

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 183/MP/2020

- Subject : Petition under Section 79 of the Electricity Act, 2003 read with Regulation 29 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for approval of additional capital expenditure on installation of various Emission Control Systems at Barh Super Thermal Power Station Stage-II (2x660 MW) in compliance of Ministry of Environment, Forest and Climate Change, Government of India Notification dated 7.12.2015.
- Petitioner : NTPC Limited (NTPC)
- Respondents : South Bihar Power Distribution Company Limited and Ors.

Petition No. 267/MP/2020

- Subject : Petition under Section 79 of the Electricity Act, 2003 read with Regulation 29 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for approval of additional capital expenditure on installation of various Emission Control Systems at Feroze Gandhi Unchahar Thermal Power Station Stage-I (2x210 MW) in compliance of Ministry of Environment, Forest and Climate Change, Government of India Notification dated 7.12.2015.
- Petitioner : NTPC Limited (NTPC)
- Respondents : Uttar Pradesh Power Corporation Limited (UPPCL) and Ors.

Petition No. 333/MP/2020

- Subject : Petition under Section 79 of the Electricity Act, 2003 read with Regulation 29 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for approval of additional capital expenditure on installation of various Emission Control Systems at Talcher Super Thermal Power Station Stage-I (1000 MW) in compliance of Ministry of Environment, Forest and Climate Change, Government of India Notification dated 7.12.2015.
- Petitioner : NTPC Limited (NTPC)



Respondents : West Bengal State Electricity Distribution Company Limited and Ors

Petition No. 335/MP/2020

Subject : Petition under Section 79 of the Electricity Act, 2003 read with Regulation 29 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for approval of additional capital expenditure on installation of various Emission Control Systems at Vindhyachal Super Thermal Power Station Stage-I (6x210 MW) in compliance of Ministry of Environment, Forest and Climate Change, Government of India Notification dated 7.12.2015.

Petitioner : NTPC Limited (NTPC)

Respondents : M. P Power Management Company Limited and Ors.

Petition No. 338/MP/2020

Subject : Petition under Section 79 of the Electricity Act, 2003 read with Regulation 29 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for approval of additional capital expenditure on installation of various Emission Control Systems at Korba Super Thermal Power Station Stage-I&II (3x200 MW + 3x500 MW) in compliance of Ministry of Environment, Forest and Climate Change, Government of India Notification dated 7.12.2015.

Petitioner : NTPC Limited (NTPC)

Respondents : M. P Power Management Company Limited and Ors.

Petition No. 339/MP/2020

Subject : Petition under Section 79 of the Electricity Act, 2003 read with Regulation 29 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for approval of additional capital expenditure on installation of various Emission Control Systems at Sipat Super Thermal Power Station Stage-II (2x500 MW) in compliance of Ministry of Environment, Forest and Climate Change, Government of India Notification dated 7.12.2015.

Petitioner : NTPC Limited (NTPC)



Respondents : M. P Power Management Company Limited and Ors.a

Petition No. 342/MP/2020

Subject : Petition under Section 79 of the Electricity Act, 2003 read with Regulation 29 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for approval of additional capital expenditure on installation of various Emission Control Systems at Farakka Super Thermal Power Station Stage-III (500 MW) in compliance of Ministry of Environment, Forest and Climate Change, Government of India Notification dated 7.12.2015.

Petitioner : NTPC Limited (NTPC)

Respondents : West Bengal State Electricity Distribution Company Limited and Ors.

Petition No. 499/MP/2020

Subject : Petition under Section 79 of the Electricity Act, 2003 read with Regulation 29 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for approval of additional capital expenditure on installation of various Emission Control Systems at National Capital Thermal Power Station, Stage-II (980 MW) in compliance of Ministry of Environment, Forest and Climate Change, Government of India Notification dated 7.12.2015.

Petitioner : NTPC Limited (NTPC)

Respondents : Uttar Pradesh Power Corporation Limited (UPPCL) and Ors.

Petition No. 501/MP/2020

Subject : Petition under Section 79 of the Electricity Act, 2003 read with Regulation 29 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for approval of additional capital expenditure on installation of various Emission Control Systems at Feroze Gandhi Unchahar Thermal Power Station Stage-III (210 MW) in compliance of Ministry of Environment, Forest and Climate Change, Government of India Notification dated 7.12.2015.

Petitioner : NTPC Limited (NTPC)



Respondents : Uttar Pradesh Power Corporation Limited (UPPCL) and Ors.

Petition No. 508/MP/2020

Subject : Petition under Section 79 of the Electricity Act, 2003 read with Regulation 29 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for approval of additional capital expenditure on installation of various Emission Control Systems at Farakka Super Thermal Power Station Stage-I&II (1600 MW) in compliance of Ministry of Environment, Forest and Climate Change, Government of India Notification dated 7.12.2015.

Petitioner : NTPC Limited (NTPC)

Respondents : West Bengal State Electricity Distribution Company Limited and Ors.

Petition No. 509/MP/2020

Subject : Petition under Section 79 of the Electricity Act, 2003 read with Regulation 29 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for approval of additional capital expenditure on installation of various Emission Control Systems at Vindhyachal Super Thermal Power Station Stage-III (2x500 MW) in compliance of Ministry of Environment, Forest and Climate Change, Government of India Notification dated 7.12.2015.

Petitioner : NTPC Limited (NTPC)

Respondents : M. P Power Management Company Limited and Ors.

Petition No. 510/MP/2020

Subject : Petition under Section 79 of the Electricity Act, 2003 read with Regulation 29 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for approval of additional capital expenditure on installation of various Emission Control Systems at Singrauli Super Thermal Power Station (2000 MW) in compliance of Ministry of Environment, Forest and Climate Change, Government of India Notification dated 7.12.2015.

Petitioner : NTPC Limited (NTPC)



Respondents : Uttar Pradesh Power Corporation Limited (UPPCL) and Ors.

Petition No. 512/MP/2020

Subject : Petition under Section 79 of the Electricity Act, 2003 read with Regulation 29 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for approval of additional capital expenditure on installation of various Emission Control Systems at Mouda Super Thermal Power Station Stage-II (2x660 MW) in compliance of Ministry of Environment, Forest and Climate Change, Government of India Notification dated 7.12.2015.

Petitioner : NTPC Limited (NTPC)

Respondents : M. P Power Management Company Limited and Ors.

Date of Hearing : 21.7.2020

Coram : Shri I. S. Jha, Member
Shri Arun Goyal, Member

Parties present : Shri Rohit Chhabra, NTPC
Shri Shailendra Singh, NTPC
Shri Evani Prabhakar Rao, NTPC
Shri Rohit Ladha, NTPC
Shri Parimal Piyush, NTPC
Shri Sachin Jain, NTPC
Shri Pankaj Kumar Gupta, NTPC
Shri Sukhjinder Singh, NTPC
Shri Anjum Zargar, NTPC
Shri Surya Prakash Kesarwani, NTPC
Shri Prashant Chaturvedi, NTPC
Shri Shashwat Kumar, Advocate, SPBDH
Shri Rahul Chouhan, Advocate, SPBDH
Shri Arjit Maitra, BYPL
Shri R. B. Sharma, Advocate, BRPL
Shri Sanjay Srivastav, BRPL
Shri Gurmeet Singh, BRPL
Shri Shobit Dhar, BRPL
Ms. Megha Bajpeyi, BRPL
Shri Manish Garg, UPPCL
Shri B. K. Saxena, UPPCL
Shri Anurag Bansal, TPDDL
Ms. Shefali Sobti, TPDDL



Record of Proceedings

The matters were heard through video conferencing.

2. The representative of the Petitioner submitted that the instant Petitions have been filed under Section 79 of the Electricity Act, 2003 and Regulation 29 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (in short 'the 2019 Tariff Regulations'), *inter-alia*, for approval of additional expenditure on installation of various emission control systems at its Thermal Power Stations in compliance of Ministry of Environment, Forest and Climate Change, Government of India (MoEF&CC) Notification dated 7.12.2015. He further submitted that in these Petitions, the Petitioner has furnished details of technology/emission control systems to comply with the revised emission norms in respect of its various generating stations along with the estimated costs for implementation and resultant likely impact on the tariff.. The representative of the Petitioner submitted that the costs for implementation of emission control systems have been discovered through competitive bidding process.

3. The representative of the Respondent, Uttar Pradesh Power Corporation Limited (UPPCL) in Petition Nos. 267/MP/2020, 499/MP/2020, 501/MP/2020, 508/MP/2020 and 510/MP/2020 submitted that the Respondent has already filed its reply in these matters. He further submitted as under:

(a) The Petitioner has not shared the critical factors of tendering process and its concluding aspects. The Petitioner has also not shown the basis on which the cost of technology has been ascertained by it.

(b) The Petitioner has sought additional O& M Expenses, GSHR and auxiliary consumption on account of implementation of emission control systems. However, admittedly, the Petitioner has no prior experience of operation of such systems as they have not been installed at any of its generating stations. Accordingly, such proposals ought not to be considered.

(c) Any recommendations of CEA on operation norms for thermal generating station cannot be implemented unless such norms are deliberated upon and approved by the Commission.

(d) The Petitioner has prayed to consider the shutdown period required to implements the system as 'deemed available'. However, the Petitioner ought to be directed to align the work of implementation of systems with the annual maintenance program of its various generating stations so that the additional costs to the beneficiaries/procurers including the cost associated with procurement of power from alternative sources can be mitigated.

(e) Ministry of Power in its letter No. 23/22/2018-R&R dated 30.5.2018 has issued directions under Section 107 of the Electricity Act, 2003 to the Commission to develop 'appropriate regulatory framework' to address the impact on tariff, recovery of cost involved in installation and operation of chosen technology/systems. Therefore, until such 'appropriate regulatory framework' has been developed, the present Petitions may be kept pending.



4. The representative of the Petitioner reiterated that the selection of appropriate technology/system at its various generating stations has been done as per the CEA's guidelines/recommendations and on the basis of the various factors indicated therein. He further added that the Petitioner will endeavour to undertake implementation of these systems aligned with the annual maintenance of its various generating stations. However, owing to strict time-line for complying with the revised emission norms, the Petitioner may require additional shutdown period.

5. After hearing the representatives of the parties, the Commission admitted the Petitions and directed to issue notice to the Respondents.

6. The Commission directed the Petitioner to serve copy of the Petitions on the Respondents, if not already served. The Respondents were directed to file their reply to the Petition by 14.8.2020 with copy to the Petitioner, who may file its rejoinder, if any by 30.8.2020.

7. The Commission observed that in terms of Regulation 29(1) of the 2019 Tariff Regulations, the Petitioner is required to share its proposal with the beneficiaries for incurring the expenditure on Emission Control Systems (ECSs). In response, the representative of the Petitioner submitted that sharing of the proposals is being done through these Petitions and the same may be allowed by the Commission.

8. The Commission further observed that the Petitioner's proposals contained in the Petitions are not in line with the provisions of the Regulation 29(2) and 29(3) of 2019 Tariff Regulations as certain required details have not been included in the instant Petitions. Accordingly, in view of the fast approaching target for installation of these ECSs, the Commission directed the Petitioner to submit on affidavit by 15.8.2020, complete proposal for incurring expenditure including the details as required under Regulation 29(2) and 29(3) of 2019 Tariff Regulations with advance copy to the beneficiaries/Respondents who may file their response including their views on the proposal of the Petitioner by 25.8.2020. The Petitioner may file its response thereof, if any, by 4.9.2020.

9. The Commission directed the Petitioner to file the following information/justification in all the Petitions, on affidavit, by 14.8.2020:

(a) Reasons for not consulting the beneficiaries for the proposed additional capital expenditure prior to floating/ finalising the bid for incurring such additional capital expenditure.

(b) Reasons for depreciating 90% of the capital cost of the ECS (FGD/SNCR) over the balance useful life of the generating station or 5 years, whichever is higher.

(c) Whether the generating station has availed the benefit of special allowances under the applicable provisions of Tariff Regulations or has undertaken additional capital expenditures for R&M?

(d) Whether life of the generating station has been extended or is proposed to be extended?



(e) What is the reasonable estimation of the remaining useful life of the generating station?

(f) Why the recovery of capital cost (90%) through depreciation should not be spread over the useful life of ECS of 25 years?

910. The Commission further directed the Petitioner to file the following details/information, on affidavit, by 15.8.2020.

A. Petition No. 183/MP/2020

(a) Certificate to the effect that FGD technology adopted would meet the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020 and would also meet the SO₂ emission norms specified by MoEF&CC.

(b) Detailed note with regard to selection of technology for SO₂ control for the instant power plant based on the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020.

(c) Basis of cost claimed towards 'SNCR' and certificate to the effect that the power plant would meet the NO_x emission norms stipulated by MoEF&CC after installation of the same, and the status of bidding process with respect to SNCR for NO_x control.

(d) Detailed note on bidding (ICB or domestic) for award of different packages of FGD system (firm basis or escalation basis), number and names of the bidders which participated in the bid and name of the L-1 bidder/s with awarded cost of each package, if already awarded.

(e) Resolution of the board/ decision of the competent authority to go ahead with the bidding and award of the contract (s), if already awarded.

(f) Basis of increase in GSHR by 13.46 Kcal/kwh (0.6%) for installing the SNCR.

B. Petition No. 267/MP/2020

(a) Certificate to the effect that FGD technology adopted would meet the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020 and would also meet the SO₂ emission norms specified by MoEF&CC.

(b) Detailed note with regard to selection of technology for SO₂ control for the instant power plant based on the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020.

(c) Detailed note on bidding (ICB or domestic) for award of different packages of FGD system (firm basis or escalation basis), number and names of the bidders participated in the bid and name of the L-1 bidder/s with awarded cost of each package, if already awarded.

(d) Resolution of the board/ decision of the competent authority to go ahead with the bidding and award of the contract (s), if already awarded.



(e) Break-up of the capital cost claimed including awarded capital cost of different packages, IEDC, IDC, taxes and duties considered, opportunity cost for shutdown period and any other cost.

(f) Reasons/Justification for the cost of Rs.78.77 lakh/MW in comparison to capital cost (base cost) of Rs. 45.00 lakh/MW, prescribed by the CEA.

C. Petition No. 333/MP/2020

(a) Certificate to the effect that FGD technology adopted would meet the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020 and would also meet the SO₂ emission norms specified by MoEF&CC.

(b) Detailed note with regard to selection of technology for SO₂ control for the instant power plant based on the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020.

(c) Detailed note on bidding (ICB or domestic) for award of different packages of FGD system (firm basis or escalation basis), number and names of the bidders participated in the bid and name of the L-1 bidder/s with awarded cost of each package, if already awarded.

(d)) Resolution of the board/ decision of the competent authority to go ahead with the bidding and award of the contract (s), if already awarded.

(e) Break-up of the capital cost claimed including awarded capital cost of different packages, IEDC, IDC, taxes and duties considered, opportunity cost for shutdown period and any other cost.

D. Petition No. 335/MP/2020

(a) Applicable norm for SO₂ is 600 mg/Nm³ for the units, but the selected WFGD is for 200mg/Nm³. Reason for selection of more efficient FGD system.

(b) Whether units of the generating station are meeting other norms of NO_x, Hg and PM, etc. as specified in the MoEF&CC Revised Emission Standards?

(c) Detailed note with regard to selection of technology for SO₂ control for the instant power plant based on the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020.

(d) Detailed note on bidding (ICB or domestic) for award of different packages of FGD system (firm basis or escalation basis), number and names of the bidders participated in the bid and name of the L-1 bidder/s with awarded cost of each package, if already awarded.



(e) Resolution of the board/ decision of the competent authority to go ahead with the bidding and award of the contract (s), if already awarded.

(f) Break-up of the capital cost claimed including awarded capital cost of different packages, IEDC, IDC, taxes and duties considered, opportunity cost for shutdown period and any other cost.

(g) As the Petitioner's claim is higher compared to other similar generating stations comparison of the capital cost with similar other generating stations and reasons for the variation and higher capital cost.

E. Petition No. 338/MP/2020

(a) Whether the units of the generating station are meeting the other norms of NOx, Hg, PM etc. as specified in the MoEF&CC Revised Emission Standards?

(b) Detailed note with regard to selection of technology for the power plants based on the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020. Submit approval of the CEA on proposed technology, if any.

(c) Certificate to the effect that FGD technology adopted would meet the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020 and would also meet the SO₂ emission norms specified by MoEF&CC.

(d) Break-up of capital cost claimed by the Petitioner i.e. plant & machinery cost, interest during construction, incidental expenditure during construction and any other expenditure alongwith the basis.

(e) As the Petitioner's claim is higher compared to other similar generating stations comparison of the capital cost with similar other generating stations and reasons for the variation and higher capital cost.

(f) Detailed note on bidding (ICB or domestic) for award of different packages of FGD system (firm basis or escalation basis), number and names of the bidders participated in the bid and name of the L-1 bidder/s with awarded cost of each package, if already awarded.

(g) Resolution of the board/ decision of the competent authority to go ahead with the bidding and award of the contract (s), if already awarded.

F. Petition No. 339/MP/2020

(a) Basis for selection of NOx control technology and the associated claimed cost. Whether the units of the generating station are meeting other norms of Hg and PM, etc. as specified in the MoEF&CC Revised Emission Standards.

(b) Details of pilot test study conducted by NTPC for NOx control and feasibility at the existing generating units.

(c) Detailed note with regard to selection of technology for the power plants based on the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020. Submit approval of CEA, if any.



(d) Certificate to the effect that technology adopted would meet the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020 and would also meet the SO₂ emission norms specified by MoEF&CC.

(e) Break-up of capital cost claimed by the Petitioner i.e. plant & machinery cost, interest during construction, incidental expenditure during construction and any other expenditure alongwith the basis.

(f) As the Petitioner's claim is higher compared to other similar generating stations comparison of the capital cost with similar other generating stations and reasons for the variation and higher capital cost.

(g) Detailed note on bidding (ICB or domestic) for award of different packages of FGD system (firm basis or escalation basis), number and names of the bidders participated in the bid and name of the L-1 bidder/s with awarded cost of each package, if already awarded.

(h) Resolution of the board/ decision of the competent authority to go ahead with the bidding and award of the contract (s), if already awarded.

G. Petition No. 342/MP/2020

(a) Certificate to the effect that FGD technology adopted would meet the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020 and would also meet the SO₂ emission norms specified by MoEF&CC.

(b) Detailed note with regard to selection of technology for SO₂ control for the instant power plant based on the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020.

(c) Basis of cost claimed towards 'SNCR'/combustion modification and certificate to the effect that the generating station would meet the NO_x emission norms stipulated by MoEF&CC after installation of the same, and the status of bidding process with respect to SNCR for NO_x control.

(d) Detailed note on bidding (ICB or domestic) for award of different packages of FGD system (firm basis or escalation basis), number and names of the bidders participated in the bid and name of the L-1 bidder/s with awarded cost of each package, if already awarded.

(e) Resolution of the board/ decision of the competent authority to go ahead with the bidding and award of the contract (s), if already awarded.

(f) Break-up of the capital cost claimed including awarded capital cost of different packages, IEDC, IDC, taxes and duties considered, opportunity cost for shutdown period and any other cost.

(g) Basis of increase in GSHR as 9.72 Kcal/kWh and 19.44 Kcal/kWh and APC by 0.4% due to installation of SNCR and Combustion Modification respectively, to be provided by the Petitioner.

H. Petition No. 499/MP/2020



(a) Certificate to the effect that FGD technology adopted would meet the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020 and would also meet the SO₂ emission norms specified by MoEF&CC.

(b) Detailed note with regard to selection of technology for SO₂ control for the instant power plant based on the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020.

(c) Basis of cost claimed towards 'SNCR'/combustion modification and certificate to the effect that the generating station would meet the NO_x emission norms stipulated by MoEF&CC after installation of the same, and the status of bidding process with respect to SNCR for NO_x control.

(d) Detailed note on bidding (ICB or domestic) for award of different packages of FGD system (firm basis or escalation basis), number and names of the bidders participated in the bid and name of the L-1 bidder/s with awarded cost of each package, if already awarded.

(e) Resolution of the board/ decision of the competent authority to go ahead with the bidding and award of the contract (s), if already awarded.

(f) Break-up of the capital cost claimed including awarded capital cost of different packages, IEDC, IDC, taxes and duties considered, opportunity cost for shutdown period and any other cost.

(g) Basis of increase in GSHR as 9.53 Kcal/kWh and 19.06 Kcal/kWh and APC by 0.2% due to installation of SNCR and Combustion Modification respectively.

I. Petition No. 501/MP/2020

(a) Certificate to the effect that FGD technology adopted would meet the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020 and would also meet the SO₂ emission norms specified by MoEF&CC.

(b) Detailed note with regard to selection of technology for SO₂ control for the instant power plant based on the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020.

(c) Basis of cost claimed towards 'SNCR'/combustion modification and certificate to the effect that the generating station would meet the NO_x emission norms stipulated by MoEF&CC after installation of the same, and the status of bidding process with respect to SNCR for NO_x control.

(d) Detailed note on bidding (ICB or domestic) for award of different packages of FGD system (firm basis or escalation basis), number and names of the bidders participated in the bid and name of the L-1 bidder/s with awarded cost of each package, if already awarded.

(e) Resolution of the board/ decision of the competent authority to go ahead with the bidding and award of the contract (s), if already awarded.



(f) Break-up of the capital cost claimed including awarded capital cost of different packages, IEDC, IDC, taxes and duties considered, opportunity cost for shutdown period and any other cost.

(g) Basis of increase in GSHR as 9.72 Kcal/kWh and 19.44 Kcal/kWh due to installation of SNCR and Combustion Modification respectively.

(h) Reasons and justification for the cost of Rs.78.77 lakh/MW in comparison to capital cost (base cost) of Rs. 45.00 lakh/MW, prescribed by the CEA.

J. Petition No. 508/MP/2020

(a) Certificate to the effect that FGD technology adopted would meet the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020 and would also meet the SO₂ emission norms specified by MoEF&CC.

(b) Detailed note with regard to selection of technology for SO₂ control for the instant power plant based on the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020.

(c) Basis of cost claimed towards 'SNCR'/combustion modification and certificate to the effect that the generating station would meet the NO_x emission norms stipulated by MoEF&CC after installation of the same, and the status of bidding process with respect to SNCR for NO_x control.

(d) Detailed note on bidding (ICB or domestic) for award of different packages of FGD system (firm basis or escalation basis), number and names of the bidders participated in the bid and name of the L-1 bidder/s with awarded cost of each package, if already awarded.

(e) Resolution of the board/ decision of the competent authority to go ahead with the bidding and award of the contract (s), if already awarded.

(f) Break-up of the capital cost claimed including awarded capital cost of different packages, IEDC, IDC, taxes and duties considered, opportunity cost for shutdown period and any other cost.

(g) Reasons and justification for the cost of Rs.70.28 lakh/MW in comparison to capital cost (base cost) of Rs. 45.00 lakh/MW for 200 MW units and Rs. 40.50 lakh/MW for 500 MW units, prescribed by the CEA.

K. Petition No. 509/MP/2020

(a) Basis for selection of NO_x control technology and the associated claimed cost.

(b) Whether the units of the generating station are meeting other norms, i.e.Hg and PM, etc. specified in the MoEF&CC Revised Emission Standards?

(c) Details of pilot test study conducted by NTPC for NO_x control.

(d) Detailed note with regard to selection of technology for the Plants based on the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020.



(e) Certificate to the effect that mentioned technology adopted would meet the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020 and would also meet the SO₂ emission norms specified by MoEF&CC.

(f) Break-up of capital cost claimed i.e. plant & machinery cost, interest during construction, incidental expenditure during construction and any other expenditure alongwith the basis.

(g) Detailed note on bidding (ICB or domestic) for award of different packages of FGD system (firm basis or escalation basis), number and names of the bidders participated in the bid and name of the L-1 bidder/s with awarded cost of each package, if already awarded.

(h) Resolution of the board/ decision of the competent authority to go ahead with the bidding and award of the contract (s), if already awarded.

(h) The Petitioner's claim is higher than other generating stations. Submit the comparison of the capital cost with other generating stations and explain the variation and reason for increase in capital cost.

L. Petition No. 510/MP/2020

(a) Certificate to the effect that FGD technology adopted would meet the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020 and would also meet the SO₂ emission norms specified by MoEF&CC.

(b) Detailed note with regard to selection of technology for SO₂ control for the instant power plant based on the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020.

(c) Basis of cost claimed towards 'SNCR'/combustion modification and certificate to the effect that the generating station would meet the NO_x emission norms stipulated by MoEF&CC after installation of the same, and the status of bidding process with respect to SNCR for NO_x control.

(d) Detailed note on bidding (ICB or domestic) for award of different packages of FGD system (firm basis or escalation basis), number and names of the bidders participated in the bid and name of the L-1 bidder/s with awarded cost of each package, if already awarded.

(e) Resolution of the board/ decision of the competent authority to go ahead with the bidding and award of the contract (s), if already awarded.

(f) Break-up of the capital cost claimed including awarded capital cost of different packages, IEDC, IDC, taxes and duties considered, opportunity cost for shutdown period and any other cost.

(g) Reasons and justification for the cost of Rs.66.38 lakh/MW in comparison to capital cost (base cost) of Rs. 45.00 lakh/MW for 200 MW units and Rs. 40.50 lakh/MW for 500 MW units, prescribed by the CEA.

M. Petition No. 512/MP/2020

(a) Basis for selection of specified NO_x control technology and the associated claimed cost.



(b) Whether the units of the generating station are meeting other norms, i.e. Hg and PM, etc. specified in the MoEF&CC Revised Emission Standards?

(c) Details of pilot test study conducted by NTPC for NOx control.

(d) Detailed note with regard to selection of technology for the power plants based on the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020.

(e) Certificate to the effect that technology adopted would meet the evaluation criteria as indicated by CEA in its advisory dated 7.2.2020 and would also meet SO₂ & NOx emission norms specified by MoEF&CC.

(f) Break-up of capital cost claimed i.e. plant & machinery cost, interest during construction, incidental expenditure during construction and any other expenditure alongwith the basis.

(g) Detailed note on bidding (ICB or domestic) for award of different packages of FGD system (firm basis or escalation basis), number and names of the bidders participated in the bid and name of the L-1 bidder/s with awarded cost of each package, if already awarded.

(h) Resolution of the board/ decision of the competent authority to go ahead with the bidding and award of the contract (s), if already awarded.

11. The due date of filing of reply, rejoinder and information/justification shall be strictly complied with.

12. The Petitions shall be listed for hearing in due course for which separate notice will be issued.

By order of the Commission

**Sd/-
(T.D. Pant)
Deputy Chief (Law)**

