunder:
 - "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
 - (iii) change in any consents, approvals or licences 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 Procurer under the terms of this Agreement or (iv) any change in the (a) the Declared Price of Land for the Projector (b) the cost of implementation of the resettlement and rehabilitation package of the land for the project mentioned in the RFP or (c) the cost of implementing Environmental Management Plan for the Power Station mentioned in the RFP; OR (d) the cost of implementing compensatory afforestation for the Coal Mine, indicated under the RFP and the PPA;
- 17. In the light of the provisions in the PPAs as quoted above, the relevant provisions for consideration of the claims of Petitioner for relief under Change in Law are either Article 13.1.1(i) of the PPAs (i.e. the enactment, bringing into effect, adoption, promulgation, amendment, modification or repeal, of any law) or Article 13.1.1.(iii) of the PPAs (i.e. change in any consents, approvals or licences available or obtained for the Project).

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- 18. Article 13.1.1(iii) provides that change in any consent or approval or licence available or obtained for the project shall be covered under change in law. In other words, consents, approvals or licence must either be available or must have been obtained by the bidder for the project. The term "available" has been defined in the Law Lexicon of P Ramanath Aiyer as "capable of being turned to account; to one's disposal; within one's reach". The Petitioner had not applied for Environment Clearance for Units 7,8 & 9 of Mundra Power Project as on the cut-off date. Therefore, it cannot be said that the Environmental Clearance was at the Petitioner's disposal or was within its reach. In other words, as on cut-off date, the Environmental Clearance was neither available to the Petitioner nor was obtained by the Petitioner and therefore, the imposition of the condition for installation of FGD will not be considered as a change in consent, approval or licence under Article 13.1.1 (iii) of the PPA.
- 19. Article 13.1.1 (i) of the PPA provides for "any change in the enactment, bringing into effect, adoption, promulgation, amendment, modification or repeal of any law". 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."

20. As per the above definition, Law includes any statute, applicable rules, regulations, orders and any notifications by an Indian Government Instrumentality pursuant to or under any such statute, applicable rules, regulations or orders. Indian Government Instrumentality has been defined as the "the Government of India (GOI), Government of Haryana and any ministry, department, body corporate, Board,

agency or other authority of GOI or Government of the State where the Project is located and includes the Appropriate Commission". MoE&F is a Ministry under Government of India and CPCB is an authority under the Government of India. Therefore, notifications issued by MoE&F in exercise of powers conferred under Section 6 and 25 of the Environment (Protection) Act, 1986 and by CPCB in exercise of powers conferred under Section 16(2)(h) of Air (Prevention and Control of Pollution) Act, 1981 would qualify as law in terms of the PPAs.

- 21. Next, we consider whether revision in NAAQS has a correlation with the condition of stipulation of FGD in the EC dated 20.5.2010 and therefore, would constitute Change in Law in terms of Article 13.1.1 (i) of the PPA.
- 22. The Central Government in exercise of its power under sections 6 and 25 of the Environment (Protection) Act, 1906 (29 of 1986), notified the Environment (Protection) Rules, 1986 on 19.11.1986 (hereinafter "Rules"). MOE&F has amended the Rules from time to time. Schedule VII of the Rules {inserted by G.S.R. 176(E), dated 2nd April, 1996 (w.e.f 3.4.1996)} provided for the National Ambient Air Quality Standards (NAAQS) as under:

Concentration in Ambient Air				
ndustrial	Residential	Sensitive	Method of	
rea	Rural and	Area	measurement	
	other area			
0 ug/m ³	60 ug/m ³	15 ug/m ³	-Improved	
			West and	
			Gaeke	
20 ug/m ³	80 ug/m ³	30 ug/m ³	method	
			- Ultraviolet	
			Fluorescence	
) 	idustrial rea O ug/m³	rea Residential rea Rural and other area O ug/m³ 60 ug/m³	Residential Sensitive Rural and other area O ug/m³ 60 ug/m³ 15 ug/m³ O ug/m³ 80 ug/m³ 30 ug/m³	

^{*} Annual Arithmetic mean of minimum 104 measurements in a year taken twice a week 24 hourly at uniform interval.

^{** 24} hourly/8 hourly values shall be met 98% of the time in a year, 2% of the time, it may exceed but not on two consecutive days.

Thus, as per the Environment Protection Rules, the NAAQS for $(SO)_2$ for industrial area for annual average and 24 hours were 80 ug/m3 and 120 ug/m3 respectively.

23. MOE&F in exercise of its powers under Sections 3(1) and 3(2)(v) of the Environment (Protection) Act, 1986 read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 made a Notification dated 27.1.1994 under which expansion or modernization of any activity (if pollution load is to exceed the existing one, or new project listed in Schedule I to this notification) shall not be undertaken in any part of India unless it has been accorded environmental clearance by the Central Government in accordance with the procedure specified in this notification. Thus, pollution load is one of the important consideration for grant of environmental clearance. As on the cut-off date of 19.11.2007 for Phase III project (Units 7, 8 & 9), the Environmental Protection Rules, 1986 as amended with effect from 3.4.1996 was in force which required the NAAQS for SO₂ for thermal power project located in industrial area for annual average and 24 hours as 80 ug/m3 and 120 ug/m3 respectively. As per the Rules, MOE&F is required to monitor the implementation of the recommendations and conditions subject to which the environmental clearance has been given by calling for half yearly report from the Project Authorities and if no comments are received, then the project would be deemed to have been approved as proposed by project authorities. Before the cut-off date for Phase III (19.11.2007), EC for Phase I was granted on 13.8.2007 and after the cut-off date, EC was granted on 8.12.2007. Since the NAAQS was within the limits for Phase I & II of the projects, MOE&F did not insist on protection measure in the form of installation of FGD, even though the Petitioner was asked to make provision for space. After grant of ECs for Phase I and II and after the cut-off date for Phase III, CPCB during June, 2008 circulated the draft revised NAAQ standards. Based on the

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recommendations of CPCB, the MOE&F vide notification dated 16.11.2009 amended the Environment Protection Rules and revised the NAAQ standards including SO_2 emission level as under:

National Ambient Air Quality Standards

	Transfer at the second of the						
Pollutant	Time weighted Average	Concentration in Ambient Air					
		Industrial,	Ecologically Sensitive	Methods of			
		Residential,	Area (modified by	Measurement			
		Rural and	Central Government)				
		Other Area					
Sulphur	Annual*	50 ug/m ³	20 ug/m ³	-Improved			
Dioxide				West and			
	24			Gaeke			
(SO) ₂	hours**	80 ug/m ³	80 ug/m ³	- Ultraviolet			
				Fluorescence			

^{*} Annual Arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform interval.

- 24. Thus, the NAAQS was changed to 50 mg/Nm3 for industrial/rural/residential and other areas as compared to the emission level of 80 mg/Nm3 for annual average and 120 mg/Nm3 for 24 hours, which was in existence as on the cut-off date (19.11.2007) as mentioned in the preceding para. The amended Rules provided for SO_2 emission norms for industrial/rural/residential and other areas as 50 mg/Nm³. The amended Rules were issued by MOE&F vide notification dated 16.11.2009 revising the NAAQ standards including SO_2 emission level followed by CPCB notification dated 18.11.2009. Since both MOE&F and CPCB are Indian Government Instrumentalities after the cut-off date, these notifications changing the NAAQS are covered under Change in Law in terms of Article 13.1.1 (i) of the PPAs dated 7.8.2008.
- 25. It is pertinent to mention that in the ToR dated 14.12.2007 in respect of EC for Phase I, there was no mention of the proposed measure for SO_2 control. MOE&F vide

^{** 24} hourly or 08 hourly or 01hoursly monitored values, as applicable, shall be complied with 98% of the time in a year, 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

its letter dated 18.12.2008 communicated ToR for Phase III to the Petitioner which at serial no. 3 (xvii) prescribed as under:

"xvii. The proposed SO_2 measures should also be detailed in the EIA along with their effectiveness in controlling the SO_2 levels."

- 26. This condition was included in the ToR on account of the proposed changes in the NAAQS. The Petitioner in EAC meeting held in September, 2009 agreed for installation of FGD in Phase III to meet the SO₂ level. Based on the recommendations of the EAC for grant of EC in its 54th meeting held in September 10-12, 2009, the MOE&F on 20.5.2010 had issued the EC for Phase III, wherein the installation of FGD was made a mandatory condition. Had the NAAQS standards not been changed, the Petitioner would have got the similar environmental clearance certificate as was granted for Phases I and II. It is on account of the changes in NAAQS that the installation of FGD was made a mandatory condition for Phase III of the project.
- 27. M/s Prayas has submitted that there has to be a co-relation between the requirement for FGD in the ECs and NAAQS. In our view, the correlation between mandatory installation of FGD and NAAQS becomes clear from the perusal of the ECs for Phase I & II and EC for Phase III. In the ECs for Phase I & II, the specific condition for installation of FGD was for the purpose of removal of SO₂, if required at the later stage which means that at the point of time of grant of ECs for Phase I & II, the SO₂ level at the location of the project was within the prescribed limit which did not require installation of FGD. Only when the stricter norms of SO₂ level was prescribed through the Environment Protection (7th Amendment) Rules vide MOE&F Notification dated 16.11.2009 and CPCB Notification dated 18.11.2009 pursuant to the said amended rules, then only the installation of FGD was made mandatory in the EC for Phase III of the project. Further, in cases of ECs for Phase I & II, the general condition

is that "separate funds should be allocated for implementation of environmental protection measures along with item-wise break-up. These cost should be included as part of the project cost." The provisions for separate funds are relatable to the specific provisions in the ECs prescribing the various environmental measures to be undertaken. While the requirement of funds for Phase I & II was for making provision for space for FGD, the requirement of funds for Phase III (Units 7,8 &9) was for installation of FGD itself. There is, therefore, a direct correlation between the change in the environmental laws prescribing a stricter NAAQS which took place after the cut-off date in Phase III of the project and the mandatory requirement for installation of FGD in the said phase. Had there been no change in the environmental laws post the cut-off date, the same condition as in case of Phases I & II (provision for space for installation of FGD in future) would have been prescribed for Phase III. The imposition of the condition mandating the Petitioner to install FGD in Phase III is on account of change in environmental laws which took place after the cut-off date prescribing a stricter NAAQS and therefore, falls within the definition of change in law under Article 13.1.1 (i) of the PPAs dated 7.8.2008.

28. The Petitioner in the affidavit filed in Petition No. 156/MP/2014 had given the cumulative resultant concentrations on 24 hours basis in ug/m³ without FGD and with FGD as under:-

Cumulative Resultant Concentrations after implementation of the Adani Power Project (4620 MW), on 24 hourly basis in ug/m³ (without FGD)

Name of the	Distance	Direction	Monitored	Incremental	Resultant
Location			Ground Level Ground Level		Ground Level
			Concentration	Concentration	concentration
				(Adani Power	
				Plant)	
			SO ₂	SO ₂	SO ₂
Plant Size	0	-	12.1	-	12.1
Tunda	2	NW	11.4	36.4	47.8
Khakar moti	7.5	N	13.2	10.5	23.7

Nani Khakar	8.5	NNW	12.3	15.4	27.7
Siracha	3.5	NE	10.2	29.1	39.3
Navinal	6	E-NE	11.4	45.5	56.9
Tragadi	7.5	WNW	9.1	18.2	27.3
Mota Bhadiya	8	NW	10.1	40.6	50.7
Kandagra	3	NW	10.9	37.1	48.0
Deshalpar	5.5	NE	12.5	32.9	45.4
Nana Bhadiya	6	WNW	9.8	20.7	30.5
Wandh	1.5	SW	10.1	92.4	102.5

Cumulative Resultant Concentrations after implementation of the Adani Power Project (4620 MW), on 24 hourly basis in ug/m³ (with FGD)

Name of the	Distance	Direction	Monitored	Incremental	Resultant
Location			Ground Level	Ground Level	Ground Level
			Concentration	Concentration	concentration
				(Adani Power	
				Plant)	
			SO ₂	SO ₂	SO ₂
Plant Size	0	-	12.1	0	12.1
Tunda	2	NW	11.4	10.4	21.8
Khakar moti	7.5	N	13.2	3	16.2
Nani Khakar	8.5	NNW	12.3	4.4	16.7
Siracha	3.5	NE	10.2	8.3	18.5
Navinal	6	E-NE	11.4	13	24.4
Tragadi	7.5	WNW	9.1	5.2	14.3
Mota	8	NW	10.1	11.6	21.7
Bhadiya					
Kandagra	3	NW	10.9	10.6	21.5
Deshalpar	5.5	NE	12.5	9.4	1.9
Nana	6	WNW	9.8	5.9	15.7
Bhadiya					
Wandh	1.5	SW	10.1	26.4	36.5

29. It is apparent that before implementation of FGD, the concentration at Wandh was $102.5~\text{ug/m}^3$ which was within $120~\text{ug/m}^3$ applicable for 24 hours weighted average. On account of change in NAAQS with effect from 16.11.2009, the NAAQS was fixed at $80~\text{ug/m}^3$ at Wandh which is only 1.5 km away from the project. The cumulative concentration of SO_2 would have exceeded the new NAAQS but for the installation of FGD. After installation of FGD, 24 hours average at Wandh is $36.5~\text{ug/m}^3$ which is within $80~\text{ug/m}^3$. Therefore, the change in NAAQS has resulted in the requirement for FGD being made mandatory for Phase III.

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- 30. Next we consider whether in terms of the ECs issued for Phase I & II of the project, it was mandatory for earmaking funds for installation of FGD. We notice that based on the proposal of the Petitioner for grant of EC for setting up 660 MW coal based power plant in Phase I and on the recommendations of the EAC, MOE&F had granted EC dated 13.8.2007 subject to the implementation of certain terms and conditions which include amongst others, the following:
 - "3. The proposal has been considered in accordance with para 12 of the EIA notification dated 14th September, 2006 read with para 2.2.1 (i) (a) of the Circular No. J-11013/41/2006- IA (II) (I) dated 13.10.2006. Based on the recommendations of the Expert Appraisal Committee for thermal power and coal mine projects, the Ministry of Environment & Forests hereby accords environmental clearance to the said project under the provisions of EIA notification 2006, subject to the implementation of the following terms and conditions:-
 - (i) to (v).....
 - (vi) Space provision shall be made for installation of FGD of requisite efficiency of removal of SO_2 , if required at later stage.
 - (vii) to (xxii)......
 - (xxiii) Separate funds should be allocated for implementation of environmental protection measures along with item-wise break-up. These cost should be included as part of the project cost. The funds embarked for the environment protection measures should not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.
- 31. Referring to the provision (xxiii) above, the Commission in its order dated 6.2.2017 in Petition No. 156/MP/2014 had directed the Petitioner to place on record the year-wise expenditure submitted to MOE&F in compliance to the EC dated 13.8.2007 and 21.10.2008 for Phases I & II of the project. In response, the Petitioner had submitted the details of the year-wise expenditure on environmental protection measures in compliance with the EC dated 13.8.2007 and 21.10.2008 as under:

Phase I (2 x 330) EC- dated 13.8.2007								
2007-08 2008-09 2009-10 2010-11 Total								
ESP	-	43.99	13.06	-	57.06			
Chimney	9.68	6.83	8.88	0.89	26.28			
Cooling tower	-	5.74	10.53	-	16.27			
AHP	-	3.17	8.81	0.05	12.03			
ETP & STP	-	-	-	-	-			
Green Belt	-	-	-	0.72	0.72			
Total	9.68	59.73	41.29	1.66	112.36			

Phase II (2 x 330 + 2 x 660) EC- dated 21.10.2008								
	2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 Total							
ESP	-	65.36	233.51	88.05	0.66	43.23	430.82	
Chimney	5.35	13.91	37.23	47.40	3.45	10.67	118.02	
Cooling	-	0.07	5.61	89.07	0.06	9.67	104.48	
tower								
AHP	0.21	-	3.86	20.08	2.17	2.99	29.31	
ETP & STP	-	-	-	-	0.20	0.22	0.42	
Green Belt	-	-	-	1.56	2.47	2.53	6.56	
Total	5.56	79.35	280.22	246.16	9.01	69.30	689.60	

32. It is evident from the above that the Petitioner had not earmarked funds for installation of FGD in the year-wise expenditure submitted to MOE&F on environmental protection measures in compliance with the ECs dated 13.8.2007 and 21.10.2008. It is pertinent to mention that MOE&F had also not raised any objections for not earmarking funds towards installation of FGD in terms of the ECs dated 13.8.2007 and 21.10.2008 respectively. In this background, we are of the view that the installation of FGD in Phases I & II of the project was not mandatory, except for space provisions for FGD and the Petitioner could have reasonably assumed that similar condition would only be imposed for Phase III of the project. Accordingly, the Petitioner could not have been expected to factor the cost of installation of FGD in the bid for Phase III. We therefore conclude that the installation of FGD was not a mandatory requirement as on the cut-off date (19.11.2007) and was made mandatory post the cut-off date vide the EC dated 20.5.2010 granted to the Petitioner for Phase III (units 7 to 9) of Mundra UMPP. The relevant extract of EC dated 20.5.2010 is as under:

A. Specific Conditions:

(i) to (xii).....

(xiii) FGD shall be provided for Phase III units.

B. General Conditions:

(i).....

[&]quot;4. Based on the information submitted by you, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA notification dated September 14, 2006, subject to the compliance of the following specific and general conditions:

- (xviii) Separate funds should be allocated for implementation of environmental protection measures along with item-wise break-up. These cost should be included as part of the project cost. The funds embarked for the environment protection measures should not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.
- 33. In view of the above, the condition mandating the installation of FGD in Phase III units of the Petitioner falls within the definition of change in law under Article 13.1.1(i) of the PPA. Consequent upon the above, the Petitioner is entitled for reimbursement of the expenditure for installation of FGD in Phase III of the project in terms of the EC dated 20.5.2010.
- 34. M/s Prayas has submitted that the EC dated 13.8.2007 for Phase I granted to the Petitioner envisaged for installation of FGD and therefore, the Petitioner cannot contend that it could not have envisaged the installation of FGD for Phase III. Prayas and Haryana Utilities have submitted that the judgment dated 21.1.2013 of the Appellate Tribunal for Electricity (the Tribunal) in Appeal No. 105 of 2011 (JSW Energy Ltd vs MSEDCL & anr) is applicable in the case of the Petitioner as the Petitioner was aware at the time of grant of EC for Phase I (which was issued prior to the cut-off date for Phase III) that the Petitioner would have to earmark space for FGD and make necessary arrangement for funds for implementation of environmental measures which included installation of FGD and accordingly, the relief on account of change in law as prayed for by the Petitioner cannot be allowed. The Petitioner in its rejoinder has clarified that the facts in the JSW case are different from the case of the Petitioner.
- 35. We have carefully considered the submissions of the parties. The Tribunal in JSW case has given its findings as under:
 - "50. Summary of Our Findings:
 - (i) The Environmental Clearance dated 17.5.2007 provided for installation of the FGD at a later stage. It further mandated that separate funds must be allotted for installation of

the said FGD, which are to be included in the project cost. Admittedly, these conditions have not been complied with by the Appellant after getting the Environmental Clearance.

(ii) On a careful perusal of the relevant clause of the PPA, the Environmental Clearance dated 17.5.2007 and the letter issued by the Central Government on 16.4.2010, it is clear that there is no "Change in Law" as contemplated by the PPA. In fact, the letter dated 16.4.2010 issued by the Central Government merely confirms the requirement of installation of the FGD intimated through the letter dated 17.5.2007. It merely informs the Appellant the state of the installation of the FGD. Therefore, there is no "Change in law" as claimed by the Appellant. The reasoning given in the impugned order for rejecting the claim of the Appellant are perfectly valid in law."

36. In the case of JSW, the MOE&F granted EC to JSW on 17.5.2007, subject to various conditions and one of the conditions was provision of space for installation of FGD system for removal of SO_2 , if required at a later stage and for allocation of separate funds for implementation of environmental protection measures. Thereafter, at the final stage of commissioning of the project of JSW, the MOE&F by letter dated 16.4.2010 imposed a condition that FGD system should be installed before the commissioning of the said project within a period of 23 months and conveyed its EC for the project, subject to compliance of safeguards and conditions mentioned in the said letter. MERC and Tribunal had rejected the claim of JSW on the ground that there was no change in law under Article 13 of the PPA, since the letter dated 16.4.2010 issued by MOE&F merely confirmed the requirement of installation of FGD intimated through letter dated 17.5.2007. The findings of the Tribunal in the case of JSW is that the EC dated 16.4.2010 is a mere confirmation of the earlier EC dated 17.5.2007 which is apparently based on the fact that the EC granted by MOE&F to JSW on 16.4.2010 makes reference of the EC granted by letter dated 17.5.2007 where there was a direction to make provisions for space for FGD. In the present case of the Petitioner, the EC granted by MOE&F on 20.5.2010 for Phase III was independent of the ECs granted by MOE&F on 13.8.2007 and 21.10.2008 respectively for Phases I and II of the project. However, in case of Phase III, there was no prior EC as in case of JSW and EC dated 20.5.2010 was granted by MOE&F at the first instance mandating the installation of FGD. The case of JSW is therefore distinguishable from the present case of the Petitioner and hence the judgment of the Tribunal dated 21.1.2013 cannot be made applicable in case of the Petitioner as contended by the Respondents/M/s Prayas.

37. In view of the above discussions, we hold that the condition in EC dated 20.5.2010 mandating installation of FGD for Phase III of the project of the Petitioner was the result of the revision of NAAQS vide MOE&F Notification dated 16.11.2009 and CPCB Notification dated 18.11.2009 which took place after the cut-off date and MOE&F and CPCB being India Government Instrumentalities, the said notifications constitute Change in Law in terms of the PPAs dated 7.8.2008 between the Petitioner and Haryana Utilities.

Issue No.(B) Whether the Petitioner is entitled to be reimbursed the expenditure on FGD, auxiliary power consumption and O & M expenses on FGD?

(A) Capital Cost towards FGD

38. The Petitioner has furnished the break-up of the total capital cost for FGD duly certified by the Auditor as on 29.1.2014 as detailed under:

Particulars	(₹ in crore)	
Engineering Procurement &	541.06	
Construction Cost		
Foreign Exchange Rate Fluctuation	71.90	
Interest During Construction	33.26	
Total Project Cost	646.22	

39. The Petitioner has submitted the details of IDC furnished as on 29.1.2014 as under:

Particulars	₹ in crore
Interest on LC	16.99
LC opening charges	9.36
Sepco vendor BG charges	0.91
LC facility processing fees	6.00
Total	33.26

40. The details of Exchange Rate fluctuation as furnished by the Petitioner is as under:

₹in crore	?)
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Particulars	USD	INR	Average	Cl. rate	Difference	(Loss/
	(Million)		rate			
LC						
Total LC opened	48.44	220.87	45.60			
Paid till 31.1.2014	(-) 10.99	(-) 50.33	45.81	60.15	14.35	15.78
As on 31.1.2014	37.45	170.54	45.54	62.69	17.15	64.21
Forward contract*						
Paid / cancelled	7.14	40.83	57.22	61.82	4.61	3.29
As on 31.1.2014	31.74	183.35	57.76	62.69	4.93	17.22
Exchange fluctuation						0.77
on advance adjusted						
As on 31.1.2014-	6.82	31.09	45.60	62.69	17.09	11.65
Retention						
Total-A	44.27					71.90

*The forward cover of \$7.14 million was booked for value date 10.1.2014 but actual payment fell due on 13.1.2014. Hence, the forward contract was cancelled and made profit of Rs 3.29 crore. On due date, \$7.14 million was paid at USD 1 = Ex. Rate 61.87

41. The Petitioner has submitted that it selected the OEM based on the international competitive bidding and the expenditure on FGD with a capacity of 1980 MW works out to ₹32 lakh/MW. It is noticed that in respect of Bongaigaon TPP of NTPC with a capacity of 250 MW, the total estimated expenditure for FGD system claimed by NTPC in Petition No. 45/GT/2016 is ₹108 crore which works out to ₹43 lakh/MW. Similarly, in respect of Singrauli & Sipat STPS of NTPC with a capacity of 2000 MW and 1980 MW respectively, the cost of installation of FGD system as estimated by NTPC ranges from ₹40 lakh to ₹50 lakh/MW. Therefore, cost of installation of FGD by the Petitioner in Phase III of the project appears to be reasonable in comparison to the costs incurred by other developers who have installed FGD. Accordingly, we are allowing the hard cost of ₹541.06 crore. As reagrds the FERV and IDC are concerned, we find that detailed doceuments have not been placed on record in support of the expenditure incurred. However, as per the prudence practice adopted in case of cost plus tariff, it is observed that the cost on FERV and IDC constitutes around 14% of the capital cost. Accordingly, 14% of the capital cost of ₹541.06 crore, works out to ₹75.74 crore. We

have allowed this expenditure provisionally which shall be trued-up on submission of the documents duly supported by Auditor's certificate. The total expenditure allowed is ₹616.81 crore including provisional amount of ₹75.74 crore.

The FGD cost of ₹646.22 crore is for the generating station (Phase-IV) of (3x660 42. MW)=1980 MW. Out of the capacity of 1980 MW, the Petitioner is supplying 1424 MW to Haryana Utilities at the Haryana periphery. Therefore, we have to find out what is the Gross Generation required at generator terminal to deliver contracted capacity of 1424 MW at Haryana periphery. The ex-bus generation and ex-bus delivery at Haryana periphery would need to take into account the Auxiliary energy consumption and transmission loss from ex-bus to delivery point. In such a competitive bidding project capacity is contracted after excluding auxiliary consumption. In similar unit capacity of 660 MW Sasan Mundra Project of SPL with installed capacity of 3960 MW (6x660 MW), the contracted capacity is 3722.40 MW, the auxiliary consumption is 237.6 MW (3960-3722.40), including consumption of captive coal mine which works out to 6.00%. In Mundra UMPP of CGPL of 4000 MW (5x800 MW), the net contracted capacity is 3800 MW and the AEC is 4.75% (4000-3800 MW). The Petitioner in Petition No. 156/MP/2014 has furnished in para 11 & 15 that the actual Auxiliary Energy Consumption for the month of March, 2014 is 6.38% after commissioning of FGD. Since, the full capacity based on installed capacity excluding Auxiliary consumption has not been contracted, the auxiliary consumption in MW terms is not known. Therefore, the AEC in percentage terms like SPL & Sasan cannot be worked out. CEA in its recommendations to CERC in August, 2016 had provided additional auxiliary consumption of 1.0% for Sea-Water based FGD system. In case of Sasan Power Limited in Petition No.118 MP/2015, the Commission in the order dated (6x660 MW) 30.12.2015 has considered Auxiliary Consumption of 6.00% including consumption in

the captive coal mines while allowing relief due to Change in law. In case of Coastal Gujarat Power Limited (5x800 MW), the Commission in the order dated 21.2.2014 in Petition No. 155/MP/2012, considered Auxiliary consumption as 4.75% based on Bid assumption parameters which are much lower than the AEC claimed by the Petitioner of 8.42%. On this consideration, even after additional 1% AEC, due to FGD, the Auxiliary consumption would not be more than 6.5 %. FGD, as per submission of Petitioner at para 8 of Petition No.156/MP/2014, commenced commercial operation on 29.01.2014 and was capitalised on 29.1.2014. Therefore, the AEC of 6.38 % and transmission loss of 2.85 % in the month of March, 2014 has been considered for computing Gross generation required to be considered for pro-rating the capital cost of FGD towards Haryana Utilities. Therefore, 1558.02 MW [1424÷(1-2.85%)÷(1-6.38%] of the installed capacity pertains to Haryana PPA, the capital cost pertaining to Haryana PPA works out to ₹485.35 crore [=616.81x (1558.02 MW÷1980 MW)]. As per Article 13.2(a) of the PPA, for every increase of ₹8.90 crore in capital cost, the capacity charge shall be increased by 0.227%. Since the additional expenditure towards FGD pertains to the construction period, the same is considered as part of the capacity charge and is allowed in line with the said article of the PPA. Accordingly, there is increase of 12.38% in the capacity charge corresponding to the capital cost of ₹485.35 crore in respect of Haryana PPA.

43. The Installation of FGD was taken up by the Petitioner alongwith the construction of Phase III of the Project and even though the FGDs were put into service after the CoD of these units, the expenditures being capital in nature shall be admissible under the provisions of "construction period" in terms of Article 13.2 (a) of the PPAs dated 7.8.2008. Article 13.2 (a) of the PPAs provides for the application and

principles for computing the impact of Change in law during the construction period.

The said Article is extracted hereunder:

"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 Rs. 8,90,000,00 (Rupees eight crore ninety lakh only) Rupees of the Contracted Capacity in the Capital Cost over the term of this Agreement, the increase/decrease in Quoted Capacity Charges shall be an amount equal to zero point two two seven (0.227%) percent of the Quoted Capacity Charges. Provided that the Seller provides to the Procurer 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."

44. As per the above provision, compensation shall be payable to either Party, only with effect from the date on which the total increase/decrease exceeds the amount of ₹8,90,000,00 (Rupees eight crore nintey lakh only). Further, for every cumulative increase of ₹8.90 crore, the capacity charge shall be increased by 0.227%. Since the additional expenditure towards FGD pertains to the construction period, the same is considered as part of the capacity charge and is allowed as per the principle of computation in terms of Article 13.2(a) of the PPA. Accordingly, there will an increase of 12.38% in the capacity charge corresponding to the capital cost of ₹485.35 crore in respect of Haryana PPAs.

(B) Auxiliary Energy Consumption and O &M expenses

45. The Petitioner has submitted that on account of installation of FGD, it is incurring additional recurring expenditure in terms of O & M and Auxiliary Energy Consumption (AEC). As regards Auxiliary Energy consumption, the Petitioner has

submitted that the per unit impact of additional auxiliary consumption for the month of March, 2017 is as under:

Particulars	Formula	Amount
Capacity charge (FY 2016-17)	Α	1.011 Rs/kWh
Normative auxiliary consumption without FGD	В	6.50%
Normative auxiliary consumption with FGD	С	8.42%
Revised capacity charges	D= A * (1-B) / (1-C)	1.03 Rs/kWh
Impact on capacity charges due	E= D-A	0.021 Rs/kWh
to increase in auxiliary		
consumption because of FGD		

46. As regards operating expenses, the Petitioner has computed the per unit impact due to additional operating expenditure of running FGD for the month of March, 2017 is as under:

Particulars	Formula	Amount
Increased operating expenditure for	Α	4.00 crore
month		
Total gross generation for the month	В	1288.27MU
Actual auxiliary consumption	С	7.06%
Transmission losses based on schedule	D	3.05%
Per unit impact of increased operating	E= A/ (Energy	0.0345
expenditure because of FGD	sold)	

47. We have considered the submissions of the parties. The Petitioner has furnished the Auxiliary Energy Consumption of 1.92% on account of installation of FGD, based on the OEM parameters. The Petitioner, in paras 11 and 15 of Petition No. 156/MP/2014 had submitted 6.38% as the actual Auxiliary consumption for the month of March, 2014 which was after commissioning of the FGD. The Petitioner in the present Petition has submitted that the actual Auxiliary Energy Consumption is 7.06% in the month of March, 2017 which is much lower than the claimed Auxiliary Energy Consumption of 8.42%. Central Electricity Authority vide its letter dated 1.8.2016 addressed to the Commission has recommended operational norms in respect of coal based thermal power plants for implementation of the Environmental (Protection)

Amendment, Rules, 2015. In the said recommendations, CEA, referring to the operational norms proposed by it during the year 1997, has recommended 1% additional Auxiliary Energy Consumption for FGD using Sea water provision. We are of the view that the Petitioner shall be granted compensation @1.0% as additional Auxiliary Energy Consumption or actual Auxiliary Energy Consumption on account of operation of FGD for Phase III of the project, whichever is lower. If the norms are revised by CEA in future, then the revised norms or 1.92% or the actual consumption whichever is lower shall be admissible. Considering the fact that expenditure on account of additional Auxiliary Energy Consumption shall be on recurring basis during the operating period, the same shall be reimbursed to the Petitioner by Haryana Utilities in terms of Article 13.2(b) of the PPA.

- 48. As regards the additional O& M expenses, it is observed that in the PPAs dated 7.8.2008, there is no provision for any separate compensation for O&M other than the capital expenditure in terms of Article 13.2(a) of the PPA. Since FGD is a new requirement under Change in Law and the O&M expenditure is incurred over and above the capital cost on a recurring basis, O&M expenditure for FGD should be admissible for putting the generating company in the same economic position as if Change in Law has not occurred. CEA is in the process of developing the norms for O&M for FGD. As per MOP, GOI Notification for generating companies dated 30.3.1992, the norms of O&M are given as under:
 - (i) at the rate of 2.5% of the actual capital expenditure of ceiling on capital expenditure provided in the power purchase agreement: or
 - (ii) at 2% of the actual capital expenditure on ceiling on capital expenditure provided in the power purchase agreement together with actual expenditure on insurance.

49. Pending the prescription of norms by CEA, we allow the O&M expenses provisionally at the rate of 2% per annum of the capital cost of FGD, subject to adjustment in the light of the norms to be prescribed by CEA.

Carrying Cost

- 50. The Petitioner has prayed for a direction to the Respondents to pay carrying cost for the period of delay from the date of Notification of change in law. Article 13.2 of the PPAs provides 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."
- 51. Article 13.4 which deals with tariff adjustment payment on account of change in law is extracted as under:
 - "13.4 Tariff Adjustment Payment on account of Change in law
 - 13.4.1 Subject to Article 13.2, 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."
 - 13.4.2 The payment for changes in law shall be through supplementary bill as mentioned in Article 11.8. However, in case of any change in Tariff by reason of change in law, as determined in accordance with this Agreement, the Monthly Invoice to be raised by the Seller after such change in tariff shall appropriately reflect the changed Tariff."
- 52. The above provisions do not provide for payment of carrying cost from the date the additional cost was incurred on account of change in law till the date of determination of the change in law events by the Commission. After determination of change in law events, the Petitioner shall be required to claim payment on account of the change in law through the supplementary bill raised in accordance with Article 11.8 of the PPA. Article 11.8 of the PPA provides that either party may raise a

supplementary bill for payment on account of Change in Law and the bills shall be paid by the other party. Article 11.8.3 provides that "in the event of delay in payment of a supplementary bill by either party beyond one month from the date of billing, a late payment surcharge shall be payable at same terms applicable to the Monthly Bill in Article 11.3.4." From the above provisions, it emerges that late payment surcharge is payable only if the payment of supplementary bill by either party beyond one month from the date of billing is delayed. There is no provision in the PPAs to grant carrying cost from the date of incurring the expenditure under Change in Law.

53. Based on the above analysis, the the summary of our decision in respect of the prayers made by the Petitioner in para 5 above are as under:

Prayers	Decision	
Declare that the event mentioned above is a Change in Law event as per the PPAs.	Allowed as in paras 24, 27 and 29, 33 and 37	
Grant compensation under Change in Law for the additional capital cost, operational expenditure and auxiliary consumption on account of installation of FGD	Allowed as in paras 44, 47 and 49	
Direct the Respondents to make the payment of the compensation in accordance with the methodology	Allowed as above	
Direct the Respondents to pay in the interim 95% of the amount payable towards Change in Law	Interim payment not ordered since final order passed	
Direct the Respondents to pay Carrying Cost for the period of delay from the date of Notification of Change in Law	Not allowed	

54. Petition No. 104/MP/2017 is disposed of in the terms of above.

Sd/-Sd/-Sd/-(Dr. M.K.lyer)(A.S. Bakshi)(A. K. Singhal)(P.K.Pujari)MemberMemberMemberChairperson