

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 181/GT/2019

Coram:

**Shri Jishnu Barua, Chairperson
Shri Ramesh Babu V, Member
Shri Harish Dudani, Member**

Date of Order: 20th March, 2025

IN THE MATTER OF:

Petition for the determination of tariff of Gadarwara Super Thermal Power Station (1600 MW) for the period from the date of commercial operation of Unit-I (i.e.1.6.2019) to 31.3.2024.

AND

IN THE MATTER OF:

NTPC Limited,
NTPC Bhawan, Core-7, Scope Complex,
Institutional Area, Lodhi Road,
New Delhi - 110003

... Petitioner

Vs

1. Madhya Pradesh Power Management Company Limited
Shakti Bhawan, Vidyut Nagar, Jabalpur - 482008
2. Maharashtra State Electricity Distribution Company Limited
Prakashgad, Bandra (East), Mumbai - 400051
3. Gujarat Urja Vikas Nigam Limited
Vidyut Bhavan, Race Course,
Vadodara - 390007
4. Chhattisgarh State Power Distribution Company Limited
P.O. Sundar Nagar, Danganiya, Raipur - 492013
5. Electricity Department
Government of Goa, Vidyut Bhawan,
Panaji, Goa
6. Electricity Department
Administration of Daman & Diu, Daman - 396210



7. DNH Power Distribution Company Limited
UT of Dadra & Nagar Haveli, Silvassa

.....Respondents

Parties Present:

Shri Venkatesh, Advocate, NTPC
Shri Nikunj Bhardwaj, Advocate, NTPC
Shri Ravi Sharma, Advocate, MPPMCL

ORDER

This Petition has been filed by NTPC for approval of the tariff of Gadarwara Super Thermal Power Station (2 x 800 MW) (in short, “the project/ generating station”) based on the anticipated COD of Unit-I i.e. 30.4.2019 to 31.3.2024, in accordance with the provisions of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (in short, “the 2019 Tariff Regulations”). Thereafter, the Petitioner, vide affidavit dated 27.1.2021, filed the amended Petition based on the actual COD of Unit-I (i.e., 1.6.2019) and the anticipated COD of Unit-II (i.e.1.4.2021). Further, the Petitioner, vide affidavit dated 11.3.2022, amended the Petition and revised its tariff proposal for the period 2019-24 based on the actual COD of Unit-I (i.e., 1.6.2019) and the actual COD of Unit-II (i.e., 1.3.2021).

2. The generating station is located in the Narsinghpur District of the State of Madhya Pradesh and comprises two Units of 800 MW each. The Ministry of Power (MOP), GOI, vide its letter dated 11.7.2017, allocated the power from the generating station to the Respondents/ beneficiaries as detailed below:

State	Total allocation in MW	Share in Installed Capacity (%)
Gujarat	303.94	19.00
Madhya Pradesh	800.00	50.00
Chhattisgarh	155.65	9.73
Maharashtra	50.00	3.13
Goa	14.55	0.91
Daman & Diu	15.03	0.94
D&N Haveli	20.83	1.30



Unallocated	240.00	15.00
Total (WR)	1600.00	100.00

3. The Investment Approval (IA) of the project was accorded by the Board of the Petitioner's Company in its 392nd meeting held on 26.2.2013, subject to MOEF&CC clearance, which was accorded on 22.3.2013. The indicative estimated completion cost was Rs.12865.92 crore, including IDC and FC of Rs.1966.20 crore, and the working capital margin of Rs.265.50 crore at the price level of the 1st quarter of 2013. The Petitioner has submitted the Revised Cost Estimate (RCE) accorded by the Board of the Petitioner's Company in its 134th meeting held on 30.7.2020 for Rs.15105.22 crore, including IDC and FC of Rs.2131.49 crore and the working capital margin of Rs.255.65 crore, at the price level of the 1st quarter of 2020.

4. Based on the above, the capital cost and the annual fixed charges claimed by the Petitioner from the COD of Unit-I (1.6.2019) till 31.3.2024 are as under:

	2019-20	2020-21		2021-22	2022-23	2023-24
	1.6.2019 to 31.3.2020	1.4.2020 to 28.2.2021	1.3.2021 to 31.3.2021			
Capital Cost as on the COD of Units	684029.76		1268206.04			
Add: Notional IDC	4297.00		6152.97			
Add: Loan ERV charged to Revenue	3291.80		14414.17			
Opening Capital Cost	691618.56	717967.37	1288773.18	1289775.68	1315611.66	1406636.17
Add: Addition during the year / period *	26348.81	102303.13	1002.50	25835.98	91024.51	91405.72
Closing Capital Cost	717967.37	820270.50	1289775.68	1315611.66	1406636.17	1498041.89
Average Capital Cost	704792.97	769118.94	1289274.43	1302693.67	1361123.92	1452339.03

* The Petitioner vide affidavit dated 8.7.2022 revised the additional capital expenditure claim for the period 2021-24, with revising Form-1 & Form-1(I).

Annual fixed charges

	2019-20	2020-21		2021-22	2022-23	2023-24
	1.6.2019 to 31.3.2020	1.4.2020 to 28.2.2021	1.3.2021 to 31.3.2021			
Depreciation	33971.02	37071.53	64515.29	65264.95	68192.31	72762.19
Interest on Loan	31713.01	29814.08	48976.51	47330.73	45298.77	43940.53
Return on Equity	39712.26	43336.78	72645.46	73401.58	76693.89	81833.50



Interest on Working	9916.01	9377.80	12579.66	11873.38	12166.10	12348.52
O&M Expenses	16706.00	18038.00	34126.00	34304.02	36574.84	38257.05
Total	132018.31	137638.19	232842.92	232174.66	238925.91	249141.79

5. The Petitioner was directed to file certain additional information and the parties were also directed to complete their pleadings in the matter. During the hearing on 6.9.2022, the Respondent MPPMCL made detailed oral submissions, and the Commission, after seeking certain additional information from the Petitioner, reserved its order in the matter. Since the order in the petition could not be issued prior to one Member of the Commission, who formed part of the Coram demitting office, the Petition was re-listed on 16.2.2024, and the Commission, after seeking certain additional information and based on the consent of the parties, reserved its order in the Petition. The Petitioner, in compliance with the directions, furnished the additional information vide affidavit dated 5.4.2024 after serving a copy on the Respondents. However, as the order in the Petition could not be issued prior to one Member, who formed part of the Coram demitting office, the matter was again re-listed on 8.11.2024, and the Commission, after hearing the learned counsel for the parties, reserved its order in the Petition. The Respondents MSEDCL, CSPDCL, and MPPMCL have filed their replies vide affidavits dated 5.2.2020, 5.2.2020, and 6.2.2020, and the Petitioner has filed its rejoinder to the aforementioned replies vide affidavit dated 29.6.2021, 29.7.2021 and 8.7.2022, respectively. The Respondent MPPMCL and the Petitioner have filed their written submissions vide affidavits dated 8.11.2024 and 26.11.2024, respectively. Accordingly, based on the submissions and the documents on record, we proceed to examine the claim of the Petitioner, as discussed in the subsequent paragraphs.

Commissioning Schedule

6. As stated, the IA for the project was accorded by the Board of the Petitioner's Company in its 392nd meeting held on 26.2.2013, subject to MOEF&CC clearance. As the MOEF&CC



clearance was accorded on 22.3.2013, the Petitioner considered the date of 22.3.2013 as the 'Zero Date.' The Petitioner has also considered the Scheduled Commercial Operation Date (SCOD) of Unit-I as 21.7.2017 (52 months from the zero date) and SCOD of Unit-II as 21.1.2018 (6 months after the SCOD of Unit-I). As against the same, the actual COD of Unit-I is 1.6.2019, and that of Unit-II is 1.3.2021, thereby resulting in a delay of approximately 23 months (680 days) for Unit-I and approximately 38 months (1135 days) for Unit-II from SCOD as shown below:

Unit	SCOD	Actual COD	Time Overrun
Unit I	21.7.2017	1.6.2019	22.67 months (680 days)
Unit II	21.1.2018	1.3.2021	37.87 months (1135 days)

Time Overrun

7. The Petitioner, vide its affidavit dated 11.3.2022, submitted that the COD of the Units was delayed on account of the following reasons, which were beyond its control:

- a. Delay in initial site levelling works due to Law & Order issues;
- b. Delay due to agitation of farmers leading to non-performance of agency;
- c. Delay in the Project activities due to Law & Order issues during 2017-2018;
- d. Delay due to unprecedented rain;
- e. Delay due to ban on Sand mining;
- f. Delay due to Earthquake;
- g. Delay in arrival of Stator;
- h. Delay in the ROU and possession of Land for laying of Make-up Water Pipeline;
- i. Geological surprises during the excavation for the Make-up Water Pump House;
- j. Delay in Railway Siding Works;
 - (i) Delay in approval of the DPR;
 - (ii) Delay in Land acquisition for Railways due to changes in the Land Acquisition Act; and
 - (iii) Agitation by the Project Affected People (PAPs)
- k. Work interruption due to COVID-19 Pandemic lockdown

8. The Petitioner, vide affidavit dated 11.3.2022, furnished the Unit-wise reasons for the time overrun along with the delay analysis, indicating the activities delayed, the reasons for the delay, and the corresponding delay on account of the delay in each of the activities, corresponding to the units. These are examined in the paragraphs below:



9. Regulation 20 of the 2019 Tariff Regulations provides for prudence check of the capital cost of existing or new projects as under:

“20. Prudence Check of Capital Cost : *The following principles shall be adopted for prudence check of capital cost of the existing or new projects: (1) In case of the thermal generating station and the transmission system, prudence check of capital cost shall include scrutiny of the capital expenditure, in the light of capital cost of similar projects based on past historical data, wherever available, reasonableness of financing plan, interest during construction, incidental expenditure during construction, use of efficient technology, cost over-run and time over-run, procurement of equipment and materials through competitive bidding and such other matters as may be considered appropriate by the Commission:*

Provided that, while carrying out the prudence check, the Commission shall also examine whether the generating company or transmission licensee, as the case may be, has been careful in its judgments and decisions in execution of the project.”

10. Further, Regulations 21 of the 2019 Tariff Regulations provides as under:

“21. Interest During Construction (IDC) and Incidental Expenditure during Construction (IEDC)
(1) Interest during construction (IDC) shall be computed corresponding to the loan from the date of infusion of debt fund, and after taking into account the prudent phasing of funds upto SCOD.
(2) Incidental expenditure during construction (IEDC) shall be computed from the zero date, taking into account pre-operative expenses upto SCOD:

Provided that any revenue earned during construction period up to SCOD on account of interest on deposits or advances, or any other receipts shall be taken into account for reduction in incidental expenditure during construction.

(3) In case of additional costs on account of IDC and IEDC due to delay in achieving the COD, the generating company or the transmission licensee as the case may be, shall be required to furnish detailed justifications with supporting documents for such delay including prudent phasing of funds in case of IDC and details of IEDC during the period of delay and liquidated damages recovered or recoverable corresponding to the delay.

(4) If the delay in achieving the COD is not attributable to the generating company or the transmission licensee, IDC and IEDC beyond SCOD may be allowed after prudence check and the liquidated damages, if any, recovered from the contractor or supplier or agency shall be adjusted in the capital cost of the generating station or the transmission system, as the case may be.

(5) If the delay in achieving the COD is attributable either in entirety or in part to the generating company or the transmission licensee or its contractor or supplier or agency, in such cases, IDC and IEDC beyond SCOD may be disallowed after prudence check either in entirety or on pro-rata basis corresponding to the period of delay not condoned and the liquidated damages, if any, recovered from the contractor or supplier or agency shall be retained by the generating company or the transmission licensee, as the case may be.

11. The Petitioner was directed to furnish the chronological details of the delay corresponding to the reasons provided for time overrun vis-à-vis the SCOD and the actual COD, along with the



summary of the critical parts of the PERT chart. In response, the Petitioner, vide affidavit dated 28.9.2022, furnished the requisite particulars/documents. The Petitioner was also directed to furnish the details of the delay claimed on account of each of the factors, from the zero dates to the actual COD of Units I & II, in a specified format, detailing the overlapping delay and the effective delay claimed. In response, the Petitioner, vide affidavit 5.4.2024, submitted that the delay claimed on account of each of the factors from the zero date till the COD of Units I & II in the required format. It is, however, observed that the Petitioner, in response to the ROP dated 6.2.2024, instead of providing details in a specified format detailing the overlapping delay and the effective delay claimed, has merely reiterated its submissions made in the Petition. In view of this, the Commission again directed the Petitioner to furnish the details of the delay claimed on account of each of the factors from the zero date to the actual COD of Units I & II in the specified format, clearly specifying the overlapping delay and effective delay claimed.

12. It is observed that the overall delay in the COD of Unit-I and Unit-II is approximately 23 months (680 days) for Unit-I and approximately 38 months (1135 days) for Unit-II from the SCOD, respectively. The Petitioner, vide affidavit dated 28.9.2022, attributed the reasons for the delay in the COD of the units as under:

Unit-I

Sl. No.	Description of activities	Original schedule (as per planning)		Actual schedule (As per actuals)		Time Overrun (Days)	Major reasons for delay
		Start date	Completion date	Actual Start date	Actual completion date for Unit-I		
	Zero Date	22-03-2013	-	22-03-2013	-	-	
1	Initial site levelling package	27-06-2013	26-12-2015	27-06-2013	30-08-2016	248.00	1. Farmers agitation for additional compensation 2. Notice of termination & re-tendering of initial Site levelling & infrastructure work
2	Main Plant & Offsite Civil works	01-12-2013	26-12-2015	01-12-2013	31-05-2019	1252.00	1. Farmers agitation for additional compensation 2. Notice of termination & re-tendering of initial Site levelling &



Sl. No.	Description of activities	Original schedule (as per planning)		Actual schedule (As per actuals)		Time Overrun (Days)	Major reasons for delay
		Start date	Completion date	Actual Start date	Actual completion date for Unit-I		
							infrastructure work. 3. Agitation by PAPs demanding employment in NTPC creating severe security & law and order issues. 4. Heavy and unprecedented Rainfall. 5. Ban on sand mining.
3	Boiler erection (up to steam-blowing)	21-05-2014	21-10-2016	12-06-2014	21-07-2017	273.00	1. Farmer's agitation for additional compensation. 2. Notice of termination & re-tendering of initial Site levelling & infrastructure work. 3. Agitation by PAPs demanding employment in NTPC creating severe security & law and order issues. 4. Heavy and unprecedented Rainfall. 5. Ban on sand mining. 6. Earthquake.
4	TG package (up to oil flushing)	21-05-2015	21-07-2016	13-07-2016	08-09-2017	414.00	1. Farmer's agitation for additional compensation. 2. Notice of termination & re-tendering of initial Site levelling & infrastructure work. 3. Agitation by PAPs demanding employment in NTPC creating severe security & law and order issues. 4. Heavy and unprecedented Rainfall. 5. Ban on sand mining. 6. Abnormal sea conditions leading to delay in receiving the Generator Stator at site.
5	Make-up water system	21-01-2014	20-05-2016	01-10-2013	31-12-2018	955.00	1. Delay caused in awarding complete ROU of land for laying Make-up water pipeline. 2. Delay in actual availability of full Land from award of ROU. 3. Agitation by PAPs demanding employment in NTPC creating severe security & law and order issues. 4. Geological Surprises in excavation for Make-up water pump house. 5. Heavy and unprecedented Rainfall. 6. Ban on sand mining
6	Railway siding Package works (for Unit-I)	25-06-2014	25-12-2016	25-06-2014	23-11-2019	1063.00	1. Delay in approval of DPR for railway siding Package 2. Delay in land acquisition of railway siding due to change in Land Acquisition law 3. Hon'ble High Court stay.



Sl. No.	Description of activities	Original schedule (as per planning)		Actual schedule (As per actuals)		Time Overrun (Days)	Major reasons for delay
		Start date	Completion date	Actual Start date	Actual completion date for Unit-I		
							4. Agitation by PAPs demanding employment in NTPC creating severe security & law and order issues. 5. Heavy and unprecedented Rainfall 6. Ban on sand mining
7	Declaration of COD	21-07-2017		01-06-2019		680.00	

Unit II

Sl. No.	Description of activities	Original schedule (as per planning)		Actual schedule (As per actual)		Time Over-run (Days)	Major reasons for the delay
		Start date	Completion date	Actual Start date	Actual completion date for Unit-II		
	Zero Date	22-03-2013		22-03-2013		22-03-2013	
1	Initial site levelling package	27-06-2013	26-12-2015	27-06-2013	30-08-2016	248.00	1. Farmer's agitation for additional compensation. 2. Notice of termination & re-tendering of initial Site levelling & infrastructure work. 3. Heavy and unprecedented Rainfall.
2	Main Plant & Offsite Civil works	01-12-2013	26-12-2015	01-12-2013	31-05-2019	1252.00	1. Farmer's agitation for additional compensation. 2. Notice of termination & re-tendering of initial Site levelling & infrastructure work. 3. Agitation by PAPs demanding employment in NTPC creating severe security & law and order issues. 4. Heavy and unprecedented Rainfall. 5. Ban on sand mining.
3	Boiler erection up to steam-blowing	01-11-2014	31-04-2017	01-05-2015	31-12-2019	975.00	1. Farmer's agitation for additional compensation. 2. Notice of termination & re-tendering of initial Site levelling & infrastructure work. 3. Agitation by PAPs demanding employment in NTPC creating severe security & law and order issues. 4. Heavy and unprecedented Rainfall. 5. Ban on sand mining.
4	TG package (up to oil flushing)	01-11-2015	31-01-2017	30-06-2017	31-03-2019	789.00	1. Farmer's agitation for additional compensation. 2. Notice of termination & re-tendering of initial Site levelling & infrastructure work. 3. Agitation by PAPs demanding employment in NTPC creating severe security & law and order issues. 4. Heavy and unprecedented Rainfall. 5. Ban on sand mining.



Sl. No.	Description of activities	Original schedule (as per planning)		Actual schedule (As per actual)		Time Over-run (Days)	Major reasons for the delay
		Start date	Completion date	Actual Start date	Actual completion date for Unit-II		
							6. Abnormal sea conditions leading to delay in receiving the Generator Stator at the site.
5	Make-up water system	21-01-2014	20-05-2016	01-10-2013	31-12-2018	955.00	1. Delay caused in awarding complete ROU of land for laying Make-up water pipeline. 2. Delay in actual availability of full Land from award of ROU. 3. Agitation by PAPs demanding employment in NTPC creating severe security & law and order issues. 4. Geological Surprises in excavation for Make-up water pump house. 5. Heavy and unprecedented Rainfall. 6. Ban on sand mining.
6	Railway siding Package works	25-06-2014	25-12-2016	25-06-2014	08-01-2021	1475.00	1. Delay in approval of DPR for railway siding Package 2. Delay in land acquisition of railway siding due to change in Land Acquisition law and Hon'ble High Court stay. 3. Agitation by PAPs demanding employment in NTPC creating severe security & law and order issues. 4. Delay in the availability of land because of High Court stay. 5. Heavy and unprecedented Rainfall. 6. Ban on sand mining. 7. COVID-19 Pandemic.
7	Declaration of COD	21-01-2018		01-03-2021		1135.00	

13. The Petitioner, vide affidavit dated 26.11.2024, submitted the month-wise and activity-wise delay in the commissioning of Units I & II. It is observed that there are certain variations in the start date and the end dates in respect of certain delays, as per the submissions made in the Petition and the affidavit dated 26.11.2024. The Commission has, however, considered the submissions of the Petitioner in the said affidavit, as it contains the details on the factors leading to the delay in the execution of the project. Based on the submissions of the parties and the documents available on record, we proceed to examine, on prudence check, the reasons for the time overrun of the project, as stated in the subsequent paragraphs:



Delay in Right of Use (ROU) and Possession of land for laying of Make-up Water Pipe Line (1.10.2013 to 7.5.2018)

14. The Petitioner has submitted the following:

- (a) The Make-up water pipeline for the project was a cross-country pipeline from Kakraghat, M.P on the banks of the river Narmada to the Project, with a pipeline length of around 24 kms., covering 16 villages. The Petitioner made an application for the Right of Use (ROU) of land for laying of a makeup water pipeline as per the Madhya Pradesh Underground Pipeline, Cable and Duct (Acquisition of Right of Use of Land) Act, 2012 on 1.10.2013 and deposited 80% amount of the assessed compensation, on 25.1.2014 in the account maintained in the name of Collector, Narsinghpur.
- (b) Sec. 3(1) of the said ROU Act was published in the Madhya Pradesh Rajpatra on 25.4.2014. However, disputes were raised by some of the landowners, raising objections and demanding exorbitant compensation, and some of the landowners declined to hand over the respective stretch of land to the Petitioner. Accordingly, the matter was taken up with the competent authority, which served notices to the aggrieved landowners, and the dissatisfied landowners were heard by the competent District Authority, as per established procedure, for three consecutive days. i.e., 22.7.2014 till 24.7. 2014.
- (c) The landowners objected to laying of the makeup water pipeline through the Gadarwara-Tendukhera path. Based on the views of the landowners, it was decided in the meeting with the State Administration (District Collector, MLAs, and other senior officials) to change the laying/alignment of the Make-up water pipeline, through an alternate route covering 10 villages. Accordingly, in order to get the RoU as per the revised/new layout covering 10 no. villages, the total procedure of getting RoU, Land Survey, notification of identified land as per new route, Estimates, etc., was to be followed from the beginning, which delayed the process of getting RoU for total stretch and delayed the pipe laying activity.
- (d) Subsequent to the decision of the State Authority to re-route the Make-up water pipelines, the revised land path was notified under Sec 3(1) of the ROU Act in the Madhya Pradesh Rajpatra on 17.7.2015, after following the due process of the land survey for the new route, identification of the lands, etc. Subsequently, the competent authority issued letters under Section 3(4) in October 2015 to different landowners regarding the hearings and taking their views on the ROU of the said land.
- (e) During the hearings held on 15.10.2015 and 16.10.2015, several objections and queries were raised by different farmers/ landowners regarding the compensation for land, permanent job, compensation for crop loss, difficulty in farming, etc., and the Petitioner replied to each and every query in its letter to the competent authority dated 27.11.2015.



Further, notification under Section 4(1) of the Act regarding the resolution of the objections was published in the Madhya Pradesh Rajpatra on 18.12.2015, and the ROU for laying the pipeline, including the new route, was finally awarded vide order dated 4.4.2016, disposing of all the complaints.

- (f) In spite of the sustained efforts that started in October 2013, the whole process of ROU for the Make-up water pipeline (including the portion where the pipeline was re-routed) works took around 30 months, resulting in the consequential delay in the said construction activities. The Petitioner pro-actively cooperated with the District Administration towards prompt resolution of the issues at hand. However, the procedural delay during the whole process of the ROU award was totally beyond the control of Petitioner.
- (g) Even after the award of ROU by the competent District Authority and the payment of the total amount by the Petitioner as directed by said Authority, farmers were not willing to accept the ROU compensation paid by the Authorities under the ROU Act. The Farmers/ landowners were adamant in demanding exorbitant compensation instead and some of them neither took the compensation nor gave the possession of Land for the pipeline work. The Petitioner rigorously pursued the matter with the District Administration. After continuous persuasion of the landowners by the District Administration, compensation was taken by the different farmers over a period from November 2016 to May 2018, and possession of the required Land was available with the Petitioner in patches (various Kabja Pramaan Patra issued by the competent authority from September 2016 to January 2018). As the work was under progress in the Make-up Water Pump House area and where the ROU was available, the Petitioner immediately mobilized the men and materials and started laying the pipelines, where the patch of land was made available by the State Authorities.
- (h) The last patch of land required for the completion of the Pipeline activity was made available to the Petitioner only after 8.5.2018. This significantly affected the laying and completion of the Makeup Water pipeline, hindering the progress of the commissioning activities of the Boiler and Turbine. Accordingly, the Petitioner made contingency arrangements for carrying out the Boiler Hydro/ Steam Blowing activity of the Units, which generally required less water. The required water was arranged from the nearby Sakkar River, a tributary of the Narmada River, and the water flow of the said river was less and not adequate for the operation of both units, on a sustained basis.
- (i) However, due to the delay in getting ROU for the land for laying the Make-up water pipeline from the Narmada River, a temporary, contingent arrangement of pipes of about 3 km were laid to bring the water from Sakkar River to the raw water reservoir of the plant for carrying out the critical activities such as the boiler light up, steam blowing of Unit-I and Boiler light up activities of Unit-II. However, for the sustained operation of both units,



the readiness of the make-up water system was to be ensured, which was delayed due to the ROU issues. By arranging water through contingency for the commissioning activities, the boiler, and the associated system were made ready beforehand so that the Petitioner could proceed immediately towards the trial operation and other related activities as soon as the make-up water pipeline was ready.

- (j) The delay in the award of ROU, caused by the re-routing of the Pipeline and the availability of land for the un-hindered activity of the laying up of the Make-up water pipeline, consequently delayed the work of the package by more than 30 months from its scheduled completion, for which the Petitioner was not at fault. The delay caused during the award of the complete ROU, including re-routing and the settlement between the local farmers and the District Administration, was totally beyond the control of the Petitioner. Accordingly, the Petitioner has prayed to condone the delay caused by the unprecedented situation above.

Submissions of the Respondents

15. The Respondent CSPDCL submitted that a prudence check may be undertaken to ascertain the actual delay caused to the Petitioner. Respondent MSEDCL submitted that the problems related to the disputes for compensation by the Landowners are general problems and the Petitioner should have been well aware of the same. It has also submitted that the delay, as claimed by the Petitioner, may not be allowed, and proper due diligence may be undertaken to estimate the actual delay.

Rejoinder of the Petitioner

16. In response, the Petitioner clarified that it had furnished a detailed explanation in the amended Petition, along with documents, in support of its claim. It has submitted that in spite of all the hurdles, it undertook its best efforts to mitigate the situation by making contingent arrangements to carry out the critical activities. The Petitioner stated that it could not have anticipated the delay caused during the award of the complete ROU, including the re-routing and the settlement made between the local farmers and the District Administration, as the same was beyond its control.



Analysis and Decision

17. We have considered the submissions of the parties. Regulation 22(2) of the 2019 Tariff Regulations provides as under:

22. Controllable and Uncontrollable factors: *The following shall be considered as controllable and uncontrollable factors for deciding time over-run, cost escalation, IDC and IEDC of the project:*

(1) xxxx

(2) *The “uncontrollable factors” shall include but shall not be limited to the following:*

a. Force Majeure events;

b. Change in law; and

c. Land acquisition except where the delay is attributable to the generating company or the transmission licensee...”

18. We note that the Petitioner had applied for an ROU of land to lay the Makeup water pipeline under the ROU Act on 1.10.2013 and also deposited 80% of the assessed compensation on 25.1.2014 to the Collector of Narsinghpur's account. Subsequent to the decision of the State Authority for the re-routing of the Make-up water pipeline, the revised land path was notified under Sec 3(1) of the ROU Act in the Madhya Pradesh Rajpatra on 17.7.2015 after following the due process of land survey for the new route, identification of the lands, etc. Subsequent to this, the competent authority issued letters under Section 3(4) in October 2015 to the different landowners with respect to the hearings and took their views on the ROU of the said land. We also note that disputes had also arisen due to the landowners demanding higher compensation and objecting to the Pipeline's route. It is noticed that some of the landowners, refused to relinquish their land. Even notices were issued, and hearings were conducted from 22nd July 2014 till 24th July 2014, wherein the landowners opposed the proposed Gadarwara-Tendukhera route, and therefore, it was decided to reroute the Pipeline through an alternative route, thereby affecting 10 villages, which required the entire ROU process to be restarted, thereby causing delays. Though the new route was notified on 17.7.2015, the notices for the hearings were issued in October 2015. Also, the objections and queries from the landowners were addressed



by the Petitioner vide letter dated 27.11.2015. The resolution of the objections was published on 18.12.2015, and the ROU was granted only on 4.4.2016. Despite the ongoing efforts since October 2013, the ROU process, including the re-routing, took about 30 months, thereby delaying the Pipeline construction. Though the Petitioner had coordinated with the District Administration, procedural delays were faced, which was beyond the control of the Petitioner.

19. We further note that even after the ROU award and the compensation payment, some of the landowners demanded a higher compensation, thereby delaying the land possession. Even though the compensation was finally accepted between the period from November 2016 and May 2018, the delays persisted. The Petitioner proceeded with the Pipeline laying in the available areas but received the possession of the final land patch for the Pipeline completion only after 8.5.2018, thereby delaying the project and further affecting the commissioning activities. Though the contingency measures, which included using the water from the Sakkar River, were adopted, the readiness of the Make-up water system was affected on account of such delays.

20. As evident from the above, the delay caused in the ROU, due to the hindrances and objections by the villagers/ landowners and the subsequent change in the route of the Pipeline due to the said objections by the landowners, were beyond the control of the Petitioner, despite measures being taken by the Petitioner to mitigate the same. In our considered view, the Commission is inclined to condone the delay due to ROU issues leading to the re-routing of the pipeline and delay in possession of land from 1.10.2013 to 7.5.2018, as the same was beyond the control of the Petitioner.



Delay in Railway Siding Works (1.11.2013 to 22.1.2020)

21. The Petitioner has submitted that the generating station was being developed as a non-pit head station, and the transportation of coal to the station was through a Railway siding to be connected to the nearest Railway Station of Baranjh (the new name of crossing station), located at an aerial distance of about 10 kms. The Petitioner also submitted that as it did not have any expertise in the Design layout and laying of the Railway tracks, the work of preliminary estimates and survey for Railway siding works was awarded to M/s Aarvee Associates, Architects Engineers & Consultants Pvt. Ltd (authorized consultants of West Central Railway) before the investment approval. It has further stated that based upon the suggestions and the in-principle approval accorded by the WCR, during the initial survey, Railway siding was envisaged to comprise around 42 kms of Railway track, which would consist of two main lines, one called the 'Lead line' and the other the 'Return line', outside the plant boundary and about 7-8 parallel and interconnected lines near and in the Plant for shunting and receiving the Railway coal rakes for unloading, as well as for movement out. The Petitioner has added that an additional Railway station (namely crossing station) was also envisaged to be built up at Baranjh on the Railway network and for the development of the crossing station and the Railway line network from Baranjh Station to Gadarwara plant, about 143.5 acres of land was required to be acquired. In this background, the Petitioner pointed out that there has been a significant delay in the Railway siding works for the reasons mentioned below:

(A) Delay in Land acquisition for Railways (due to change in Land Acquisition Act) (1.11.2013 to 30.04.2018)

22. The Petitioner submitted the following:

- (a) The Petitioner filed the application for land acquisition for around 145 acres on 1.11.2013 and deposited 80% of the agreed land cost, as directed under the Land Acquisition Act on 25.1.2014. The total land to be occupied was covering six different villages. In order to speed up the process and fast processing of the required land acquisition for the



Railway siding works, the Petitioner wrote a letter to the District Collector on 25.1.2014. Based on the request of the Petitioner for speeding up the process, Section-11 (issuance by the Government of Madhya Pradesh. Also, Section 19 was published in the Gazette on 20.2.2015, after following the due process, and the Land acquisition was progressing as per the schedule.

- (b) Meanwhile, the Govt of Madhya Pradesh, in exercise of its powers under Section 109 of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013, notified on 3.9.2015, the Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2015. The promulgation of the said new rules under the Land Acquisition Act, 2013 derailed the land acquisition process of the Petitioner, who had to follow the new procedures as provided in the said Rules.
- (c) Subsequent to the publication of a notification in the Gazette, various objections were raised by the landowners under the new rules. Consequent upon this, hearings before the competent authority continued till 11.2.2016. Finally, the R&R scheme, as per the new Land Acquisition Rules, was approved by the competent authority on 20.4.2016, and the R&R award for the 6 villages was issued on 31.5.2016. The promulgation of the amended Land Acquisition Act, the publication of the said Rules, and the subsequent R&R approval by the State Authorities delayed the award of Land Acquisition by around 24 months, which was beyond the control of the Petitioner.
- (d) Subsequent to the award of required land for the construction of a Railway line for the transportation of coal, some of the Landowners approached the Hon'ble High Court of Madhya Pradesh by filing the Writ Petition (WP No. 15681-2016) to quash of the Land acquisition proceedings and to set aside the award of the Collector, alleging that the social impact report by the Expert group was not undertaken, as per the provisions and proper compensation were also not paid to them. The District Collector, Narsinghpur, M.P. was made Respondent No.1, the Land Acquisition Officer Narsinghpur, was made Respondent No. 2, and the Petitioner was arrayed as Respondent No. 3 in the said Writ Petition. The said writ Petition was heard from September 2016 progressively, and a stay was granted by the Hon'ble MP High Court in November 2016 vide order dated 21.11.2016. The Hon'ble High Court directed to maintain status-quo, in so far as it related to the possession of the affected landowners.
- (e) Thereafter, the matter was progressively heard, and The Petitioner filed I.A No. 13832/2017 seeking vacation of the stay granted by the Hon'ble Court on 21.11.2016 so that the work towards the Construction of the Railway line for the transportation of coal would not be delayed further. The Petitioner stated that 143.5 acres of land (approx.) was required for the Construction of the Railway line, which belonged to 112 farmers and



117.55 acres of land were not under dispute. The dispute was only in respect to 25.95 acres of land for which the Writ Petition had been filed.

- (f) The Hon'ble Court, after acknowledging the importance of the operation of the plant for the generation of electricity and in the national interest and considering the huge investment undertaken by the Petitioner, vacated the stay on 19.12.2017, subject to the deposit of Rs.20 crore, in addition to the amount already deposited, within two months with the reference Court. Subsequent to this, the demand of Rs.20 crore was raised by the Collector office on 5.1.2018, and the Petitioner deposited the said amount on 30.1.2018 through the Demand draft. The land acquisition process could be completed only after 30.1.2018 after the payment of the said amount, and the physical handover of the land by the State Authorities could only be completed during March-April 2018.
- (g) Since the work related to Railway siding could have started only after the physical possession of the required land, the progress of the said siding works got delayed by about 21 months due to the promulgation of the new Land Acquisition Rules and about 19 months on account of the stay order granted by the Hon'ble Court (i.e., a total of 40 months) which were all beyond the control of the Petitioner.

(B) Agitation by Project Affected People (PAPs) (1.2.2014 to 31.3.2018 intermittently)

23. The Petitioner submitted that the intermittent agitation by the PAPs, also affected the work of Railway siding severely. It has been stated that during the agitation period, no man mobilization was possible for the execution of the said work and this issue was raised before the District Administration also. The Petitioner, however, submitted that various works, including the work of Railway siding, got further delayed by approximately 3 months, and in such a delayed situation, the scheduled completion of the Railway siding became difficult.

(C) Delay in the approval of DPR (1.11.2014 to 8.12.2017)

24. The Petitioner has submitted the following:

- (a) The work order for the Railway siding package was awarded on a turnkey basis to M/s Konkan Railways Corporation Limited (KRCL-a Govt. of India Undertaking) as Project Management Consultants for carrying out the identification of exact track route, package identification, preparation of DPR and construction of coal transportation system. M/s KRCL was to prepare the DPR for the Railway siding package by October 2014. However, in spite of several communications and correspondence for a timely submission of the DPR, M/s KRCL submitted the DPR to Railway authorities for approval on 11.5.2015.



- (b) For the start of the Railway siding work, the DPR had to be approved by the Indian Railways (WCR). However, against the schedule of November 2014, the DPR was finally approved in June 2016 by WCR. The required codal charges were paid by the Petitioner on 7.6.2014 to WCR for the identified works. Further, for early approval of the DPR and for the timely completion of the coal transportation system of the generating station, the Petitioner followed up and made several correspondences from September 2014 to March 2016 to WCR and KRCL, which are Government instrumentalities.
- (c) However, the delay in the approval of DPR led to a consequent delay in the start of Engineering and Track work by KRCL. The Petitioner had rigorously pursued the matter for an early submission and approval of the DPR through various correspondences. However, the role of the Petitioner in obtaining the approval of the DPR and Engineering Scale Plan from the Railway Authorities (WCR and M/S KRCL) is minimal, and the delay (of 19 months) caused due to the same was beyond the control of the Petitioner. Consequently, there was a delay in the work by M/s KRCL. In spite of all efforts by the Petitioner, the delay (of 19 months) in the approval of DPR from the scheduled date by Railways Authorities was beyond the control of the Petitioner.

(D) Other Issues (1.5.2018 to 22.1.2020)

25. In addition, the Petitioner further submitted the following:

- (a) Due to delay in the Land acquisition and agitation by the villagers, the completion of the Railway siding was getting delayed inordinately. The difficulty further increased due to the ban on sand mining for almost 3-4 months, during the monsoon period of the respective years/ periods, as the sand formed the basic ingredient for the construction of culverts, bridges, and track levelling where the land was available with the Petitioner. Accordingly, foreseeing the delay in the completion of total Railway siding, the Petitioner decided to complete at least two temporary lines at Gadarwara Railway Station (about 17 kms from the station) so that coal could be unloaded there and transported to the station by road. This helped the Petitioner to proceed with the commissioning activities of the main plant boiler/ unit without further delay. The Petitioner managed to declare the COD of Unit-I on 1.6.2019 through this additional arrangement of contingent Railway siding.
- (b) For the sustained operation of both the Units, i.e., Units-I & II, the coal receipt through this arrangement was not sufficient, and the Railway siding complete network was required for a sustained and continuous operation, without which the COD of Unit-II could not be declared.
- (c) During the DPR (prepared by M/s KRCL), 23 bridges were envisaged. The entire land was highly uneven, with numerous ravines, as the project is situated between the two rivers Narmada and Sakkar. During the rainy season, drainage of rainwater occurs



through these natural ravines, rendering the work execution extremely difficult. To maintain proper drainage of the rainwater to ensure the stability of the Railway lines and allow the rainwater to have an easy passage to the rivers without de-stabilizing the track bed and, at the same time, providing underpasses to villagers in the existing routes, KRCL proposed to increase the number of bridges from 23 to 30.

- (d) The increase in the number of bridges, which could not have been envisaged earlier by any means, led to an increase in the construction time by 6-8 months due to consequential changes in the scope of work, as time was consumed for the additional bridge construction and curing time required for its structures. This resulted in further delaying the readiness of the Railway track and its associated system. Further the ban on sand mining during the monsoon period by Govt. of MP every year, as brought out above, affected the construction process and the same further delayed the readiness of the Railway track.
- (e) After the successful declaration of COD of Unit-I, the work for the completion of the entire Railway siding was progressing as envisaged. However, the sudden onset of COVID-19 halted the progress of the work completely. Because of the nationwide lockdown in four phases from 25.3.2020 to 31.5.2020 and thereafter, strict measures and the fear created by the said pandemic resulted in a slow resumption of work. Subsequently, after the lockdown was removed, WCR managed to carry out the engine loco trial and electrification work from Baranjh to the R&D yard of the generating station on 23.7.2020.
- (f) For running the rails/ rakes on a regular basis at full capacity, the fitness of the OHE traction was required as a statutory requirement for running trains on Electric Traction inside the plant premises. The fitness certificate of the OHE lines and trial operation of the electric loco for Rail lines within the plant was not available to the Petitioner as the trial run of the loco on electric traction within the plant could not be completed. For the completion of the loco trial run on electric traction inside the plant, the electric loco should first reach the plant premises, and the same could only be possible when the Rail track with OHE traction line up to the Plant is ready and the OHE equipment of traction within the plant got connected with the external railway network.
- (g) The Petitioner submitted that only after the commissioning of the rail track with electric traction up to the plant and after the electrical connection of the traction inside to external traction the trial operation on rail tracks with OHE could be completed in the presence of the Railway officials on 21.11.2020 and certification of the same by WCR was received on 23.11.2020 and the signaling and telecommunication system was handed over to the Petitioner on 11.12.2020. With the readiness of the Railway siding up to a certain level, Unit-II could be run on a sustainable basis, and the full load of Unit-II was achieved on



19.1.2021. On 15.2.2021 successful trial operation was achieved, after which the COD of Unit-II was achieved on 1.3.2021.

- (h) The Commission may consider the facts regarding the difficulties faced by the Petitioner in the Railway siding works and grant relief to the Petitioner by condoning the delay of 49 months (79 months' time taken for the completion of the Railway siding works for a sustained operation of both the units of the generating station against the scheduled 30 months' time period) in the execution of the Railway siding works beyond the original schedule, as the same was beyond the control of the Petitioner.

Submission of the Respondents

26. The Respondent, CSPDCL, submitted that the delay caused by the delay in the DPR approval by KRCL for the Railway sliding was independent of plant erection and does not affect the COD of the plant, and therefore, the delay may not be allowed. As regards the delay in the Railway siding work on account of the agitation by PAPs, a due diligence and prudence check may be carried out to ascertain the actual delay. The Respondent, MSEDCL, with regard to the delay in the approval of DPR by Railways, submitted that the delay may not be allowed and proper due diligence may be undertaken to estimate the actual delay. As regards the delay in the Land acquisition for Railways, the Respondent submitted that the same was delayed on account of the new Land Acquisition Act notified by the State. It has been submitted that considering the introduction of the new Land Acquisition Act, the documents and events with respect to the same may be reviewed by the Commission before approving the capital cost. The Respondent has, however, submitted that the Petitioner has not provided the break-up of the two years delay claimed, and the activities that were carried out for resultant two years delay. With regard to the delay due to the agitation by PAPs, the Respondent stated that such agitation was usual and should have been expected by the Petitioner at the time of planning, as due diligence might have been carried out and the Petitioner should have been well aware of such problems. It has added that the delay, as proposed by the Petitioner, may not be allowed, and

proper due diligence is required to be undertaken to estimate the actual delay. Respondent MPPMCL has submitted the following:

- (a) The delay in the submission of DPR approval for Railway siding work is an independent activity and is solely caused by the inefficiency of the Consultant/Contractor appointed by the Petitioner as well as its inability to identify an able consultant for its project activity. The submissions of the Petitioner that KRCL is a Government instrumentality and therefore, delay should be condoned, is baseless. In India, there are many Railway siding project-related consultants such as RITES, Tata, etc., and the 2019 Tariff Regulations make it clear that any delay due to controllable factors or due to an act of negligence will not be allowed as pass through.
- (b) The Petitioner has failed to show what preventive measures were taken by it to mitigate the risk along with details of the LD that have been imposed on their consultant and how the proceeds of LD have been accounted for. The Petitioner has admitted in the Petition that the delay was solely caused by the negligence of the Consultant, which is a controllable factor.
- (c) The dates and list of events show willful negligence and intentional delay on the part of Petitioner in the award of Survey and Package Identification works for the preparation of a detailed Engineering, PMC Coal Transportation System for the generating station as under:
 - (i) Petitioner has awarded the LOA to KRCL as a PMC for the Survey and Package Identification works for the preparation of a detailed Engineering, PMC Coal Transportation System on 25.6.2014, i.e., after 14 months from the Investment Approval, i.e., 26.2.2013. The Petitioner also failed to provide any justifiable reasons for the delay in awarding the essential work of Survey and Package Identification works for the preparation of a detailed Engineering PMC Coal Transportation System for the generating station to KRCL after an inordinate delay of 14 months.
 - (ii) Vide letter dated 15.12.2014, i.e., after a lapse of 6 months from 25.6.2014 (date of award of work to KRCL), the Petitioner for the first time wrote to KRCL stating the "KRCL will be submitting the DPR of the subject work for approval by WCR, Jabalpur by Jan-Feb-2016). It means that the Petitioner was in no hurry or mutually agreed with KRCL for the delay in the work of Survey and Package Identification works for Preparation of Detailed Engineering.
 - (iii) Vide letter dated 14.5.2015, the Petitioner admitted that it had approved the DPR on 14.5.2015, which was submitted by KRCL on 11.5.2015, i.e., almost after the lapse of 2 years 3 months from the date of Investment Approval. Vide letter dated 31.8.2015, the Petitioner, for the first time, raised the concerns regarding the approval of DPR to KRCL. It also requested KRCL to approach WCR for the approval of DPR.
 - (iv) Vide letter dated 24.2.2016, the Petitioner requested KRCL to submit the completed DPR to WCR, Jabalpur, as soon as possible. While reading this letter and the aforementioned



letter it is visible that the Petitioner was very relaxed and replying to the Consultant in a casual manner. Vide letter dated 7.3.2016, the Petitioner, for the first time, wrote to the Chief Transportation Planning Manager, WCR, Jabalpur, requesting approval of the DPR, which shows the laxity and the causal approach on the part of the Petitioner.

- (v) Vide letter dated 13.6.2016, the WCR, Jabalpur, approved the DPR as submitted by the Petitioner, consultant KRCL. Further, the Petitioner has not disclosed as to why they have not imposed any LD on the Consultant, M/s KRCL.
- (d) In view of the aforesaid reasons, any increase in the cost overrun due to delay in the execution of the Survey and Package Identification works for the preparation of a detailed Engineering PMC Coal Transportation System for the generating station on account of the extremely delayed submissions of the DPR, should not be passed on to the beneficiaries and the additional IDC/IEDC claimed by the Petitioner on this count may be disallowed.
- (e) With regard to the delay in the Railway siding works on account of the delay in Land Acquisition for Railways, the Petitioner first started the process of Land acquisition on 25.1.2014 vide its letter dated 25.1.2014, i.e., after 9 months from the date of Investment Approval. Further, the Land Acquisition works should have been completed before the Environmental Clearance, i.e., 22.3.2013. Hence, the Petitioner has failed to provide any justifiable reasons as to why it had not commenced the work of Land acquisition for the Railway siding work.
- (f) The chronology of events, as summarized by the Respondent MPPMCL, is as under:
 - (i) The Petitioner deposited the amount for Land acquisition before the Collector, Narsingpur, MP on 25.1.2014. Notice of land Acquisition was issued by the Collector, Narsingpur, MP, on 10.2.2014. The process of Land acquisition was completed on 16.5.2016.
 - (ii) Madhya Pradesh Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2015 was published and came into force on 3.9.2015. If timely action for the acquisition of land was taken by the Petitioner, the work of land acquisition might have been completed much prior to the promulgation of Rules 2015.
 - (iii) The Hon'ble High Court granted an interim stay vide its order dated 21.11.2016 till 5.12.2016, and the said order was vacated on the next date of hearing (5.12.2016). Therefore, it is wrong on the part of Petitioner to claim that due to the stay granted by the Hon'ble High Court, the process of land acquisition got delayed for Railway siding work. The actual delay due to the interim stay order was only for 1 month.
- (g) The Petitioner failed to give any justifiable reasons for initiating the process for Land Acquisition for the Railway siding work after the lapse of almost 12 months from the date of Investment Approval. Further, the revenue department had acted very promptly upon receiving the request from the Petitioner and therefore, the delay on this count is due to the casual and negligent approach of the Petitioner and is not liable to be condoned. With regard to the delay in the Railway siding works on account of the agitation by PAPs, the



Petitioner has claimed the delay of 55 days but has intentionally hidden the fact that the agitation was peaceful and outside the gate of the Project. Further, there were only 30-40 protestors who could not overpower the security deployed and therefore, the delay was on account of some other reason that is attributable to the Petitioner.

Rejoinder of the Petitioner

27. In response to the above, the Petitioner, vide its rejoinder, has clarified the following:

- (a) The Railway siding work was awarded to M/s KRCL as Project Management Consultants for carrying out the Survey, Package identification, Preparation of DPR, and the Construction of the coal transportation system, as scheduled. However, because of the delay in the approval of the DPR by WCR and the delay in the Land acquisition due to changes in the Land Acquisition Act and the stay order granted by the Hon'ble High Court of Madhya Pradesh, the Railway siding work got delayed.
- (b) The Petitioner has provided a detailed explanation along with supporting documents concerning the delay of 19 months that occurred on account of the non-approval of DPR along with supporting documents. Detailed clarification regarding the delay caused on account of the promulgation of the new land acquisition Rules and the stay granted by the Hon'ble High Court of Madhya Pradesh on the land acquisition award by the State Authorities has been dealt with in the Petition.
- (c) Despite best efforts being made by the Petitioner to resolve the issues raised by the PAPs with the District Administration, the delay caused was beyond the reasonable control of the Petitioner, and the same could not have been anticipated by the Petitioner.
- (d) The Petitioner's role in obtaining the approval for DPR and other clearance from the Railway authorities is minimal, and therefore, it is inappropriate on the part of the Respondent to contend that the delay in the submission of DPR is covered within the ambit of controllable factors. In an order dated 21.9.2015 in Petition No. 69/GT/2013, the Commission has condoned the delay in the approval of DPR by Indian Railways and observed as under:

"31.From the submissions of the petitioner, it is noticed that the work order for Railway siding package was awarded on turnkey basis to M/s RITES as per schedule on 10.12.2008 and M/s RITES had prepared the DPR for Railway siding package and submitted to Railway authorities in June 2009 for approval. The DPR was approved on 10.5.2010 by the Railways authorities after incorporating the necessary modifications/ suggestions as agreed to with the Railways. It is also observed that the Safety approval was accorded by the Railways in November, 2011. Thus, three years had elapsed for obtaining approval for DPR and Safety clearances from the Railway authorities from date of award of contract to RITES on 10.12.2008. Considering the fact that the petitioner's role in obtaining the approval for DPR and Safety clearances from Railway authorities is minimal, it would not be proper to conclude that the delay of 3 years in obtaining approvals from Railway authorities is attributable to the petitioner."



- (e) It is incorrect on the part of the Respondent, MPPMCL, to contend that the Petitioner has commenced the work for Land acquisition after a period of 9 months from the date of the Investment approval. Prior to making an application for Land for Railway siding, several mandatory and initial survey works are to be undertaken by the Petitioner, such as:
- a. Examination of alternative alignments along with tentative cost estimates through field reconnaissance survey and with the help of topo sheets for a siding from the existing/planned Indian Railway system.
 - b. Identification of proper coordinates, along with the proper alignments with proper gradients, proper identification of serving station on Indian railways to connect it with private siding and the requirement of traffic facilities, identification of mode traction including electrification, the details such as private, govt, forest land and identification of various structures are required.
 - c. Cost estimate and compensation and various other works, etc., are to be carried out by expert agencies approved by the Railways, which takes a considerable amount of time.
- (f) The initial study and preliminary survey work for the Railway siding works were commenced much before the Investment approval, however, only after conducting the survey, the application for land acquisition was made by the Petitioner with the Competent Authority. Therefore, the contention of the Respondent, MPPMCL, that the Petitioner has not provided any justifiable reasons for commencing the work for land acquisition after a period of 9 months from the date of Investment Approval is devoid of any merit and is liable to be rejected.
- (g) It is evident from the amended Petition and the documents on record that:
- a. On 1.11.2013, the Petitioner filed an application for land acquisition for the requisite land and accordingly deposited 80% of the agreed land cost as per the Land Acquisition Act, 2013. Thereafter, on 25.01.2014, Petitioner addressed a letter to the District Collector in order to speed up the process for the acquisition of land for Railway siding.
 - b. In view of the request made by Petitioner on 10.2.2014, a Preliminary Notice was issued under Section 11 of the Land Acquisition Act, 2013, for the lands required for the development of the Railway siding work.
 - c. However, while the above steps were taken by the Petitioner, on 3.9.2015, the Government of Madhya Pradesh notified the Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2015. In view of this, the land owners of the requisite land raised objections against the acquisition of land.
 - d. Thereafter, on 20.4.2016, the Rehabilitation and Resettlement scheme as per the new Land Acquisition Rules, 2015 was approved by the competent authority, and on 31.5.2015, the award for 6 villages was passed.
 - e. On account of the promulgation of the amended Land Acquisition Act, 2013, the Land Acquisition Rules 2015 and the subsequent R&R approval by the State Authorities delayed the award of acquisition of land by a period of 24 months, which were beyond the control of the Petitioner.



- f. In view of the facts highlighted above, the Petitioner submitted that it had started the process of land acquisition well within time, and the process only got delayed on account of reasons not attributable to the Petitioner.
- g. The agitation by the farmers was peaceful and outside the gate of the Project. Additionally, it would be relevant to consider that in view of the situation created by the agitated farmers, the Petitioner was constrained to issue a letter dated 2.1.2018 to the SDM, Gadawara, with a request to provide security arrangements in order to ensure the plant safety, as the agitations by the vested groups, stopped the movement of Petitioner's employees.
- h. Based on the request of the Petitioner on 2.1.2018, the SDM, Gadawara issued a letter to the Sub-divisional police directing them to make arrangements for the hurdle-less movement of the Petitioner's employees/officers, despite the restrictive orders passed under Section 144 of the CrPC, more security arrangements were required for the safety of the Plant and the workers of the Petitioner. The relevant extract of the said letter is extracted below:

"It may be pertinent to mention here that restricted orders under Section 144 of the criminal procedure code have been imposed which are in force. Police force has also been deployed on the route from Gadawara to NTPC Plant. In spite of this, keeping in view of the seriousness of the particulars of letter under reference, more security arrangements are required. Therefore, you are requested to make necessary police force arrangements for the hurdle-less movement of NTPC employees/officers and their vehicles at the route between Gadawara to NTPC Plant and at the point of entry into plant keeping in view the urgency of the essential work in the NTPC Plant as stated above. Please inform this office and NTPC Management the actions taken in this regard."
- i. It is evident that the protest of farmers was not peaceful, and therefore, the objection raised by the Respondent MPPMCL is liable to be rejected.

Analysis and Decision

28. We have considered the submissions and the documents on record. Accordingly, the issue-wise reasons for the delay are examined below:

Delay in Land acquisition for Railways (due to change in Land Acquisition Act):

29. It is observed that the Petitioner applied for the acquisition of approximately 145 acres of land, which covered six villages, on 1.11.2013 and deposited 80% of the land cost by 25.1.2014. In order to expedite the land acquisition process, the Petitioner contacted the District Collector, and a preliminary notification was published on 28.2.2014. However, the DPR approval, which was necessary for starting the work, was delayed until June 2016, despite the Petitioner's efforts. Further, on 3.9.2015, the Government of MP introduced new land acquisition Rules in terms of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and



Resettlement Act, 2013, which also disrupted the land acquisition process. Following these changes, objections made by the landowners led to hearings, which continued until 11.2.2016. Though the R&R scheme was approved on 20.4.2016, and the R&R award for the six villages was granted on 31.5.2016, in our view, the new rules delayed the land acquisition process by approximately 24 months, which was beyond the Petitioner's control. We also note that even after the payment of the land award, some of the landowners had filed Writ Petitions challenging the land acquisition and inadequate compensation, and the Hon'ble High Court of MP issued a stay order on 21.11.2016, directing the status quo on land possession. It is only after the Petitioner filed I.A seeking vacation of the said interim order stating that out of the 143.5 acres needed, 117.55 acres were undisputed and that the dispute concerned was only with 25.95 acres, the Hon'ble High Court vacated the interim order/stay on 19.12.2017, thereby entailing the Petitioner to deposit an additional amount of Rs. 20 crores, which was made on 30.1.2018. The land acquisition process was completed only after this payment, and the physical handing over of the lands occurred by March-April 2018. In our considered view, the Railway siding work, due to the new land acquisition rules (changes in land acquisition rules), was delayed by about 40 months, and the interim order of stay dated 21.11.2016 of the Hon'ble Court were issues which were beyond the control of the Petitioner, and the Petitioner cannot be faulted for the same. In this background, we condone the delay in the land acquisition for Railway siding work from 1.11.2013 to 30.4.2018. It is pertinent to mention that a part of this delay condoned has already been subsumed in the delay condoned, as discussed in paragraph 20 above. We also observe that the timeline for the completion of the Railway siding is 30 months, as per the schedule provided in the BAR chart submitted with the Petition. However, the Petitioner, in its affidavit dated 26.11.2024, has claimed a consequential delay due to the land acquisition under this head until 22.1.2020.. However, it is noticed that the Petitioner has stated that foreseeing



the delay in the completion of the total Railway siding, it had completed two temporary lines at the Gadarwara Railway Station (about 17 km from the station) so that coal could be unloaded and transported to the station by road, which helped the Petitioner to proceed with the commissioning activities of the main plant boiler/unit without further delay. In this regard, we have examined the impact of Railway siding works on the commissioning of Unit-I and Unit-II. It has been determined that the COD of Unit-I was not hindered by the delay in the completion of the railway siding. This conclusion is based on the fact that the Petitioner had implemented a temporary arrangement at Gadarwara Railway Station, which was deemed adequate to fulfil the coal supply requirements specifically for Unit-I. However, the situation was different for Unit-II. The Petitioner, in its affidavit dated 26.11.2024, asserted that the absence of a dedicated railway siding had directly affected the commissioning schedule of Unit-II. According to the Petitioner, the commissioning of Unit-II was delayed until 22.1.2020, due to the non-availability of railway siding, which hindered coal transportation and supply for the unit's operation. Taking these circumstances into account, we condone the delay affecting Unit-II's commissioning for the period spanning from 1.5.2018 to 22.1.2020. In this connection, the Petitioner is directed to submit the details of the temporary arrangement made along with the timeline in which such arrangement was completed, along with the requisite documentary evidence at the time of truing-up of tariff.

Delay due to agitation by the PAPs

30. Regulation 25 of the 2019 Tariff Regulations defines force majeure as under:

“(25) ‘Force Majeure’ for the purpose of these regulations means the events or circumstances or combination of events or circumstances including those stated below which partly or fully prevents the generating company or transmission licensee to complete the project within the time specified in the Investment Approval, and only if such events or circumstances are not within the control of the generating company or transmission licensee and could not have been avoided, had the generating company or transmission licensee taken reasonable care or complied with prudent utility practices:



*(a) Act of God including lightning, drought, fire and explosion, earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, geological surprises, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred years; or
(b) Any act of war, invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action; or
(c) Industry wide strikes and labour disturbances having a nationwide impact in India; or
(d) Delay in obtaining statutory approval for the project except where the delay is attributable to project developer;"*

31. It is noticed that the Petitioner has not justified the delay in line with the provisions of the force majeure as defined above. In our view, the delay due to minor agitations/strikes is to be factored in by the Petitioner during the DPR phase. Hence, the delay on this count is not condoned. Even otherwise, the delay on this count has already been subsumed in the delay condoned due to land acquisition, as discussed above.

Delay in the approval of DPR

32. It is observed that the Petitioner awarded the Railway siding package on a turnkey basis to M/s KRCL for Project management, including the DPR preparation and the Construction of the Coal transportation system. KRCL was supposed to submit the DPR by October 2014 but did so only on 11.5.2015. The DPR, which needed approval from WCR, was approved in June 2016, which is well past the schedule of November 2014. The Petitioner had paid the necessary charges on 7.6.2014 to WCR for the identified works. We note that despite the multiple follow-ups by the Petitioner from September 2014 to March 2016 with WCR and KRCL, there was a substantial delay in the approval of DPR by WCR, which led to the delay in the start of Engineering and Track work by KRCL, resulting in a delay of 19 months. In our view, the delay for the period from October 2014 to May 2015 was on account of the delay in the DPR preparation by KRCL, which cannot be construed as an uncontrollable factor. In view of this, the delay for the said period is not condoned. It is, however, observed that the period of delay



disallowed on this count has already been subsumed in the delay condoned due to land acquisition, as discussed above.

33. As regards the Railway siding works, we notice that the Petitioner has submitted the details for the delay in the completion of the said works and has also furnished the documentary evidence for the Loco Trial on 20.11.2020 and the commissioning of the Signal & Telecom arrangements on 11.12.2020. However, we notice a discrepancy between the claim for the delay due to the completion of Railway siding works in the main Petition and the affidavit dated 26.11.2024 filed by the Petitioner. The Petitioner has claimed the delay due to the completion of Railway siding works only till 22.1.2020 in the abovementioned affidavit as against the claim of 19.1.2021 in the Petition. As the affidavit dated 26.11.2024 has only been considered (for the reasons stated earlier), we condone the delay on this count, subject to the Petitioner filing the Railway siding completion details, the timelines along with the relevant documents at the time of truing-up of tariff.

E. Impact of COVID-19 Pandemic to the commissioning of Unit-II (1.3.2020 till 28.2.2021)

34. The Petitioner has submitted that prior to the spread of the COVID-19 pandemic, the commissioning activities of Unit-II were in full swing. It has stated that the steam-blowing activities of the Unit-II Boiler were completed successfully on 31.12.2019, and within the next three months, the unit was planned for synchronization, and it was anticipated that the said Unit would be declared under COD within the next 6-month period, i.e., by August 2020 together with the completion of the Railway siding work. The Petitioner has further submitted the following:

- (a) Meanwhile, early 2020 witnessed an unprecedented humanitarian crisis in the form of a new virus called Coronavirus (Covid-19) around the globe. The various restrictions, which were imposed by the Government(s) concerning Covid-19, created havoc and resulted in an adverse impact on the performance of all industrial activities. Due to the rapid spread



of the Covid-19 pandemic all across the globe, the World Health Organization (WHO) declared it a pandemic.

- (b) Due to the countrywide lockdown from 24.3.2020 to 31.5.2020 and subsequent unlocking with strict measures till the month of September 2020, the balance erection and commissioning activities of Unit-II were affected severely. Further, recognizing the COVID-19 pandemic as an extraordinary event that was beyond human control and taking note of the limitations placed on the movement of men and materials, as per the Central/State govt guidelines, leading to impairment of the various contractual obligations by parties, the Ministry of Finance, GOI issued OM dated 13.5.2020 wherein, Covid-19 pandemic was treated as a 'force majeure' event and the extension in the completion of works from three to six months, was allowed without the imposition of any cost or penalty.
- (c) Limited availability of the labourers and experts, including the problem of supplies by the agencies, the balance works pertaining to the COD of Unit II were prioritized and started soon after the unlock, and the unit was successfully synchronized on 26.8.2020. The scheduled time period for the COD declaration was envisaged after 7 months after the machine gets synchronized. Unit-II achieved full load on 19.1.2021, and the successful trial run operation was achieved on 13th, 14th, and 15.2.2021, and Unit-II was declared COD on 1.3.2021, which was well within the 7-month period from the date of synchronization.

Submission of the Respondents

35. The Respondent, MPPMCL, submitted that when the first unit was commissioned on 1.6.2019, there was no COVID-19 impact at all, but the second unit must have achieved its COD on 1.12.2019 and in that case, there would not have been any effect of COVID-19 pandemic. It had also been submitted that there was no reason as to why the Petitioner had not undertaken the activity of commissioning Unit-II simultaneously with Unit-I (which was charged after an abnormal delay of 23 months) so that the second unit could also be charged within the specified period of six months, after the commissioning of the first unit, as the Petitioner's plant was already delayed by more than two years and six months when the lockdown was imposed. Accordingly, the Respondent submitted that the benefit claimed by the Petitioner out of the lockdown period was not justifiable and may not be allowed.



Analysis and Decision

36. We have examined the submissions. It is observed that COVID-19 was declared a worldwide pandemic, which had caused constraints in the Procurement of goods/materials and the availability and free movement of personnel/manpower, throughout the country. In addition to the force majeure (as defined in para 30 above), we note that the Ministry of Finance (MOF), Gol, vide its circular dated 13.5.2020, provided the following:

“Attention is invited to Department of Expenditure’s O.M. No. 18/4/2020-PPD dated 19th February, 2020 on the invocation of Force Majeure Clause (FMC). Vide the O.M., it was clarified that disruption of supply chains due to the spread of Coronavirus will be covered under FMC which could be invoked, wherever considered appropriate, following the due procedure as stated in para 9.7.7 of the Manual on Procurement of Goods.

2. Subsequent to issuance of the above referred O.M., further disruptions have affected the transportation, manufacturing and distribution of goods and services in the country. Limitations placed on the movement of men and materials as per the guidelines issued by the Ministry of Home Affairs (MHA) under the Disaster Management Act, 2005 (DM Act 2005) and the respective State and UT governments from time to time have severely impacted the fulfilment of contractual obligations for supply of goods, works and consultancy services (including other services), and affected the volume of vehicular traffic.

3. Attention in this regard is invited to para 9.7.7 of the "Manual for Procurement of Goods 2017", Para 6.4.2 of the "Manual for Procurement of Works 2019" and para 8.14.1 of the "Manual for Procurement of Consultancy and other Services 2017" issued by the Department of Expenditure. The above referred three Manuals recognize extraordinary events or circumstances beyond human control leading to delays in or non-fulfilment of contractual obligations. In a situation of such events happening, and after following due procedure, parties to the contract are allowed flexibility to invoke FMC following prescribed due procedure.

4. It is recognised that in view of the restrictions placed on the movement of goods, services and manpower on account of the lockdown situation prevailing overseas and in the country in terms of the guidelines issued by the MHA under the DM Act 2005 and the respective State and UT Governments, it may not be possible for the parties to the contract to fulfil contractual obligations.”

37. Admittedly, the COVID-19 pandemic affected the free movement of men/materials, which was vital for the timely construction of the Projects, including that of the Petitioner. Therefore, in line with the MOF circular, the delay in completion of the work due to COVID-19 is considered a ‘force majeure’ event, as it had severely affected the flow of materials, supplies, and manpower during the project execution by the Petitioner. The said notification also provides that the contractual obligations would stand extended by not less than 3 (three) months and not more



than 6 (six) months. However, the Petitioner vide its affidavit dated 26.11.2024 has claimed the delay of 365 days from 1.3.2020 to 28.2.2021, due to the impact of COVID-19 pandemic. In consideration of the above submissions, the period of delay of 6-months from 24.3.2020 to 23.9.2020 due to COVID-19 pandemic, is condoned towards the commissioning of Unit-II, in terms of the MOF circular dated 13.5.2020. However, the delay of another 158 days from 24.9.2020 to 28.2.2021 claimed due to COVID-19 pandemic with respect to Unit-II is not condoned. A similar approach has been adopted by the Commission, while approving the delay due to the COVID-19 pandemic in its order dated 2.8.2024 in Petition No.145/GT/2019 (approval of tariff for Lara STPS). Accordingly, as against the delay claimed by the Petitioner from 1.3.2020 to 28.2.2021, only the delay for the period from 24.3.2020 to 23.9.2020 is condoned for the commissioning of Unit-II.

F. Delay in initial site levelling works due to law & order problems (1.2.2014 to 30.6.2014)

38. The Petitioner has submitted the following:

- (a) The land acquired for the main plant was registered in the name of the Petitioner, and the possession of the same, initially free from any encumbrances and disturbances, was completed before the Investment Approval, as per the provisions of the R&R policy under the then Land Acquisition Act. Immediately after the investment approval, the Petitioner awarded the Site levelling & Infrastructure package to M/s Transtroy (India) Limited, Hyderabad. Subsequently, the initial site levelling and infrastructure package works were started, and the works were at full pace as per schedule. However, subsequent to the initial stage of the civil activities, the project faced obstructions and agitations from the local villagers, as the villagers started demanding higher additional compensation for the land that was already in possession of the Petitioner after following due process, including the payment of agreed compensation.
- (b) The Petitioner fulfilled all its commitments in line with the order dated 12.9.2012 of the “Rehabilitation Department of the Government of MP”. The payment for the land was done as per the rate decided by the GoMP. As per the agreement, the Petitioner paid Rs. 15 lakh per acre for the irrigated land and Rs. 11 lakh per acre for the non-irrigated land as agreed. The land for the main Plant was acquired after following all procedures of the then prevailing R&R policy, including public hearings. The initial work of site levelling was



progressing as scheduled till 20.2.2014. A day after the foundation stone laying ceremonial function of the station on 20.2.2014, more than 500 farmers started demanding an additional compensation of Rs 3 lacs per acre and started protesting and stalled the construction work of the power plant, and also threatened to remove the men and machines.

- (c) Further, the protesting farmers continued the dharna in spite of regular persuasion by the Petitioner and also blocked the approach road to the station by digging the roads in front of the main gate and also placing roadblocks, resulting in the blockade and the overall restriction in the movement of vehicles/machinery to and from the station. The protest and blockade posed a serious security threat to the workers and employees of the station. In order to bring the situation under control, the Petitioner immediately took up the matter with the District Authorities and sought their help and direction, as the demand was over and above the agreed rate by the GoMP. At the same time, the Petitioner tried to pacify the protestors by explaining the facts and showing the details of the agreed rate of land as approved by the GoMP. However, the agitating farmers were adamant and continued their dharna threatened not to allow any resumption of work, and started removing the men, materials, and vehicles of the working agency forcibly. Consequent to this, the movement of the construction materials stalled, and the working agency started demobilizing their men and machinery to avoid any damage and accidents.
- (d) The Petitioner, sensing the impending trouble and in order to resolve the issues, took up the matter with the District Authorities through calls, meetings, and communication, including addressing a letter dated 1.3.2014 to the District Collector, seeking support and directions. Even when the model code of conduct was in effect from 5.3.2014 onwards in view of ensuing Parliamentary elections, the agitating farmers continued their dharna, obstructing all the initial site levelling activities and also submitted a Memorandum on 15.3.2014 to the In-charge, Cheechali Police Station for permission to continue the dharna further.
- (e) The initial site levelling work was in full progress, and all the men & machinery were deployed at the site, but the threats of agitation and impediments created by the protesting farmers demanding special additional compensation of 3 lakhs per acre led to a complete stoppage of work w.e.f. 20.2.2014. The Petitioner conducted several workshops to convince the agitating farmers, but the efforts were in vain. Further, the Petitioner explored the possibility of negotiating and paying the additional compensation as demanded by the protesting farmers, as the delay in the project activities was not in favour of the Petitioner. Accordingly, the Petitioner discussed the issue with the appropriate State authorities and local leaders. However, due to the model code of conduct being in force, the same could not be finalized. The Petitioner, in its various interactions, also explained the situation to the 500 nos. of protesting farmers that it may consider their



demand but would take some time, considering the process of approval with the GoMP, and the same would be possible only after the general elections, i.e., May 2014 as the model code of conduct was in force. Subsequently, the matter was resolved on 15.4.2014, with the villagers citing the election and model code of conduct, and the work of site levelling could only be resumed after re-mobilizing the men and machinery, which took additional time of about 10 days, including filling/ levelling of the approach road to the main plant area, which was dug out by the villagers. There was a complete stoppage of work due to blockade and law and order problems during the period from 20.2.2014 to 25.4.2014.

- (f) The matter of additional compensation was taken up immediately with the GoMP and State Authorities and for its earliest disbursement after the general elections in May 2014. However, the process of approval and arriving at the negotiated additional compensation took some time. The farmers restarted the agitation and blocked the roads once again from 16.6.2014, restating their demand for additional compensation of Rs.3 lakh per acre, and their agitation and blockade continued, thereby causing a complete demobilization of men and machinery, including obstruction in the movement of materials once again.
- (g) In order to avoid further delay and in order to resume the hindered work at the earliest, the Petitioner, along with the District Administration and the agitating farmers, conducted meetings from 20.6.2014 to 21.6.2014, wherein the GoMP approved the additional compensation of Rs.3 lakh per acre for the PAPs of the generating station. Even after the agreement to pay an additional compensation of Rs.3 lakh per acre, the farmers continued their agitation till the final disbursement of the same on 28.6.2014. After the complete disbursal of compensation, the work could be started at a slow pace after a week with a lot of follow-ups and mobilizing the men and machinery as the labours/workers were afraid of repeated agitation by farmers.
- (h) There was a complete stoppage of the initial site levelling work by about 85 days (from 20.2.2014 to 25.4.2014 and from 16.6.2014 to 5.7.2014), which was beyond the control of the Petitioner, and the same may be condoned. The Petitioner, vide affidavit dated 26.11.2024, submitted the month-wise and activity-wise delay in the commissioning of Units I & II, wherein the Petitioner has claimed the delay of 55 days.

Submissions of the Respondents and Petitioner

39. The Respondents, MSEDCL and CSPDCL, submitted that the responsibility to acquire the land free from all encumbrances is on the Petitioner, and such procedural delays, illegal stoppage of works, and agitation should have been expected at the time of planning, as due diligence might have been carried out by the Petitioner. In response, the Petitioner submitted



that the problems encountered by the Petitioner on account of agitation by the PAPs, were not under the control of the Petitioner. The Petitioner had clarified that when the project work started, the main plant land was free from all encumbrances and disturbances, and the initial site levelling project activities were going on smoothly with full mobilization of the manpower. The Petitioner has submitted that on account of the law and order problems and sudden unanticipated agitation at the site, there was an overall delay of 3 months, despite the best efforts taken by the Petitioner in the prevailing scenario, and the same is beyond the reasonable control of the Petitioner.

Analysis and Decision

40. We have considered the submissions of the parties. We note that the Petitioner has not justified the delay in line with the definition of the force majeure, under the 2019 Tariff Regulations. In our view, the delays due to minor agitations and strikes need to be factored in by the Petitioner during the DPR phase. In view of this, the delay from 1.2.2014 to 30.6.2014 due to intermittent strikes and agitations has not been condoned. It is, however, noticed that the period of delay, which has not been condoned on this count, has been subsumed in the delay caused by the land acquisition, which has already been condoned, as stated earlier.

G. Delay due to agitation of farmers leading to non-performance of agency (1.6.2014 to 31.12.2014)

41. The Petitioner has submitted the following:

- (i) The initial site levelling and infrastructure, which were the basic inputs for all other main plant packages, came to a grinding halt because of the severe agitation by more than 500 farmers. During the course of the agitation the working agency demobilized its men and machinery due to fear of losses. After the resolution of the matter and even otherwise, the Petitioner constantly pursued with the agency for the adequate deployment of the resources so that the progress of work could be brought on track. However, when the settlement with farmers was done, and the agitation was called off on 28.6.2014, the implementation agency started raising unjustified financial demands against the men and machinery affected due to the long-standing unprecedented law and order situation and the same was beyond the reasonable control of the Petitioner.



- (ii) With the available limited mobilization of resources, the work was going at a very tardy pace. The Petitioner regularly pursued the matter with the agency and requested to speed up the activities of site levelling, and deploying adequate resources. However, citing the agitation that happened from February 2014 till June 2014, the contractor started taking undue advantage by claiming unjustified high additional demands, which the Petitioner, being a public organization, could not agree with, as the same was unjust and unlawful.
- (iii) The vendor, in the garb of the agitation and disturbances caused by villagers demanding higher compensation, was reluctant to mobilize the manpower and machinery to the site. As regards the hindrance due to agitation, the Petitioner made all-out efforts and took up the matter at all levels of the District Administration and the competent authority and ultimately was able to resolve the problem by agreeing towards the payment of additional compensation. Post resolution of the agitation by the sincere efforts of the Petitioner, the contractor was not mobilizing the men & machinery, despite repeated persuasions and reminders by the Petitioner. The Petitioner made all-out efforts to improve the mobilization and speed up the initial site levelling activities (on which all other milestone activities are dependent) by the said agency. However, the agency did not respond despite several communications from the Petitioner and was firm on its unjustified financial demands.
- (iv) Consequently, with no option left, the Petitioner had to issue a letter of termination dated 14.7.2014, giving seven days' notice under the terms of the contract, to improve the initial site levelling & infrastructure work, failing which the Petitioner was constrained to terminate the contract. Seeing no response to the said notice by the agency M/s Transtroy (India) Limited, the contract was terminated on 21.8.2014. In order to restrict the delay caused, the Petitioner proactively proceeded to re-tender the Package through a transparent bidding process, and by putting extra effort on fast track, the work was awarded to M/s Bridge & Roof Co. India Limited on 9.12.2014, due to consistent and sustained efforts of the Petitioner
- (v) The unjustified demand raised by the Agency (M/s. Transtroy (I) Ltd) was beyond the scope of the contractual agreement, and the same was the fallout of the continuous hindrance and disruptions created by the agitation. Further, the retendering of the contract was the result of a continuous and repeated agitation by the farmers. Had there been no agitation by the farmers on account of the additional compensation and unjust and unlawful demand by the contractor, the work would have been completed as per the schedule.
- (vi) The notice for termination of the contract, the contract termination, and its subsequent process for re-awarding the contract took an additional time of around 5 months (from 14.7.2014 to 9.12.2014) thereby delaying the milestone activities of Unit-I and Unit-II of



the station, which was beyond the control of the Petitioner. The normal tendering process takes about 8 months' time, but the work was re-awarded within 5 months, based on all-out efforts by the Petitioner. The situation unfolded due to severe law & order problems encountered during the initial stages of the project by way of unreasonable demands from the farmers (demanding additional compensation), which was completely unpredictable, unjustifiable, unlawful, and sudden in nature and not attributable to the Petitioner as the Compensation to the PAPs, was already disbursed as per the Relief & Rehabilitation package as decided by the then GoMP.

- (vii) The sudden, unpredictable, and unlawful demand by the farmers as well as the highly unjustified demands and poor performance by the contracting agency of site levelling and infrastructure works, might have caused long subsequent consequential delays in the execution of the Project, but for the all-round proactive efforts of the Petitioner, it could restrict the delay to 8 months (3 months due to the agitation by the farmers in 2014 and 5 months due to re-tendering and award). Since the said delay was caused due to the unjust demand of the farmers, which was beyond the control of the Petitioner, the same may be condoned.

Submission of the Respondent

42. Respondent, MSEDCL, submitted that the delay occurred due to the termination of the existing contract, and re-awarding of the same contract is purely a contractual issue, which needs to be handled by the Petitioner, and hence, such delay may not be allowed. The Respondent, MPPMCL, submitted the following:

- (a) The Investment Approval for the Project was accorded on 26.2.2013 at Rs 12866 crore at a price level of the 1st Qtr. of 2013. It is an established fact that the Petitioner, being a Central Government owned undertaking, approved the Investment Approval after site inspection, after land acquisition etc., and the factual position can be ascertained through the J-letter no. 13012/125/2009-IA. II (T) issued by MOEF&CC dated 22.3.2013 (placed on Page No. 1106 of the pleadings) issued to the Petitioner while granting the environmental clearance. The Respondent submitted that the Petitioner has failed to explain the following delays:
- (i) The Petitioner awarded the Site Levelling and Infrastructure works to M/s Transtroy (I) Limited on 27.6.2013, i.e., after 4 months from the date of Investment Approval, but failed to provide any justifiable reasons.
 - (ii) On 24.6.2014, M/s Transtroy (India) Limited, for the first time, wrote a letter to the Petitioner stating that a group of people, claiming to be PAPs, were not letting them enter the site but failed to explain what activities have been carried out till 24.6.2014 i.e., after the passing of 12 months from the date of the award. Further, the said letter failed to disclose what action the contractor/Petitioner took to mitigate such inordinate delay.



- (iii) Vide letter dated 30.6.2014, the contractor M/s Transtroy (I) Limited admitted that the work was suspended from 16.6.2014 and was resumed only from 28.6.2014, but what progress was made since the award of the contract and why the Site Levelling and Infrastructure works could not be completed on or before 16.6.2014 has not been explained or justified.
- (iv) Vide letter dated 10.7.2014, the Petitioner conveyed its displeasure that even after the resumption of the work, the contractor M/s Transtroy (I) Ltd could not complete the work as on that date. It was further admitted by the Petitioner in the said letter that the Site Levelling and Infrastructure works got inordinately delayed due to the said contractor's fault. The relevant portion of the letter dated 10.7.2014 is reproduced below:

"it is regretted to note that the Project Manager M/S Transtroy left the site without any appropriate alternative arrangement or intimation to NTPC. Now, NTPC has left with no other option but to take up construction works of these essential approaches and drainage at the risk and cost of Transstroy (India) Limited to ensure the working and movement of equipment in rainy seasons."
- (v) Vide letter dated 12.7.2014, the Petitioner again informed the contractor that the scope of work was scheduled to be completed within 30 months from the date of award of the contract. Vide letter dated 7.9.2014, the Petitioner wrote to the said contractor that within 1 year from the date of the contract of the award, 50% of the work was supposed to be completed. However, they have completed only 15%. Vide letter dated 21.8.2014, the Petitioner terminated the contract with the contractor, M/s Transstroy (I) Ltd.
- (vi) The Petitioner has failed to disclose the amount of LD imposed upon the Contractor. Thereafter, M/s Bridge & Roof Co (India) Ltd was awarded the project of Site Levelling and Infrastructure works on 11.12.2014 (i.e., after 4 months from the date of termination of the contract of M/s Transtroy (I) Ltd. The Petitioner has not also disclosed each and everyday progress of work undertaken by M/s Bridge & Roof Co (India) Limited.
- (vii) From the chronology of the aforesaid events, it is clear that:
 - (a) Site Levelling and Infrastructure works were awarded to M/s Transtroy (I) Ltd on 27.6.2013, i.e., after the passing of 4 months from the IA and thereafter, till 21.8.2014 (i.e., for 14 months) due to the contractor's as well as the Petitioner's negligence, the Site Levelling and Infrastructure works could not be completed by the said contractor.
 - (b) The protest from the PAPs was for a limited period, i.e., 16.2.2014 till 28.2.2014, and therefore, the Petitioner failed to provide any justifiable reasons for the delay in the completion of Site Levelling and Infrastructure works by 18 months. Therefore, the time overrun of 18 months, which led to the cost overrun, may not be condoned.

Rejoinder of the Petitioner

43. In response to the above, the Petitioner clarified as under:

- (i) The contract termination was the fallout of an unprecedented law and order situation, i.e., agitation of farmers at the site, that was already handed over by the Petitioner to the said agency free of encumbrance in order to carry out the work. However, due to the prolonged law and order situation created by the agitating farmers, the agency was not able to execute the



work despite support from the Petitioner to resolve the issues. It would have been highly imprudent to accept the unjustified demand of the contractor. In other words, had there been no unforeseen law & order situation at the site, there would have been no issue in work implementation, and no inflated demand would have been raised by the contracting agency.

- (ii) In order to award the contract for Site Levelling and Infrastructure works for the Project, the Petitioner has to conduct a transparent bidding process in order to secure the most competitive price from the contractors to complete the Site Levelling and Infrastructure works.
- (iii) It is an undisputed position that tendering of a contract takes a minimum period of 6 months in order to award a Project. Whereas, the Petitioner in the present case was successful in awarding the Project, within a period of 4 months (as scheduled) from the date of investment approval from the Board of the Petitioner. Therefore, it is incorrect for the Respondent, MPPMCL, to contend that the Petitioner delayed the process of awarding the contract for Site Levelling and Infrastructure works.
- (iv) It is incorrect for the Respondent, MPPMCL, to contend that the Site Levelling and Infrastructure Works could not be completed due to the negligence of the Petitioner. The completion of the work under question was delayed on account of the protest started by the farmers in order to fulfill their demand towards additional unjustified compensation against their respective lands being acquired by Petitioner as per the then Land Acquisition law for the implementation of the Project.
- (v) The protest and blockage by the agitated farmers created a serious security threat to the workers and employees of the Project. Therefore, in order to bring the situation under control, and to resolve the hindrances created by the farmers, the Petitioner took up the matter with the District Authorities and the GoMP. In order to avoid further delay and to resume the work at the site, the Petitioner conducted meetings on 20.6.2014 and 21.6.2014 with the District Administration and the agitating farmers, thereby approving the additional grant of Rs.3 lakh per acre for the PAPs of the Project.
- (vi) In view of the agreement reached between the Petitioner and PAPs, on 28.6.2014, the payment of Rs.44 crore was made as an additional grant to the PAPs, and accordingly, on 5.7.2014, the initial Site Levelling and Infrastructure works was started by the Petitioner. The Petitioner had taken all measures to mitigate the problems by approaching the District Authorities and the GoMP, on a regular basis, and therefore, the delay may be condoned, as it was completely beyond the control of Petitioner. Reliance is placed on the Commission's order dated 6.1.2020 in Petition No. 178/GT/2017(NTPC vs MPPMCL& ors), wherein, it was held as under:

"29. The matter has been considered. It is observed from the submissions of the Petitioner that PAPs had threatened not only the contractual labourers but also the personnel of the Petitioner Company. Petitioner has pursued the matter with District Administration on regular basis for resolution. It is also noticed that the issue was pursued by the Petitioner at the level of Prime Minister's office for resolution. It is therefore evident that the Petitioner had taken all measures to mitigate the problems. In this background, we hold that the delay on this ground was for reasons which were beyond the control of the Petitioner."

- (vii) It is evident from the above that a delay of 85 days (20.2.2014 to 25.4.2014 and 16.6.2014 to 5.7.2014) occurred towards the Site Levelling work and it is incorrect for the Respondent, MPPMCL, to contend that there is a delay of only 18 days which has occurred due to agitation of PAPs.



Analysis and Decision

44. We have considered the submissions of the parties with regard to the delay due to the agitation of farmers, leading to the non-performance of work by the agency. The Commission has observed that the agitations and obstructions caused by the agitating farmers led to the complete demobilization of men and machinery and obstruction in the movement of materials, which further led to the situation where the contractor started taking undue advantage by claiming unjustified high additional demands. As stated earlier, the Petitioner has not justified the delay in line with the definition of the force majeure clause under the 2019 Tariff Regulations (*quoted in para 30 above*). In our view, such delays due to minor agitations and strikes should have been factored in by the Petitioner during the DPR phase. Hence, we find no reason to condone the delay on account of strikes and agitations. Having said so, we feel that the Petitioner could have ensured that such unjust demands are not made by the contractor by incorporating stricter terms in the contract with a provision for levying LD due to the slow pace of work or for the adequate deployment of men and machinery, at any given point of time, or for encashment of the Performance BG. Also, the Petitioner has not submitted any such details about the steps taken to prevent/correct the unjust demands of the contractor. In our view, the delay on account of the non-performance of the agency could have been shortened/ averted by proper planning and follow-up at the Petitioner's end. For this reason, we are of the considered view that the delay on account of the non-performance of the contractor was a controllable factor. In this background, we are not inclined to condone the delay from June 2014 to December 2014. Even otherwise, we note that the period of delay not condoned/disallowed under this count has already been subsumed in the delay due to the land acquisition, which has been condoned earlier in this order.



H. Delay in the Project activities due to law & order issues during 2017-18 (1.12.2017 to 31.3.2018)

45. The Petitioner has submitted the following:

- (a) The Petitioner also encountered severe law & order problems in the midst of execution of the project, which resulted in a complete stoppage of work during the period from 22.12.2017 to 14.2.2018. There was a severe agitation by the PAPs under the banner of Kisan Mazdoor Sangha raising the demand for permanent employment in the Petitioner Company, including other demands. The agitators prevented and threatened the employees of the Petitioner, the contractual workers, and other associates from entering the plant and forcibly stopped the progress of the work. This agitation had a severe impact on the project execution, which brought the construction activities to a grinding halt. At this point in time, the progress of work was at its peak due to the full mobilization of resources and manpower by all agencies involved in the project execution.
- (b) The Petitioner proactively informed the State Authorities about the agitation and law & order issues and also had continuously coordinated with the District Collector and Superintendent of Police, on continuous basis seeking to resolve the issue at the earliest and to provide adequate security to the camps in the vicinity of the power plant so that normal movement of workers, employees, and other plant associates would not be affected. However, the problem of law and order couldn't be resolved. The problem was escalated to the level of the Principal Secretary (Energy) and the Chief Secretary, the Govt. of MP, by the top management of the Petitioner Company. In this regard, a letter from the CMD, NTPC, was written to the Chief Secretary, the GoMP. The restrictive orders under Section 144 of the CrPC were imposed. Further, FIRs at Chichili Police Station and Dongargaon Police station were also lodged in this regard. However, the law & order problem created a severe security threat, and more than 3000 workers left the site, and around 30 trucks loaded with different construction equipments & materials, got stuck at different locations from the plant site to Gadarwara, resulting in the demobilization of men & materials, which had a consequential impact on the progress of works, leading to the stoppage of work for considerable amount of time of 60 days.
- (c) The critical milestone activities related to the synchronization activities pertaining to Unit-I and the Boiler light-up activities and TG Box-up activities were stuck up badly due to the above agitation. To control the situation and to bring back normalcy at the earliest, the Petitioner took up the matter at all levels of the District & State administration authorities. There was a complete stoppage of work due to the law and order situation created by the agitation of PAPs under the banner of Kisan Mazdoor Sangha. As the plant was under various stages of erection, preservation of the ongoing works and fronts was necessary for the quick execution of erection activities. Accordingly, the Petitioner sought police protection for the movement of the employees in shift so that the preservation could be done of already executed work and the work could be restarted at the earliest on return to normalcy. The buses carrying the employees were stopped several times at the main plant gate and were threatened by the agitating PAPs.
- (d) The unlawful activities/ disturbance of Kisan Mazdoor Sangha continued even after lodging an FIR and imposition of Section 144 in the plant area. The agitation continued throughout the month



of January 2018 and till 14.2.2018. The matter was finally resolved by arresting the PAPs and removing the blockades/ tents forcibly by the State Administration/ Authorities. But after certain arrests, the law and order situation got aggravated in protest of the arrests made by the State authorities. The situation was then controlled by making large-scale arrests and removing the unlawful tents and blockades with a full-force deployment.

- (e) The unlawful agitation brought the progress of the work to a complete halt, and huge losses were incurred by the working agencies on account of site establishment, T&Ps idleness, and project schedule. Many equipments related to the project activities, which were under transportation, were badly stuck up for more than a month. Because of the agitation, the workers, who received consistent threats, deserted the site, and even when the strike was called off, it took more than a month to pick up the work, on account of the short availability of men, machinery, and materials/equipments. Due to such demobilization and the subsequent remobilization of the workers and machinery, the works in all areas of the project were delayed by around 3 months, even after the best efforts of the Petitioner to resolve the situation. The details of the various communications (from 22.12.2017 to 21.2.2018) by the contracting agencies regarding the complete stoppage of work, continuous threats to their workers, the help of police personnel, etc., are enclosed.
- (f) The main packages which got severely hampered due to the above reasons include the Main Plant and Offsite works such as Unit-I synchronization activities, Unit-II Boiler Light up and chemical cleaning activities, TG Box-up of Unit-II, Ash Dyke works, Railway siding works, etc. Consequently, the subsequent and critical associated activities pertaining to Unit-I and Unit-II of Main Plant packages, Steam Generator, Turbine Generator, ESP, AHP, DM Plant, Water Reservoir, WTP, CW System, Switchyard Package, CT Package, CHP, etc., also got severely affected and dampened the progress of the work with respect to the original schedule.
- (g) The Petitioner made all-out efforts by taking up the issue of agitation before the State Administration and its probable disturbance in the project execution work. As the agitation was an unprecedented event with law and order issues, the delay on account of the same was beyond the control of the Petitioner. However, the Petitioner, using its project execution experience and tools, worked round the clock (in three shifts) to make up for the delay. Due to the increased agitation and law & order problems, as stated above, there was an overall delay of 3 months due to the PAPs dharna, agitation, and complete stoppage of work due to law & order issues, including the de-mobilization and re-mobilization of the workforce and materials at the site, which were beyond the control of the Petitioner.
- (h) The Petitioner, vide affidavit dated 26.11.2024, submitted the month-wise and activity-wise delay in the commissioning of Units I & II, wherein the delay of 88 days from 1.12.2017 to 31.3.2018 has been claimed, on account of aforesaid reasons.

Submission of the Respondents

46. The Respondent, MSEDCL, submitted that the delay in the completion of the project activities due to law and order problems during the period 2017-18 may be rejected as the



responsibility to acquire the land free from all encumbrances is of the Petitioner and such procedural delays were to have been expected. The Respondent, MPPMCL, submitted that the reasons furnished by Petitioner for time overrun on account of the law & order problems, are nothing but a misrepresentation of facts, and the reasons for stating the same can be seen from the letter dated 26.12.2017, which the Petitioner wrote to Chief Secretary, GoMP, informing the law and order problems, which began just 5 days prior. It has further submitted that a letter dated 2.2.2018 addressed by the Sub-divisional Magistrate, Narsingpur MP, to the Sub-divisional Officer, Narsingpur, GoMP observing that the protest at the site started from 22.12.2017 and accordingly, the Sub-divisional Officer, provided police protection and the work was resumed. Therefore, effectively, the Project was impacted due to law & order problems only for a period of 10 days, while the Petitioner's claim for a delay of 90 days is highly arbitrary and exaggerated. Accordingly, the Respondent has submitted that a time overrun above 10 days may not be allowed.

Rejoinder of the Petitioner

47. In response, the Petitioner has clarified as under:

- (a) The problems encountered by the Petitioner on account of the agitation by PAPs were not under the control of the Petitioner. In view of the situation created by the PAP, prohibitory orders were passed under Section 144 of the CrPC. However, due to the increased agitation and continued law and order problems, there was an overall delay of 3 months, which was beyond the reasonable control of the Petitioner.
- (b) The agitation by the farmers severely affected the progress of the Project and a detailed explanation in this regard has been provided in the amended Petition. It would be relevant to consider that in view of the situation created by the agitated farmers; the Petitioner was constrained to issue a letter dated 2.1.2018 to the SDM, Gadawara, with a request to provide security arrangements in order to ensure the plant safety, as the agitations by the vested groups stopped the movement of Petitioner employees.
- (c) Based on the said request, the SDM Gadawara addressed a letter to the Sub-divisional Officer directing the arrangement of the required police force for the hurdle-less movement of the Petitioner employees/ officers. It is evident from the letters that the protest of farmers was not peaceful, and therefore, the objections raised by the Respondent MPPMCL may be rejected.



Analysis and Decision

48. We have considered the submissions of the parties. It is observed that the law and order problems during the period 2017-18 led to a situation wherein the agitating villagers prevented and threatened the Petitioner's employees, the contract workers, and other associates from entering the plant, and the progress of the work was forcibly stopped. In this regard, we note that the SDM (Gadarwara) vide letter dated 2.1.2018 directed SDO(Police), Gadawara to ensure the smooth movement of the Petitioner's employees and vehicles between Gadawara and the its Plant for a period of about 10 days. However, it is noticed that the labourers of the contractor, M/s BHEL who were working at site, were not given any police protection, which led to the halt of work from 22.12.2017. Moreover, the re-mobilization of over 3000 nos. labourers/manpower started only on 13.2.2018 as evident from BHEL's letter dated 21.2.2018. Accordingly, the Petitioner has claimed the delay from 22.12.2017 till 20.3.2018 due to the impact of the law and order problems. The submission of the Respondents that the work was impacted only for a period of 10 days is not acceptable, considering the fact that the law and orders problems /agitation by PAPs, continued and impacted the work even after 10 days, as demonstrated by the Petitioner above. In this background, the delay on this count is not attributable to the Petitioner, as the same was beyond its reasonable control. Hence, the delay for the period from 22.12.2017 to 20.3.2018 on account of the impact of the law & order problems faced by the Petitioner, is condoned. However, the delay condoned for this period has also been subsumed in the delay condoned due to land acquisition, which was condoned earlier.

1. Delay due to unprecedented rain and the delay in the arrival of Stator (1.1.2015 to 31.10.2019 intermittently)

49. The Petitioner has submitted the following:



- (a) The Gadarwara area has slithery soil, which is usually clayey and loamy in texture. During the rainy season, even the normal rain makes mobility difficult in this area. There was unprecedented rain of 552%, 354%, and 1159% beyond the normal during February 2014, January 2015, and March 2015, respectively, which caused difficulty in the movement of men & materials, and heavy equipment, which led to the stoppage of work during the period. The consequential impact of unprecedented rains in the month of January 2015 continued till mid-February 2015. Further, the impact of heavy rains continued during the month of March 2015. Accordingly, the cumulative impact of the heavy and unprecedented rain during the months of January and March was around 2.5 months.
- (b) During the rainy season of 2015, the months of July and August witnessed heavy rainfall to the order of 366 mm and 284 mm, and due to this, the mobilization of materials, machinery, vehicles, etc., became impossible in the Project area. This compelled the Petitioner to stop the construction works related to basic preliminary civil works on the Project site. Even during the rainy season, the movement of men & machinery was extremely difficult, and normalcy in the movement at the site could only be achieved after making continuous efforts at several fronts at the site because of the slithery soil, which made the area very slippery, thick layer of moorum was laid throughout the roads.
- (c) Further, during the monsoon season in 2016, the rainfall recorded during the month of July was 641 mm, which was 181% of the average rainfall recorded for the area, and the subsequent month, i.e., August 2016, also witnessed rainfall of 283 mm, which adversely affected the progress of site work, as during this point of time, various civil construction and foundation related activities were going on, which were the front for further subsequent critical milestone activities.
- (d) The months of July 2017, July 2018, August 2018, July 2019, August 2019, and September 2019 witnessed very heavy rainfall of more than 300 mm and also went as high as 613 mm. During these periods, several activities of the Boiler area and offsite area, such as Railway siding works, Make-up water pump house works, were adversely affected. During this period also, the field work progress was severely hampered. The adverse weather conditions (rainfall) are a force majeure event, which was beyond the control of the Petitioner. During the course of such rainfall, the site conditions took around 10 days to dry out in order for the men & machinery to move around safely.
- (e) The systems, such as dewatering equipment. etc., were deployed at the site, keeping in view the average rainfall at the project location to cope with the rainfall. However, the continuous excess rainfall, combined with the typical geological nature of the site, resulted in flooding of the areas. This caused the restriction in the movement of men & machinery and also resulted in a virtual stoppage of the Civil & Structural works of major areas. The Unit was under the construction stage, and the systems dealing with such contingency were under execution and commissioning. A lot of efforts were made by the Petitioner to normalize and make the passage healthy and safe for the movement of heavy materials and cranes. Because of such excess rainfall during this period, there was a stoppage of the Civil & Structural works of major areas, which resulted in the delay in the availability of main equipment's, leading to a further delay in the commissioning of many of the equipment's/systems mentioned above.



- (f) As regards the delay in the arrival of the Stator, the inland transportation of the Generator Stator was under the scope of the contracting agency M/s BHEL (a GOI undertaking) and as per the approved route survey report, the Stator was to be dispatched from the Kandla port to Kasheli Jetty (Thane) by sea route and from Kasheli Jetty (Thane) to the Project site by road. Due to heavy monsoons and abnormal sea conditions, the sea movement was stopped by the Marine authorities from July 2016 to mid-September 2016 for safety purposes.
- (g) The Stator could be dispatched from the Kandla port to Kasheli Jetty (Thane) after getting transportation clearance from the Marine authorities, and the same was expected around mid-September 2016, after waning out of the monsoon. However, due to the prevalent weather conditions, the total transportation time was approximately 75 days, and the Stator could reach the site only after December 2016. The delay in the arrival of Stator was on account of the non-availability of clearance from the marine authorities due to unfavorable weather conditions, and the same was beyond the control of the Petitioner.

Submission of the Respondents

50. The Respondent, CSPDCL, submitted that the delay in the arrival of the Stator is a contractual issue between the generator and the supplier, and the same may not be condoned. The Respondent, MSEDCL, submitted that in line with the definition of 'force majeure,' though heavy rainfall is covered under adverse weather conditions, considering the average rainfall in this area, particularly in the rainy season, heavy rainfall is usual in nature and the Petitioner should have considered such circumstances while projecting the COD of the generating station. The Respondent has pointed out that this is just an excuse and an effort on the part of the Petitioner to hide its inefficiency and accordingly be decided by the Commission. The Respondent has also stated that it was the responsibility of the contractor to provide proper logistic support, and in case the sea movement was stopped by the marine authorities from July to September 2016, then an alternate route should have been planned for the same. Hence, a total delay of 75 days may not be allowed. The Respondent MPPMCL has stated the following:

- (a) In the State of MP, the effective rainy season is only for a period of less than two months, and therefore, the claim of the Petitioner for stoppage of work due to rains cannot justify the delay of more than 3 years in commissioning of the project. This is an afterthought to justify the gross inefficient project management by the Petitioner. The Petitioner is India's biggest thermal power generating company owned by the Government of India and has expertise and experience of



more than 40 years in the development of Thermal Power Plants. and has few thermal power plants in the State of MP, and therefore, the reasons for the time overrun of 500 days, is not justifiable, more so, it is always expected from a prudent business to mitigate the risk which had taken place in the past. Further, the Petitioner's project was already delayed by its contractors and consultants by 2-3 years for the non-completion of site levelling & infrastructure work and non-submission of DPR in time, and therefore, the Petitioner has concocted the story to cover up its own fault. Hence, the time overrun for the aforesaid reasons may not be condoned, and the additional IDC/IEDC claimed may be disallowed.

- (b) As regards the delay in the arrival of the Stator, the Petitioner has admitted that the inland transportation of the generator stator was under the scope of the contracting agency M/s BHEL. As per the approved route survey report, the Stator was to be dispatched from Kandla port to Kasheli Jetty (Thane) by sea route and from Kasheli Jetty (Thane) to Gadawara site by road, and therefore, any delay on the part of the contractor is a controllable factor, and such delay is not liable to be condoned under the 2019 Tariff Regulations. The Petitioner has failed to provide any details regarding the imposition of LD on the contractor for the non-performance of the contract within time. Hence, the time overrun of 76 days may not be condoned, and the additional IDC/IEDC claimed by the Petitioner may be disallowed.

Rejoinder of the Petitioner

51. In response to the above, the Petitioner clarified that the adverse weather conditions as above are covered under the force majeure event in terms of Regulation 3 (25) of the 2019 Tariff Regulations and are beyond the control of the Petitioner. This event could not have been factored in while projecting the COD of the Project. It has also submitted the delay in the arrival of Stator was because of the non-clearance by the Marine authorities of the Kandla Port, considering the heavy monsoon and the abnormal sea conditions, which were entirely beyond the control of the Petitioner.

Analysis and Decision

52. We have considered the submissions of the parties. Though the Petitioner has claimed the unprecedented rainfall as a force majeure event, it has not substantiated the same to demonstrate that the rainfall was in excess of the statistical measures for the last hundred years, in terms of sub-clause (a) of Regulation 3(25) of the 2019 Tariff Regulations. In our view, the



delays due to weather inconsistencies need to be factored in during the DPR phase. Hence, the delay due to unprecedented high rainfall is not condoned. As regards the delay in the arrival of the Stator, we notice that though the sea movement was stopped by the Marine authorities, the Petitioner, along with the contractor, had not explored any alternate options for the transportation of the Stator. The Petitioner has also not demonstrated or submitted any analysis to support the fact that the transportation of Stator through sea route was the only available means of transportation, and not by other modes. In our view, the Petitioner, by prudent and proactive planning, could have averted/ shortened the delay towards the transportation of Stator. In this background, we are not inclined to condone the delay on this count. It is, however, observed that the period of delay from 1.1.2015 to 31.10.2019, disallowed on this count, has already been subsumed in the delay due to the land acquisition, which has already been condoned, as stated earlier.

J. Sand Mining Ban (1.1.2015 to 31.10.2019 intermittently)

53. The Petitioner has submitted the following:

(a) There was non-availability of sand for prolonged durations due to the imposition of a ban on mining and sale of sand by various State Governments, including the Govt. of Chhattisgarh, based on the directions of the National Green Tribunal. Since sand is the essential raw material for the Civil works, the non-availability/ reduction in the supply of the same severely hampered the Civil works of the major packages, including the preliminary civil works of the station. The NGT, vide its order dated 13.1.2015, directed the State Governments to stop giving permits for carrying on Sand mining without obtaining Environmental Clearance or mineral extraction on riverbeds or otherwise including existing mining lease right holders. The relevant portion of the NGT order is extracted below:

“In the meanwhile, no State shall permit carrying on of sand mining or minor mineral extraction on riverbed or otherwise without the concerned person obtaining Environmental Clearance from the competent authority.”

(b) The mining activity slowed down following the order of NGT, thereby causing the non-availability of sand in adequate quantum for a considerable amount of time. Due to this, the Civil works of the major plant packages were severely hampered for about 2 months, i.e., from January 2015 to February 2015. Based on the appeal filed on the issue of Environmental Clearance for sand mining, the NGT, vide its order dated 10.12.2015, strictly directed all the States once again not to carry out Sand mining without obtaining any environmental clearance and also directed the State Environment Impact Assessment Authority (SEIAA) to consider the applications filed for seeking Environmental clearance,



within a period of three months from the date of order. After this order, the respective State Governments and the SEIAAs took strict measures against the Sand miners, directing them to apply and obtain Environmental clearance at the earliest and stopping the mining work of such miners. This resulted in the non-availability of Sand for 3 months approximately, i.e. from December 2015 to February 2015, thereby affecting the progress of the various Civil works.

(c) The Petitioner further submitted that in 2015, NGT directed the GoMP to stop Sand mining on all riverbeds of the State during the monsoon months, i.e., from 1st June to 31st October, to protect the aquatic life forms, being the breeding season. Out of the 124 Sand mining leases that could operate legally in the State, the SEIAA gave 61 Environmental clearances, with the condition that Sand mining could be permissible only from 1st November to 31st May. With the reduction in the licensed Sand miners by about 50% and a complete ban on Sand mining during the monsoon season, there was an acute shortage of Sand, which had an adverse effect on the construction and erection activities of the plant.

(d) Such administrative decisions and legal orders/judgments stopped the Sand mining during different periods like January 2015 to February 2015, July 2015 to October 2015; December 2015 to February 2016, June 2016 to September 2016; June 2017 to September 2017, June 2018 to September 2018 and June 2019 to September 2019. The complete ban on Sand mining during the period from July 2015 to October 2015 (4 months) was unforeseen and sudden, and since many erection activities were at a nascent stage of their commissioning, the non-availability of Sand is an essential raw material for almost all the civil works, significantly affected the progress of various project activities.

(e) The delay in the construction activities due to the shortage of Sand caused by a change in law was beyond the control of the Petitioner, and on account of this, the Civil works of all the major packages in the main plant, Railway siding and the Balance of plant, got severely hampered, thereby, affecting the progress of the various milestone activities pertaining to Units-I & II. Although the Petitioner made sincere efforts to procure sand and materials in advance during the subsequent years of the ban, i.e., 2016, 2017, 2018, and 2019, however, the lead time in procuring Sand was extended by a considerable period in the preceding months to the period of the ban during 2016, 2017, 2018 and 2019 as stated above, and consequently, the impact of the ban during the monsoon months could not be offset to a significant margin.

(f) Further, the delay in the civil works due to inadequate Sand caused a consequential delay in the timely achievement of other milestones of the project like Boiler Erection, TG erection, Main plant & offsite civil works, Ash Dyke package, etc., as indicated in the bar chart, causing the cumulative delay of approximately 15 months i.e., 7 months in 2015 because of the NGT orders, 4 months in 2016 due to Sand mining ban during the monsoon season and the NGT orders dated 10.12.2015, and 2 months each during the years 2017, 2018 and 2019 due to sand mining ban during the monsoon period.

(g) The Petitioner submitted that the delay in erection activities was delayed by 7 months in the year 2015 as the ban on sand mining was imposed for the first time. However, the Petitioner took the best measures to make the sand available in advance in the subsequent years of 2017, 2018 & 2019 based on the past experience of not getting sand during the period from July 2015 to October 2015. However,



the delay of 2 months during the monsoon period of 2017, 2018, and 2019 could not be avoided as there was no adequate amount of sand available for procurement. Accordingly, the delay of 17 months, which could have been much more had the Petitioner not taken proactive efforts to restrict the delay may be condoned.

Submission of the Respondents

54. The Respondent, CSPDCL, submitted that sand from alternate sources could have been procured and the ban is only during the monsoon season. It has stated that requisite stocks could have been arranged by the Petitioner, for carrying the work during the monsoon period. Accordingly, the Respondent submitted that such delays due to the ban on sand mining may not be allowed. The Respondent, MSEDCL, submitted that the period mentioned by the Petitioner, as above, is mainly the rainy season, and hence, the Petitioner should have been aware of this circumstance. It has been pointed out that the Petitioner should have explored the alternate market to procure sand or stacking sand for this period. The Respondent, MPPMCL, submitted the following:

- (a) The reasons furnished by the Petitioner for time overrun due to the non-availability of sand on account of the ban on sand mining imposed by NGT of Delhi and the non-availability of material is nothing but a misrepresentation of fact and a concocted story. The Petitioner has already got the Environmental Clearance for the Project, issued by the MOEF vide letter dated 22.3.2013.
- (b) From the NGT order dated 10.12.2015, it is observed that there was no blanket ban on sand mining and any person having Environmental clearance could have obtained permission for the same. Only the persons without the Environmental clearance were stopped from carrying out any mining activity. NGT, in its order, had directed the SEIAA to consider all applications filed for seeking EC in accordance with law and in terms of the observations made in the said order expeditiously and within a period of three months. Since the ban was only on illegal mining, the event, namely, the non-availability of sand and moorum does not qualify either as a force majeure event or a change in law event, which was beyond the control of the Petitioner as envisaged under the 2019 Tariff Regulations.
- (c) Further, the Respondent, MPPMCL, submitted that Petitioner's project was already delayed by its contractors and consultants, i.e., for 2-3 years for non-completion of site levelling & infrastructure work, non-submissions of DPR in time, etc., and NGT Order became applicable subject to environmental clearance after 10.12.2015. Therefore, the claim of Petitioner regarding NGT order 10.12.2015 is nothing but an afterthought and an attempt to cover its fault in the execution of the project.



- (d) The Petitioner, in its revised Petition, has admitted that it was in a position to arrange the sand and moorum from other sources. The relevant portion is extracted below:

"It is evident from above that the delay in erection activities was delayed by 07 months in the year 2015 as the ban on sand mining was imposed for the first time, however, the petitioner took best measures to make the sand available in advance in the subsequent years of 2017, 2018 & 2019 based on the past experience of not getting sand during the period from July 2015 to October 2015."

Thus, it is clear that the procurement of sand and moorum was not an uncontrollable factor, and the same can be arranged from other sources.

- (e) There are alternatives to sand that can be used for the construction and other civil works, and the materials that can be used as a replacement for Sand in the civil works are as under:
- a. *M-Sand (Manufactured Sand) M-Sand*
 - b. *Ground Granulated Blast Furnace Slag*
 - c. *Granulated Blast Furnace Slag (GGBS)*
 - d. *Washed Bottom Ash Washed Bottom Ash*
 - e. *Sheet Glass Powder. Sheet Glass Powder*
 - f. *Construction and Demolition Waste*
 - g. *Quarry Dust*
 - h. *Fly Ash of generating plants*

- (f) The Petitioner has tried to cover up its own fault, and hence, the time overrun of 510 days for the said reasons may not be condoned, and the additional IDC/IEDC claimed may be disallowed

Rejoinder of the Petitioner

55. In response, the Petitioner clarified that due to the imposition of a ban on sand mining and the sale of sand by the various State Governments (including the GoMP) in terms of the directions of the NGT, it was not feasible for the Petitioner to explore any other alternate market sources keeping in view that the ban imposed by NGT was not only limited to the State of MP but was a blanket ban, for all the States to follow.

Analysis and Decision

56. We have examined the submissions. It is observed that in compliance with the NGT order dated 10.12.2015, various measures were taken by the GoMP and SEIAA, imposing the ban on sand mining for a certain duration for review of the license of all miners and their respective applications for environmental clearance from December 2015 onwards for an approximate



period of three months, within which period the SEIAA had to dispose of the applications of sand miners who have applied for Environment Clearance. It is observed that the cumulative/effective delay on account of the non-availability/reduced availability of Sand in the State of MP during 2015-16 was approximately 7 months, 4 months in 2016, and 2 months each during the years 2017, 2018, and 2019. It is noticed that in the present case, there has been a complete ban on Sand mining during the monsoons (based on MOEF&CC guidelines). In this regard, we notice that in Petition No. 402/GT/2019 (determination of tariff of Khargone STPS of the Petitioner for 2019-24), the Commission vide its order dated 26.7.2023, held that the disruption in the supply of sand on account of the various restrictions/ban on sand mining is an uncontrollable event and the Petitioner cannot be held liable for the same. The relevant portion of the order is extracted below.

“18. We, therefore, hold, that the ban on sand mining activities by the State Government of MP, which had resulted in the delay in construction activities of the project is a change in law / force majeure event, which was beyond the reasonable control of the Petitioner. Accordingly, in terms of Regulation 22 (2)(a) &(b) of the 2019 Tariff Regulations, we hold that the delay of 195 days on this count, is an uncontrollable factor for which the Petitioner cannot be held responsible. Therefore, the said delay is condoned and the liquidated damages recovered from the contractors and insurance proceeds, if any, will be considered for reduction of the capital cost of the project.”

57. In line with the above decision, we condone the intermittent delays during the period from 1.1.2015 to 31.10.2019 on this count. However, the said period gets subsumed in the delay due to land acquisition, which has already been condoned, as stated earlier.

K. Delay due to Earthquake (25.4.2015 to 21.5.2015)

58. The Petitioner has submitted the following:

- (a) The Boiler erection of Unit-I was on full pace until a massive Earthquake of severe intensity struck Nepal on 25.4.2015, and the tremors of the same were felt in parts of India, including the various districts of the State of MP (including Narsinghpur/Gadarwara). The Boiler-1 structure was erected up to the 7th tier, and its verticality was checked on 20.4.2015, which was in order. Accordingly, the work for further erection was taken up in full swing. However, consequent to the earthquake which struck on 25.4.2015, the verticality of the said Boiler was found to have been disturbed.



Maximum out of verticality was observed as 80 mm at H-124 and J-124 columns against a permissible limit of 1 mm/m to a maximum of 25 mm. Carrying out further erection under such conditions would have endangered the whole boiler structure. Accordingly, the verticality of the structure was to be ensured first before taking further erection activities of the boiler of Unit-I.

- (b) For verticality correction, certain additional works were involved, which included the cutting of 30 welded beams and the deployment of additional hydraulic jacks to support the boiler structure, and chain pulley blocks were to be deployed for lifting, re-welding and correction of beams. This involved very high accuracy levels and extreme precautions, which otherwise could have acted as a serious threat to the whole boiler structure.
- (c) All efforts were made by the Petitioner to speed up the activities and to limit the delay caused due to the above said force majeure impact. However, the correction in the Boiler verticality took an additional 26 days, after which, further boiler erection activities were taken up. The delay due to the earthquake may be condoned, as the same was beyond the control of the Petitioner.

Submissions of the Respondent

59. The Respondent, MPPMCL, submitted that the Petitioner is making unjustifiable pleas and trying to place unrelated facts before the Commission since from Gadarwara to Nepal, the distance is more than 800 kilometers and the intensity of any such earthquake gets very minimal and may have no effect on this Project, due to such a long distance. It has been pointed out that the Petitioner has failed to produce any document/record, indicating the intensity of the earthquake in the places of Nepal and in the Gadarwara and Narshinghpur regions. Accordingly, the Respondent has submitted that the claim of the Petitioner to condone the delay due to the earthquake for 26 days may be rejected.

Analysis and Decision

60. The submissions have been considered. In the present case, the verticality of the Boiler appears to have been affected due to the earthquake in Nepal, the tremors of which were felt in the district wherein the Project is located, according to the Petitioner. Though the earthquake is



a force majeure event beyond the control of Petitioner, we note that the Petitioner has not substantiated its claim with regard to the damage caused on account of the earthquake tremor, with supporting documents, such as the detailed report along with the photographs showing the damage due to earthquake tremors, copy of the seismic data reconfirming the fact that a strong earthquake tremor with an epicenter in Nepal, had also been felt in the Gadarwara and Narsingpur regions. However, keeping in view the submissions of the Petitioner, we are of the view that the Petitioner cannot be held responsible for the force majeure event in terms of Regulation 3(25) (a) of the 2019 Tariff Regulations. Accordingly, the delay on this count from 25.4.2015 to 21.5.2015 is provisionally condoned. However, the said period gets subsumed in the delay due to land acquisition, which has already been condoned, as stated earlier. The Petitioner is, however, directed to submit the supporting documents, such as the detailed report and photographs showing the damage caused due to earthquake tremors, a copy of the seismic data reconfirming the fact that strong earthquake tremors with epicenter in Nepal were felt in the regions of Gadarwara and Narsingpur at the time of truing up of tariff.

L. Geological Surprises during the excavation for Make-up water Pump House (12.6.2015 to 27.7.2015)

61. The Petitioner has submitted the following:

- (a) During the excavation for the intake water pump house on the bank of the Narmada River at Kakaragat, hard rock strata were found instead of soft soil, which was unprecedented and unexpected, as the same was contradictory to the report of the soil test carried out.
- (b) Based on the initial soil survey as per the set standard, hard rock strata were less, and accordingly, BoQ of 1500 cubic metres for hard rock excavation was specified. However, during actual excavation, the hard rock strata were found to be about 35000 cubic meters, which was about 2300% more. On account of this geological surprise, the excavation work for the Make-up water pump house got delayed, as the excavation of the hard rocks takes more time than soft soil. Additional manpower and machinery were deployed to excavate the same so that delay on account of the same could be reduced, as the rate of excavation of the hard rock is much less than the rate of normal soil on the riverbed. On account of the additional hard rock excavation, which was a geological surprise, an additional time of about 1.5 months was taken to complete



the excavation for the Make-up water pump house. The geological surprise is a force majeure event, which was beyond the control of the Petitioner.

Submission of the Respondents

62. Respondent CSPDCL submitted that a prudence check may be carried out to ascertain the actual delay faced by the Petitioner. Respondent MSEDCL submitted that the Commission may review the documents related to soil test reports and the actual scenario and may accordingly decide on the force majeure event.

Rejoinder of the Petitioner

63. In response, the Petitioner submitted that a detailed explanation has been submitted in the amended petition along with supporting documents.

Analysis and Decision

64. The submissions of the parties have been examined. The Petitioner has not justified the delay and /or substantiated its claim along with the Soil Investigation report. The Petitioner has also not explained how such a huge variation was observed with regard to the actual site conditions vis-à-vis the Soil Investigation conducted. Accordingly, we find no reason to condone the delay due to geological surprises. However, we note that the period of the delay from 12.6.2015 to 27.7.2015 on this count, gets subsumed in the delay due to the land acquisition, which has already been condoned, as stated earlier. However, the Petitioner is granted liberty to claim the same along with all relevant supporting documents, including the detailed report on how such a huge variation was observed with regard to actual site conditions vis-à-vis the Soil Investigation conducted at the time of truing up of tariff.



Summary of Time Overrun

65. The three major reasons that are attributable to the delay, as claimed by the Petitioner and the delay condoned in this order, are as under:

- (a) Delay in ROU and Possession of Land for laying of Make-up Water Pipe Line (1.10.2013 to 7.5.2018)*
- (b) Delay in Railway siding works (1.11.2013 to 22.1.2020)*
- (c) Impact of Covid-19 Pandemic (1.3.2020 till 28.2.2021)*

Delay Details for Unit-I

66. Except for the above, all other factors that contributed to the delay (and condoned as above) have been subsumed in the aforesaid delay. Considering the month-wise details of the delay submitted by the Petitioner vide affidavit dated 26.11.2024, it is observed that the Petitioner has claimed a total delay, including the overlapping delay of 2669 days, on various counts as discussed in the earlier paragraphs. Considering the milestone-wise delay, as per the schedule furnished by the Petitioner, it is observed that there has been a total delay of 680 days from the scheduled COD of Unit-I to its actual COD. Since the Commission has condoned the delay till the actual COD of Unit-I, as discussed earlier, the entire delay for Unit-I has been condoned.

Delay Details for Unit-II

67. Similarly, considering the month-wise details of the delay submitted by the Petitioner vide its affidavit dated 26.11.2024, it is observed that the Petitioner has claimed a total delay, including overlapping delays of 2669 days, on various counts as discussed in the above paragraphs. Considering the milestone-wise delay as per the schedule submitted by the Petitioner, it is observed that there has been a total delay of 1135 days from the scheduled COD of Unit-II to its actual COD. Since the submissions of the Petitioner vide affidavit dated 26.11.2024 have been considered (as stated earlier), the delay in respect of Railway siding has



been allowed till 22.1.2020. The impact of COVID-19 for a period of 6 months (184 days) from 24.3.2020 to 23.9.2020 [against the claim of 365 days from 1.3.2020 to 28.2.2021] has been allowed as discussed in para 37 above. Also, a delay of 61 days (23.1.2020 – 23.3.2020) was disallowed as they were not covered under any of the factors claimed by the Petitioner coupled with the fact that the Petitioner has not furnished any adequate justification through supporting documents. Accordingly, the Petitioner is directed to submit the Railway siding completion details and timelines along with relevant documentary evidence at the time of truing-up of tariff.

68. Based on the above, the summary of the revised scheduled COD is approved as under:

	SCOD	Time overrun claimed (in days)	Time Overrun condoned (in days)	Revised SCOD	Actual COD	Time Overrun disallowed (in days)
Unit-I	21-7-2017	680	680	1-6-2019	1-6-2019	0
Unit-II	21-1-2018	1135	916	25-7-2020	1-3-2021	219

Capital Cost

69. Clause (1) of Regulation 19 of the 2019 Tariff Regulations provides that the capital cost as determined by the Commission after prudence check, in accordance with this regulation, shall form the basis of the determination of tariff for existing and new projects. Clause 2 of Regulation 19 of the 2019 Tariff Regulations provides as under:

“(2) The Capital Cost of a new project shall include the following:

- (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) Capitalized initial spares subject to the ceiling rates in accordance with these regulations;*
- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*



- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;*
- (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;*
- (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
- (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
- (n) Expenditure on account of change in law and force majeure events; and*
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.”*

70. The original investment approval of the Project was accorded by the Board of the Petitioner Company at its 392nd meeting on 26.2.2013, subject to MOEF clearance, at an estimated completed project cost of Rs.1286592 lakh at a price level of the 1st Quarter of 2013. As stated, the MOEF clearance was accorded on 22.3.2013 and accordingly, the zero date of the project is 22.3.2013. The Revised Cost Estimate (RCE) of Rs.1510522 lakh at a price level of the 1st Quarter of 2020 was approved by the Board of the Petitioner's Company at its 134th Meeting of the Project Sub-committee of the Board of Directors held on 30.7.2020. The Petitioner has submitted that RCE should be used as the reference point for the determination of the capital cost. We note that a similar issue came up for consideration before the Appellate Tribunal for Electricity (APTEL) in Appeal No. 165/2012 filed by PGCIL, wherein PGCIL had contended that despite it not submitting the RCE, the Commission ought to have allowed the higher apportioned capital cost of the concerned transmission assets. However, APTEL, in its judgment dated 28.11.2013, held as under:

“27. The Appellant has contended that since overall cost of the project has reduced from the approved cost, it was not required to obtain the approval of its' own Board for Revised Cost



Estimates for Raipur ICT III. The appellant has placed reliance on a Notification dated 30.3.1992 issued by the Government of India under section 43A of the Electricity (Supply) Act, 1948 stating that where the actual expenditure exceeds the approved project cost, the excess expenditure as approved by the Central Electricity Authority shall be deemed to be the actual expenditure.

28. Both the contention as well as the reliance of Appellant on 1992 notification are misplaced. The 1992 notification was issued in the context when the schemes of the Appellant were required to be approved by the Central Electricity Authority under Section 30 of the Electricity (Supply) Act, 1948. The 1948 Act has since been repealed and the Appellant is not required to get the approval of the CEA under the 2003 Act. Therefore, the 1992 notification has no relevance in the present matter.

29. The Central Commission has been mandated to determine the transmission tariff for the Appellant. The Central Commission has every right to ask ant relevant details from the Appellant for carrying out the prudence check on the expenditure of the Appellant.

30. The conduct of the Appellant is surprising. The Appellant is a Nava Public Sector Company of the Central Government. Its Board is empowered to approve its projects including the cost estimates for such projects. The Central Commission also accepts the cost approved by the Board of the Appellant. Under such circumstances, the Appellant could have approached its own Board for approval of the Revised Cost Estimates as desired by the Central Commission. Instead of going to its own Board, the Appellant preferred to approach this Tribunal in Appeal. Such an attitude is not proper.

Accordingly, the issue is decided against the Appellant."

71. The Petitioner submitted that the methodology followed by the Commission in all its orders, pursuant to the above judgment, is that wherever RCE is available, the cost is compared to the same, and where RCE is not available, the initial approved cost as per the Investment Approval is considered. The Petitioner added that the Commission has settled this principle in several of its orders and has consistently taken a view to consider the RCE as a reference cost.

Submission of the Respondent

72. The Respondent, MPPMCL, has submitted the following:

- (a) RCE should not be used as a reference point for the determination of the capital cost. The investment approval of the Project was accorded by the Board of the Petitioner's Company at its 392nd meeting on 26.2.2013 at Rs.12866 crore at a price level of 1st Quarter of 2013. Thereafter, the project cost was revised to Rs.15105.22 crore, based on the price level of 1st Quarter of 2020, and the same was approved by the Board of the Petitioner's Company at its 134th Project sub-committee meeting held on 30.7.2020. Any sub-committee of the Board of Directors of the Petitioner Company cannot overrule the approval by the Board of Directors of the Petitioner Company, and hence, the claim of the Petitioner to consider the RCE is without any legal basis and may be rejected.



- (b) The Petitioner has submitted that due to inordinate delay in execution of the Project, the RCE has reached to Rs.15105.22 crore (in terms of the revised Investment Approval dated 30.7.2020) against the current cost estimate (CCE) of Rs.11638.55 crore, which includes IDC and FC of Rs 1850.66 crore and Working Capital Margin (WCM) of Rs.255.65 crore as of the 1st Quarter of 2013 and indicative estimated completion cost (IECC) of Rs.12865.92 crore including IDC & FC Rs.1966.20 crore and WCM of Rs.265.50 crore in terms of Investment Approval dated 26.2.2013. The reasons submitted by the Petitioner for the inordinate delay were on account of revision in the site-specific actual conditions, various input rates of steel and cement, exchange rate variations, escalation close to actual in the specific, etc., and after incorporation of the amounts pertaining to ECS (FGD), asset transfer like MGR/Railway siding, etc. Therefore, the request to consider RCE as a reference point for the determination of capital cost is misconceived.
- (c) As admitted by the Petitioner, the RCE is a product of cost overrun, which is simply caused by an inordinate delay in the execution of the Project. Therefore, till the time the Commission does the prudence check on the reasons given by the Petitioner for time overrun and cost overrun, the reference point for the capital cost should be the indicative estimated completion cost of Rs.12865.92 crore, as approved by the Board of the Petitioner's Company in the Investment Approval. The same legal proposition has been upheld by the Commission in its order dated 13.6.2021 in Petition No. 81/TT/2016.
- (d) Without analysis and prudence check of the time overrun, resulting in the cost overrun, the Commission should not consider the RCE as a reference cost for the capital cost determination. The 2019 Tariff Regulations, do not provide for the consideration of RCE and stipulate for prudence check of the capital cost.

Rejoinder of the Petitioner

73. In response to the above, the Petitioner submitted that the project cost was revised to Rs.15105.22 crore (including IDC of Rs.2131.49 crore and WCM of Rs.255.65 crore) based on the price level of the 1st Quarter of 2020 and the same was approved on 30.7.2020 by the Board of the Petitioner's Company in its 134th Project Sub-Committee meeting. It has also been submitted that the methodology being followed by the Commission in all its orders is that wherever the RCE is available, the cost stated therein is considered, and wherever RCE is not available, the initial approved cost in the Investment Approval is considered. In this regard,



reliance has been placed on the Commission's order dated 5.4.2019 in Petition No.7/GT/2017 (NHPC V PSPCL & ors), Order dated 28.9.2017 in Petition Nos. 30/RP/2017 & 31/RP/2017 (PGCIL v. RRVPNL & ors) and Order dated 31.5.2018 in Petition No. 15/RP/2018 (PGCIL vs KPTCL & ors). Accordingly, the Petitioner submitted that a similar view may be taken by the Commission and reject the objections of the Respondent.

Analysis and Decision

74. The submissions have been considered. It is observed that there have been considerable changes in the scope of work between the inception of the Project and the actual execution of the Project due to land acquisition issues, an increase in the cost of land acquisition due to changes in law, termination of the contracts and delay due to law and order issues, etc., and these changes could not have been envisaged during the commencement of the Project. There is also an impact on the Project cost due to the time overrun, which has been condoned by the Commission, considering the same to be beyond the control of the Petitioner. In view of this, we are inclined to consider the RCE (based on the actual awarded cost) for a prudence check on the capital cost and additional capital expenditure to be approved. However, it is observed that the Petitioner has revised its Form-9A and Form-B vide affidavit dated 8.7.2022. Hence, the Petitioner is directed to submit the abovementioned forms duly certified by the Statutory Auditor at the time of truing-up of tariff. It is also observed that the Petitioner has claimed the expenses incurred under Land and R&R expenses under a single head. Accordingly, the Petitioner is directed to submit the complete break-up of land cost and R&R expenses separately, including the details of land acquired for Phase I and Phase II, and to confirm if the expenses incurred towards the purchase of land for Phase II have not been claimed, along with all necessary documentary evidence at the time of truing up of tariff.



Capital Cost as on COD of Unit-I

75. The Petitioner has claimed the capital cost of Rs.691618.56 lakh, on a cash basis, as on COD of Unit-I, as under:

	(Rs. in lakh)
	Amount
Gross Block as per IND-AS as on COD of Unit-I *	739551.45
Add: IND AS adjustment *	339.38
Gross Block as per IGAAP, on an accrual basis, as on COD of Unit-I *	739890.83
Less: Un-discharged liabilities included in above *	55861.07
Gross Block as per IGAAP, on a cash basis, as on COD of Unit-I *	684029.76
Add: Notional IDC	4297.00
Add: FERV charged to P&L	3291.80
Capital cost claimed as on COD of Unit-I	691618.56

* Auditor certified

76. The capital cost, as per IGAAP, on an accrual basis, as well as on a cash basis, amounting to Rs.739890.83 lakh and Rs.684029.76 lakh, respectively, as on the COD of Unit-I, is inclusive of IDC & FC of Rs.102911.64 lakh and FERV of Rs.8861.17 lakh. Accordingly, the hard cost component of the capital cost as on the COD of Unit-I works out to Rs.628118.02 lakh, on an accrual basis and Rs.572256.95 lakh, on a cash basis. The hard cost, on accrual, as well as on a cash basis, as on the COD of Unit-I, also includes the IEDC of Rs.49413.81 lakh. Considering the fact that the entire time overrun of 680 days has been condoned as on the COD of Unit-I, the allowable IEDC, after adjustment of the depreciation capitalized to the gross block and forming part of it, as on the COD of Unit-I amounting to Rs.2177.38 lakh, works out to Rs.47236.43 lakh. Accordingly, the hard cost, considered for the purpose of tariff, as on the COD of Unit-I, works out to Rs.570079.57 lakh (net of un-discharged liabilities of Rs.55861.07 lakh) on a cash basis. We examine the Petitioner's claim for IDC & FC, FERV, notional IDC, and FERV transferred to P&L as under:



IDC & FC

77. The Petitioner has claimed IDC & FC amounting to Rs.102911.64 lakh as on the COD of Unit-I. Considering the fact that the entire time overrun has been condoned as on the COD of Unit-I, the Petitioner's claim under this head is allowed.

FERV

78. The Petitioner has claimed FERV amounting to Rs.8861.17 lakh as on the COD of Unit-I. Considering the details of draws, repayment and the exchange rates, the Petitioner's claim is found to be in order and accordingly allowed.

Notional IDC

79. The Petitioner has claimed a notional IDC of Rs.4297.00 lakh as on the COD of Unit-I. Considering the quarterly debt-equity position corresponding to the actual cash expenditure and in terms of Regulation 19(2)(b) of the 2019 Tariff Regulations, the allowable notional/ normative IDC (over and above actual IDC) as on COD of Unit-I works out to Rs.2753.91 lakh.

FERV charged to Revenue

80. The Petitioner has claimed Rs.3291.80 lakh, as on the COD of Unit-I towards FERV charged to revenue. As per the consistent methodology adopted by the Commission, FERV charged to revenue up to COD is allowed as part of capital cost for the purpose of tariff. Accordingly, the Petitioner's claim of Rs.3291.80 lakh is allowed under this head.

81. In view of the above, the capital cost allowable as on the COD of Unit-I works out to Rs.687898.09 lakh.



Capital Cost as on COD of Unit-II/Station

82. The Petitioner has claimed the capital cost of Rs.1288773.18 lakh, on a cash basis, as on the COD of Unit-II as under:

<i>(Rs. in lakh)</i>	
	Amount
Gross Block as per IND AS as on COD of Unit-II *	1322964.81
Add: IND AS adjustment *	1810.14
Gross Block as per IGAAP, on an accrual basis, as on COD of Unit-II *	1324774.94
Less: Un-discharged liabilities included in above *	56568.91
Gross Block as per IGAAP, on a cash basis, as on COD of Unit-II *	1268206.04
Add: Notional IDC	6152.97
Add: FERV charged to P&L	14414.17
Capital cost claimed as on COD of Unit-II	1288773.18

* Auditor certified

83. The capital cost as per IGAAP, on an accrual basis, as well as on a cash basis, amounting to Rs.1324774.94 lakh and Rs.1268206.04 lakh, respectively, as on the COD of Unit-II, is inclusive of IDC & FC of Rs.202893.33 lakh and FERV of Rs.20336.30 lakh. Accordingly, the hard cost component of the capital cost, as on the COD of Unit-II, works out to Rs.1101545.31 lakh on an accrual basis and Rs.1044976.41 lakh on a cash basis. The hard cost, on accrual as well as on a cash basis, as on the COD of Unit-II, also includes an IEDC of Rs.128035.84 lakh. Considering the fact that the time overrun of 219 days has not been condoned as on COD of Unit-II, and further considering the details of the IEDC as furnished by the Petitioner, the IEDC of Rs.21701.26 lakh (Rs.17920.23 lakh towards time overrun not condoned *plus* Rs.3781.03 lakh towards adjustment of the depreciation capitalized to gross block and forming part of it, as on the COD of Unit-II) is disallowed. Accordingly, the IEDC allowable as on the COD of Unit-II works out to Rs.106334.58 lakh. Accordingly, the hard cost considered for the purpose of tariff, as on the COD of Unit-II/Station, works out to Rs.1023275.14 lakh (net of un-discharged liabilities of Rs.56568.91 lakh). We examine the Petitioner's claim for IDC & FC, FERV, notional IDC, and FERV transferred to P&L as under:

IDC and FC

84. The Petitioner has claimed IDC & FC amounting to Rs.202893.33 lakh as on the COD of Unit-II. Considering the fact that the time overrun of 219 days has been disallowed, as on the COD of Unit-II, the IDC & FC allowable, as on the COD of Unit-II, works out to Rs.178015.01 lakh.

FERV

85. The Petitioner has claimed FERV amounting to Rs.20336.30 lakh, as on the COD of Unit-II. Considering the details of the drawls, repayment, and exchange rates, the Petitioner's claim is found to be in order, and accordingly, the same is allowed.

Notional IDC

86. The Petitioner has claimed the notional IDC of Rs.6152.97 lakh, as on the COD of Unit-II. Considering the quarterly debt-equity position corresponding to the actual cash expenditure and in terms of Regulation 19(2)(b) of the 2019 Tariff Regulations, the allowable notional/ normative IDC (over and above actual IDC) as on the COD of Unit-II works out to Rs.4023.96 lakh.

FERV charged to Revenue

87. The Petitioner has claimed Rs.14414.17 lakh, as on COD of Unit-II, towards FERV charged to revenue. As per the consistent methodology adopted by the Commission, FERV charged to revenue up to the COD is allowed as part of capital cost for the purpose of tariff. Accordingly, the Petitioner's claim for Rs.14414.17 lakh is allowed under this head. The Petitioner is directed to furnish a statement showing the year-wise details of the FERV charged to revenue at the time of truing up of tariff.



88. Accordingly, the allowable capital cost as on COD of Unit-II/Station works out to Rs.1240064.59 lakh.

Initial Spares

89. Regulation 23 of the 2019 Tariff Regulations provides as under:

“13. Initial Spares: Initial spares shall be capitalized as a percentage of the Plant and Machinery cost up to cut-off date, subject to following ceiling norms:

(a) Coal-based/lignite-fired thermal generating stations - 4.0%

(b) Gas Turbine/Combined Cycle thermal generating stations - 4.0%

Provided that:

i. Plant and Machinery cost shall be considered as the original project cost excluding IDC, IEDC, Land Cost and Cost of Civil Works. The generating company and the transmission licensee for the purpose of estimating Plant and Machinery Cost, shall submit the break-up of head wise IDC and IEDC in its tariff application.

ii. where the generating station has any transmission equipment forming part of the generation project, the ceiling norms for initial spares for such equipment shall be as per the ceiling norms specified for transmission system under these regulations.”

90. The COD of the generating station is 1.3.2021, and accordingly, the cut-off date of the generating station is 31.3.2024. The Commission, vide ROP of the hearing dated 19.5.2022, sought from the Petitioner the details of the initial spares capitalized up to the COD of the generating station. In response, the Petitioner submitted that as per Form-B, the Plant & Machinery cost as per RCE is Rs.782166.30 lakh, which includes 4% of the initial spares. Accordingly, the Plant & Machinery cost (excluding the initial spares) works out to Rs.752080 lakh. Therefore, 4% of the initial spares works out to be Rs.30080 lakh. The Petitioner also submitted that the initial spares worth Rs.23465 lakh have been capitalized as on the COD of the generating station, and an amount of Rs.6615 lakh has been proposed to be capitalized up to the cut-off date of the generating station.

91. The Petitioner was again directed vide ROP of the hearing dated 6.2.2024 to submit the details of the initial spares capitalized up to the actual COD of Units-I & II (both on accrual and on a cash basis). In response, the Petitioner submitted that the Initial spares capitalized as on



the actual COD of Unit-I is Rs.21101.28 lakh on an accrual basis and Rs. 20730.59 lakh on a cash basis. The initial spares capitalized as on the actual COD of Unit-II is Rs.23464.96 lakh on an accrual basis and Rs.23326.66 lakh on a cash basis. Based on the Petitioner's submission, the balance amount of Rs.6615 lakh (i.e., Rs.30080 lakh–Rs.23465 lakh) is proposed to be capitalized up to the cut-off date, i.e., 31.3.2024. Since the balance capitalisation of Rs.6615 lakh is on an anticipation basis and is subject to revision, we, for the present, allow the initial spares as claimed by the Petitioner. This is, however, subject to revision, at the time of truing-up of tariff.

Liquidated Damages

92. The Petitioner has submitted that no LD has been recovered so far for any of the packages from the contractors. The Petitioner shall, as stated, furnish the details, if any, on this count at the time of truing up of tariff.

Capital cost allowed as on the COD of the Units

93. Accordingly, the capital cost allowed as on the COD of Units-I and II, is as under:

	(Rs. in lakh)	
	As on COD of Unit-I	As on COD of Unit-II/ Station
Capital cost claimed	691618.56	1288773.18
Less: IDC disallowed	-	24878.22
Less: IEDC disallowed	2177.38	21701.26
Less: Notional IDC disallowed	1543.09	2129.01
Capital cost allowed	687898.09	1240064.59

Additional Capital Expenditure for the period from COD of Unit-I till 31.3.2024

94. Regulation 24(1) of the 2019 Tariff Regulations provides as under:

“4. Additional Capitalization within the original scope and upto the cut-off date:

(1) The additional capital expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

(a) Undischarged liabilities recognized to be payable at a future date;



(b) Works deferred for execution;

(c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;

(d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;

(e) Change in law or compliance of any existing law; and

(f) Force Majeure events:

Provided that in case of any replacement of the assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de-capitalization."

95. The details of the additional capital expenditure claimed by the Petitioner, vide affidavit dated 8.7.2022, is as under:

Sl. No.	Head of Work/ Equipment	Additional capital expenditure claimed (Actual/Projected)						Regulations
		2019-20 (1.6.2019 to 31.3.2020) (Unit-I)	2020-21 (1.4.2020- 28.2.2021)	2020-21 (1.3.2021- 31.3.2021)	2021-22	2022-23	2023-24	
1	Land Including R & R	842.88	-1179.80	-	980.66	1901.44	-	24(1)(b)
2	TG Package	2310.03	-707.75	23.23	560.64	62.29		
4	ESP Package		-	-	-	-		
3	SG Package	3263.80	-1247.42	199.57	101.00	-	13600.00	
4	Locomotive	-	2144.60	-	-	-	-	
5	Station C&I	-	-	-11.18	97.23	10.80	-	
6	Water and Cooling system	-	-	-	2577.78	698.76	-	
7	Service and General Station Equipment	-	-	-	1198.58	215.18	-	
8	Ash Handling Plant	-	-	-	413.81	1355.72	1355.72	
9	Coal Handling System	-	-	-0.65	2689.72	298.86	-	
11	AC & Ventilation System	-	-	-	-	-	-	
10	FGD	-	-	-	-	67362.97	21289.00	
11	Make Up Water Pipeline JITF	-12.22	-	-	-	-	-	
12	LT Switchgear Package	-0.62	-	-	-	-	-	
13	Electrical system	-	-	-	-	412.59	-	
14	Switch Yard Package	-	-	-	758.47	84.27	-	
15	Railway siding and MGR	-	88725.54	-	3379.47	6626.90	6626.90	
16	Township package	6966.05	5141.04	2.93	4919.24	1379.81	-	



Sl. No.	Head of Work/ Equipment	Additional capital expenditure claimed (Actual/Projected)						Regulations
		2019-20 (1.6.2019 to 31.3.2020) (Unit-I)	2020-21 (1.4.2020-28.2.2021)	2020-21 (1.3.2021-31.3.2021)	2021-22	2022-23	2023-24	
17	Main Plant Civil and Structural Works	-	-	-	1562.51	1867.01	2760.80	
18	Construction tools	-	-	-	580.90	64.54	-	
19	MBOA	2.70	453.83	59.02				
20	Capital Spares	107.67	479.20	358.95	1547.00	1550.00	3167.00	
21	Computer and satellite communication	-	-	-	270.00	170.00	-	
	De-capitalization	-28.85	-193.76	-29.86	--	-	-	
	Total Additional Capitalisation claimed	13451.44	93615.48	602.01	22232.44	84061.14	48799.42	
	Add: Discharge of liabilities	12897.34	8687.65	400.49	5150.54	8513.36	45773.30	
	Total additional capitalisation claimed (including discharge of liabilities)	26348.78	102303.13	1002.50	27382.98	92574.50	94572.72	

Additional Capital Expenditure for the period from COD of Unit-I till COD of Unit-II

96. The Petitioner has claimed additional capital expenditure amounting to Rs.128651.91 lakh for the period from the COD of Unit-I till the COD of Unit-II. This includes an expenditure of Rs.13451.44 lakh towards works pertaining to the original scope of work and discharge of liabilities of Rs.12897.34 lakh for 2019-20 (i.e. from COD of Unit-I to 31.3.2020) and expenditure of Rs.93615.48 lakh towards works pertaining to the original scope of work and discharge of liabilities of Rs.8687.65 lakh for 2020-21 (i.e. from 1.4.2020 to COD of Unit-II). It is observed that the additional capital expenditure claim of Rs. 26348.81 lakh (including discharges of un-discharges liabilities amounting to Rs.12897.34 lakh) and Rs.102303.13 lakh (including discharges of un-discharged liabilities amounting to Rs.8687.65 lakh), form part of the original scope of work of the project and is within the cut-off date of the generating station. Hence, the



additional capital expenditure claimed by the Petitioner for 2019-20 (COD of Unit-I to 31.3.2020) and 2020-21 (1.4.2020 to COD of Unit-II) is allowed for the purpose of tariff. The Petitioner is directed to furnish the Auditor-certified liability flow statement and the Auditor-certified reconciliation statement of the additional capital expenditure claimed with the audited books of accounts for the period 2019-24 at the time of the truing-up of tariff.

Additional Capital Expenditure for the period from COD of Unit-II to 31.3.2024

97. The Petitioner has claimed the projected additional capital expenditure of Rs.215532.70 lakh (Rs.1002.50 lakh for the period from COD of Unit-II to 31.3.2021, Rs.27382.98 lakh in 2021-22, Rs.92574.50 lakh in 2022-23 and Rs. 94572.72 lakh in 2023-24, on a cash basis, under Regulation 24 of the 2019 Tariff Regulations, i.e., the works within the original scope of work. It is observed that the Petitioner's claim includes the additional capital expenditure of Rs.67362.97 lakh and Rs.21289.00 lakh (a total of Rs. 88651.97 lakh) towards the FGD package, under the original scope of work during the years 2022-23 and 2023-24. In response to the directions of the Commission vide ROP of the hearing dated 6.2.2024, the Petitioner has submitted that the FGD system is under various stages of commissioning, and the trial run and ODe are expected in 2024-25. As regards the queries raised regarding the operation of the FGD, the Petitioner submitted that the FGD system commissioning activities are in progress and are yet to be put to use. It also stated that the unit-wise dates of operation of the FGD system should be provided once the system is put to use. In view of this submission, the claim of the Petitioner for the FGD system has not been considered in this order. However, the Petitioner is at liberty to approach the Commission for claiming the expenditure on this count at the time of the truing-up of tariff, along with necessary documents, and the same will be considered in accordance with law. Accordingly, the additional capital expenditure of Rs.1002.50 lakh for the period from COD of



Unit-II to 31.3.2021, Rs.27382.98 lakh in 2021-22, Rs.25211.53 lakh in 2022-23 and Rs.73283.72 lakh in 2023-24 is allowed.

Capital cost allowed for the period 2019-24

98. Based on the above, the capital cost allowed for the purpose of tariff, subject to truing up, is as under:

	(Rs. in lakh)					
	2019-20	2020-21	2020-21	2021-22	2022-23	2023-24
	1.6.2019 to 31.3.2020	1.4.2020 to 28.2.2021	1.3.2021 to 31.3.2021			
Opening capital cost	687898.09	714246.87	1240064.59	1241067.09	1268450.07	1293661.60
Add: Additional capital expenditure	26348.78	102303.13	1002.50	27382.98	25211.53	73283.72
Closing capital cost	714246.87	816550.00	1241067.09	1268450.07	1293661.60	1366945.32
Average capital cost	701072.48	765398.44	1240565.84	1254758.58	1281055.83	1330303.46

Debt Equity Ratio

99. Regulation 18 of the 2019 Tariff Regulations provides as under:

“18. Debt-Equity Ratio: (1) For a new project, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:

ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

Explanation.-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilized for meeting the capital expenditure of the generating station or the transmission system.

(2)The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

Provided that in case of generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30% shall not be taken into account for tariff computation;

Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.”

100. The Petitioner has claimed tariff, considering the debt-equity ratio of 70:30. Considering the cumulative capital expenditure and the debt position as on respective CODs, the debt-equity ratio as on the COD of Unit-I and Unit-II works out to 65.25:34.75 and 70:30, respectively. These ratios are well within the normative debt: equity ratio of 70:30, and accordingly, the debt-equity ratio of 70:30 has been considered as on the COD of both the Units and for funding of the additional capital expenditure up to the COD of Unit-II. For the funding of the additional capital expenditure from the COD of Unit-II till 31.3.2024, the debt-equity ratio of 70:30 has been considered. The details of normative debt and equity considered and allowed during the period 2019-24, is as under:

	Capital cost as on COD of Unit-I (1.6.2019) (Rs. in lakh)	(%)	Capital cost as on COD of Unit-II (1.3.2021) (Rs. in lakh)	(%)	Additional capital expenditure from COD of Unit-II till 31.3.2024 (Rs. in lakh)	(%)	Capital cost as on 31.3.2024 (Rs. in lakh)	(%)
Debt	481528.67	70	868045.21	70	88816.51	70	956861.72	70
Equity	206369.43	30	372019.38	30	38064.22	30	410083.59	30
Total	687898.09	100	1240064.59	100	126880.73	100	1366945.32	100

Return on Equity

101. Regulation 30 of the 2019 Tariff Regulations provides as under:

“30. Return on Equity:

(1) Return on equity shall be computed in rupee terms on the equity base determined in accordance with Regulation 18 of these regulations.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations transmission system including communication system and run of river hydro generating station and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

Provided further that:

(i) In case of a new project the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO) data telemetry communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;

(ii) in case of existing generating station as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

(iii) in case of a thermal generating station with effect from 1.4.2020:

(a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;

(b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute subject to ceiling of additional rate of return on equity of 1.00%:

Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.”

102. Regulation 31 of the 2019 Tariff Regulations provides as under:

“31. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission as the case may be) shall be excluded for the calculation of effective tax rate.

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where “t” is the effective tax rate in accordance with Clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business as the case may be and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT) “t” shall be considered as MAT rate including surcharge and cess.

Illustration-

(i) In case of the generating company or the transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:

Rate of return on equity = $15.50/(1-0.2155) = 19.758\%$

(ii) In case of a generating company or the transmission licensee paying normal corporate tax including surcharge and cess:

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs. 1000 crore;

(b) Estimated Advance Tax for the year on above is Rs. 240 crore;

(c) Effective Tax Rate for the year 2019-20 = Rs. 240 crore / Rs. 1000 crore = 24%;

(d) Rate of return on equity = $15.50/(1-0.24) = 20.395\%$.

(3) The generating company or the transmission licensee as the case may be shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty if any arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up shall be recovered or refunded to beneficiaries or the long-term customers as the case may be on year to year basis."

103. The Petitioner has claimed the Return on Equity (ROE) considering a base rate of 15.50% and the effective tax rate of 17.472% for the period 2019-24; the same has been considered.

Accordingly, ROE has been worked out and allowed as under:

	(Rs. in lakh)					
	2019-20 (1.6.2019 to 31.3.2020)	2020-21 (1.4.2020 to 28.2.2021)	2020-21 (1.3.2021 to 31.3.2021)	2021-22	2022-23	2023-24
Notional Equity - Opening (A)	206369.43	214274.06	372019.38	372320.13	380535.02	388098.48
Addition of Equity due to additional capital expenditure (B)	7904.63	30690.94	300.75	8214.89	7563.46	21985.12
Normative Equity - Closing (C) = (A+B)	214274.06	244965.00	372320.13	380535.02	388098.48	410083.59
Average Normative Equity (D) = (A+C)/2	210321.74	229619.53	372169.75	376427.57	384316.75	399091.04
Return on Equity (Base Rate) (E)	15.500%	15.500%	15.500%	15.500%	15.500%	15.500%
Effective Tax Rate (F)	17.472%	17.472%	17.472%	17.472%	17.472%	17.472%
Rate of Return on Equity (Pre-tax) (G) = (E)/(1-F)	18.782%	18.782%	18.782%	18.782%	18.782%	18.782%
Return on Equity (Pre-tax) (annualized) (H) = (DxG)	39502.63	43127.14	69900.92	70700.63	72182.37	74957.28
Return on Equity (Pre-tax) (pro-rata)	32918.86	39464.29	5936.79	70700.63	72182.37	74957.28



Interest on loan

104. Regulation 32 of the 2019 Tariff Regulations provides as under:

“32. Interest on loan capital: (1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan. (2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan. (3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalization of such asset. (4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year. (5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized: Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered: Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered. (6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest. (7) The changes to the terms and conditions of the loan shall be reflected from the date of such re-financing.”

105. Accordingly, Interest on loan has been worked out as under:

- (i) As stated above, the gross normative loan of Rs.481528.67 lakh and Rs.868045.21 lakh, have been considered as on COD of Unit-I & Unit-II, respectively.
- (ii) Cumulative repayment of ‘nil’ and Rs.61853.93 lakh, has been considered as on COD of Unit-I & Unit-II, respectively.
- (iii) Addition to the normative loan on account of additional capital expenditure approved above has been considered.
- (iv) Depreciation allowed has been considered as repayment of the normative loan during the respective year of the period 2019-24.
- (v) The weighted average rate of interest (WAROI) claimed by the Petitioner for the period 2019-24 has been considered for the purpose of tariff. The Petitioner is directed to certify that the rate of interest claimed towards individual loans in Form-13 are the actual applicable rates and do not include any additional markup towards sharing of savings due



to refinancing, if any, at the time of truing up of tariff.

106. The necessary calculation of the Interest on loan is as under:

	(Rs. in lakh)					
	2019-20 (1.6.2019 to 31.3.2020)	2020-21 (1.4.2020 to 28.2.2021)	2020-21 (1.3.2020 to 31.3.2021)	2021-22	2022-23	2023-24
Gross opening loan (A)	481528.67	499972.81	868045.21	868746.96	887915.05	905563.12
Cumulative repayment of loan upto previous year/ period (B)	0.00	28139.33	61853.93	67124.98	129907.42	194005.66
Net Loan Opening (C) = (A) - (B)	481528.67	471833.48	806191.28	801621.98	758007.62	711557.46
Addition due to additional capital expenditure (D)	18444.15	71612.19	701.75	19168.09	17648.07	51298.60
Repayment of loan during the period (E)	28139.91	33714.60	5271.77	62782.44	64098.23	66562.36
Repayment adjustment on account of de-capitalization (F)	0.58	0.00	0.72	0.00	0.00	0.00
Net Repayment of during the year (G) = (E) - (F)	28139.33	33714.60	5271.05	62782.44	64098.23	66562.36
Net Loan Closing (H) = (C) + (D) - (G)	471833.48	509731.07	801621.98	758007.62	711557.46	696293.70
Average Loan (I) = (C+H)/2	476681.07	490782.28	803906.63	779814.80	734782.54	703925.58
Weighted Average Rate of Interest on loan (J)	6.6179%	6.0461%	5.8478%	5.8322%	5.7653%	5.6400%
Interest on Loan (K) = (I) x (J) - (annualized)	31546.28	29673.19	47010.85	45480.36	42362.42	39701.40
Interest on loan (L) (pro-rata)	26288.56	27153.00	3992.70	45480.36	42362.42	39701.40

Depreciation

107. Regulation 33 of the 2019 Tariff Regulations provides as under:

“33. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:

Provided also that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or the extended life.

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.

(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.

(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services.”

108. The Petitioner has claimed depreciation, considering the weighted average rate of depreciation (WAROD) of 4.82% for the period from the COD of Unit-I till the COD of Unit-II, 5.004% for the period from the COD of Unit-II till 31.3.2021 and 5.010% for the period 2021-24. However, considering the rate of depreciation, as specified in Appendix-I to the 2019 Tariff Regulations, and after rectifying certain minor corrections, the WAROD works out to 4.8166% for the period from COD of Unit-I to 31.3.2020, 4.8137% for the period from 1.4.2020 to COD of Unit-II, 5.0034% for the period from COD of Unit-II to 31.3.2021 and 5.0035% for the period 2021-24. This has been considered for the purpose of tariff. Depreciation adjustment has been

provided for the de-capitalization considered during the period 2019-24. Accordingly, depreciation has been worked out and allowed as under:

	(Rs. in lakh)					
	2019-20 (1.6.2019 to 31.3.2020)	2020-21 (1.4.2020 to 28.2.2021)	2020-21 (1.3.2021 to 31.3.2021)	2021-22	2022-23	2023-24
Average capital cost (A)	701,072.48	765,398.44	1,240,565.84	1,254,758.58	1,281,055.83	1,330,303.46
Value of freehold land included above (B)	40377.61	39829.93	39240.02	39240.02	39240.02	39240.02
Aggregated depreciable value [C = (A-B) x 90%]	594625.39	653011.66	1081193.23	1093966.70	1117634.23	1161957.09
Balance useful life of the at beginning of the year (D)	25.00	24.63	24.13	24.04	23.04	22.04
WAROD (E)	4.8166%	4.8137%	5.0034%	5.0035%	5.0035%	5.0035%
Remaining depreciable value (F)	594625.39	624872.33	1019339.30	1026841.72	987726.81	967951.44
Depreciation (for the period) (G = A x E x No. of days during the period / No. of days during the year)	28139.91	33714.60	5271.77	62782.44	64098.23	66562.36
Depreciation (H) - (annualized)	33767.89	36843.80	62070.88	62782.44	64098.23	66562.36
Cumulative depreciation (at the end of the period) (I = G + 'I' of previous year/period)	28,139.91	61,853.93	67,125.70	129,907.42	194,005.66	260,568.02
Cumulative depreciation adjustment due to de-capitalization (J)	0.58	0.00	0.72	0.00	0.00	0.00
Net cumulative depreciation at the end of the year/ period (K= I - J)	28,139.33	61,853.93	67,124.98	129,907.42	194,005.66	260,568.02

Operation & Maintenance Expenses

109. Regulation 35(1)(1) of the 2019 Tariff Regulations provides for the following O&M expenses:

Year	800 MW (Rs. lakh/MW)
2019-20	18.23
2020-21	18.87
2021-22	19.54
2022-23	20.22
2023-24	20.93

110. Accordingly, the total O&M expenses claimed by the Petitioner are as under:

(Rs. in lakh)

	2019-20 (1.6.2019- 31.3.2020)	2020-21 (1.4.2020- 28.2.2021)	2020-21 (1.3.2021- 31.3.2021)	2021-22	2022-23	2023-24
Normative O&M expenses claimed under Regulation 35(1)(1) of the 2019 Tariff Regulations	14584.00	15096.00	30192.00	31264.00	32352.00	33488.00
O&M expenses ECS (FGD)	-	-	-	-	1347.26	1820.19
Water Charges	363.00	1007.00	1528.00	1017.00	781.75	781.75
Security Expenses	1759.00	1935.00	2406.00	2023.02	2093.83	2167.11
Total O&M Expenses	16706.00	18038.00	34126.00	34304.02	36574.84	38257.05

111. Since the normative O&M expenses claimed by the Petitioner are in terms of Regulation 35(1)(1) of the 2019 Tariff Regulations, the same is allowed.

O&M Expenses for FGD system

112. The Petitioner has claimed O&M expenses on account of implementation of FGD amounting to Rs.1347.26 lakh in 2022-23 and Rs.1820.19 lakh in 2023-24, as 2% of the capital cost of FGD. It is observed that the Petitioner is yet to commission the FGD systems. The Petitioner is granted liberty on this count, in terms of our discussions in para 97 above. The Petitioner is permitted to claim the O&M expenses towards the FGD system on the basis of the actual cost of the FGD package at the time of the truing-up of tariff, and the same will be considered in accordance with law.

Water Charges

113. Regulation 35(1)(6) of the 2019 Tariff Regulations provides for the consideration of the claims for Water charges, Security expenses, and capital spares as under:

“35(1)(6) The Water, Security Expenses and Capital Spares for thermal generating stations shall be allowed separately and after prudence check:

Provided that water charges shall be allowed based on water consumption depending upon type of plant, type of cooling water system etc., subject to prudence check. The details regarding the same shall be furnished along with the petition.”

xxx



114. In terms of the above proviso, water charges are to be allowed based on the water consumption depending upon the type of plant, type of cooling water system, etc., subject to prudence check. The Petitioner, in the amended Petition, has furnished the water charges to be allowed in tariff on an actual basis for the period from COD of Unit-I to 31.3.2020 and on a projected basis from 2020-21 to 2023-24. The details in respect of water charges, such as type of cooling water system, water consumption, and rate of water charges furnished by the Petitioner, are as under:

Description	Remarks
Type of Plant	Coal
Type of cooling water system	Closed Circuit Cooling System
Allocation of Water for Gadarwara STPS	56 MCM
Rate of Water charges	Rs 1.55 per Cubic meter
Total Yearly Water Charges as per allocation	Rs. 781 lakh

115. The Petitioner, in Form-3A of the amended Petition, has claimed water charges as under:

(Rs. in lakh)					
2019-20 (1.6.2019 to 31.3.2020)	2020-21 (1.4.2020 to 28.2.2021)	2020-21 (1.3.2021 to 31.3.2021)	2021-22	2022-23	2023-24
363.00	1007.00	1528.00	1017.00	781.75	781.75

116. The Petitioner was directed to submit the detailed expenses incurred towards water charges, and the Petitioner, in compliance with the same, submitted the details of the actual water charges incurred along with a copy of the Water supply agreement and the sample bills. It is noticed that the water charges claimed do not include the Power charges paid by the Petitioner. In view of this, the water charges claimed by the Petitioner are allowed. The Petitioner is directed to submit documentary evidence, such as an agreement copy, Bills including the basis for the escalation considered, etc., at the time of truing up of tariff.



Capital Spares

117. The Petitioner has not claimed any capital spares on a consumption basis. Accordingly, the same has not been considered. The claim of the Petitioner, if any, towards capital spares at the time of truing up of tariff shall be considered on merits after prudence check.

Security Expenses

118. Regulation 35(1)(g) of the 2019 Tariff Regulations provides for claims towards security expenses as under:

“(6) The Water Charges, Security Expenses and Capital Spares for thermal generating stations shall be allowed separately after prudence check:

xxx

Provided further that the generating station shall submit the assessment of the security requirement and estimated expenses;”

119. The security expenses claimed by the Petitioner is as under:

<i>(Rs. in lakh)</i>					
2019-20 (1.6.2019 to 31.3.2020)	2020-21 (1.4.2020 to 28.2.2021)	2020-21 (1.3.2021 to 31.3.2021)	2021-22	2022-23	2023-24
1759.00	1935.00	2406.00	2023.02	2093.83	2167.11

120. The Petitioner has submitted that the security expenses claimed are based on the estimated expenses for the period 2019-24 and shall be subject to retrospective adjustment, based on actuals, at the time of truing up of tariff. We note that the Petitioner has not furnished the assessment of the security requirement in terms of the last proviso to the above regulations. However, the projected security expenses as claimed by the Petitioner, as above, are allowed for the purpose of tariff. The Petitioner is directed to furnish the requisite details for carrying out the prudence check of the security expenses at the time of truing-up of tariff.



Fly Ash Transportation expenses

121. In addition to the above expenses, the Petitioner, vide affidavit dated 6.4.2022, has claimed the additional expenditure towards Fly Ash Transportation as per the MoEF&CC Notification dated 31.12.2021, which mandates the “statutory obligation of 100% utilization of ash, shall be treated as a change in law, wherever applicable”. The Petitioner submitted that the said notification would lead to additional transportation costs being incurred to deliver the fly ash to industries/users such as road and flyover embankments, shoreline protection structures in coastal districts, dams within 300 kms from the TPPs, and any other expenditure which is required for achieving 100% ash utilization as per the prescribed timeline. The projection of the cost as proposed by the Petitioner is summarized below:

Year	Expected Ash Generation (Lakh Ton)	Utilization (lakh Ton)						Ash Disposal cost (Rs lakh)
		Road Projects	Product Manufacturing	filling of low-lying area	mine void filling	other avenues	Total	
2022-23	22	25	0.05	0.03	3.0	0.0	32.08	35676.88
2023-24	22	25	0.05	0.0	3.0	0.0	32.05	35672.38

122. The matter has been examined. It is observed that the Commission vide its order dated 28.10.2022 in Petition 205/MP/2021 (filed by the Petitioner for recovery of additional expenditure incurred due to Fly Ash transportation charges, had allowed the expenditure incurred towards the fly ash transportation for the years 2019-20, 2020-21 and 2021-22, as under:

“39. Petitioner has furnished the details of the distance to which fly ash has been transported from the generating station, schedule rates applicable for transportation of fly ash, as notified by the State Governments along with details, including Auditor certified accounts. These documents have been examined and accordingly, the total fly ash transportation expenditure allowed to the Petitioner generating station wise for the period 2019-22 is as per the table in para 38 above totaling to Rs.309704.03 lakh and the same shall be recovered from the beneficiaries of the respective generating stations in 6 (six) equal monthly instalments. However, the Petitioner is directed to submit details regarding award of transportation contracts, distance to which fly ash has been transported along with duly reconciled statements of expenditure incurred on ash transportation at the time of filing petitions for truing up of tariff for the 2019-24 tariff period of the generating stations.”



123. However, in the said order, the cost incurred for the period from 2022-24 was decided as under:

“43. In the light of the above discussion and keeping in view that the Petitioner is entitled for recovery of fly ash transportation charges, under change in law, as additional O&M expenses, we permit the provisional billing at 90% of the fly ash transportation charges incurred by the Petitioner, in respect of its generating stations, for the balance period (i.e. 2022-24), on a monthly basis, based on self -certification, and the beneficiaries shall pay the same accordingly. This is, however, subject to prudence check of the claims, at the time of truing-up of tariff for the period 2019-24, in respect of the generating stations of the Petitioner, in terms of Regulation 13 of the 2019 Tariff Regulations.”

124. Since the claim of the Petitioner had been considered and disposed of by the Commission vide order dated 28.10.2022 in Petition 205/MP/2021, the claim of the Petitioner, in this petition, shall be governed by the findings of the Commission in the said order.

125. Accordingly, the total O&M expenses, including water charges and security expenses, as claimed by the Petitioner and allowed for the period 2019-24, are as under:

	<i>(Rs in lakh)</i>					
	2019-20 (1.6.2019 to 31.3.2020)	2020-21 (1.4.2020 to 28.2.2021)	2020-21 (1.3.2021 to 31.3.2021)	2021-22	2022-23	2023-24
Normative O&M expenses <i>claimed</i> under Regulation 35(1)(1) of the 2019 Tariff Regulations	14584.00	15096.00	30192.00	31264.00	32352.00	33488.00
Normative O&M expenses <i>allowed</i> under Regulation 35(1)(1) of the 2019 Tariff Regulations	14584.00	15096.00	30192.00	31264.00	32352.00	33488.00
O&M expenses ECS (FGD) <i>claimed</i>	-	-	-	-	1347.26	1820.19
O&M expenses ECS (FGD) <i>allowed</i>	-	-	-	-	-	-
Ash Transportation <i>claimed</i>					35676.88	35672.38
Ash Transportation <i>allowed</i>					-	-
Water Charges <i>claimed</i>	363.00	1007.00	1528.00	1017.00	781.75	781.75
Water Charges <i>allowed</i>	363.00	1007.00	1528.00	1017.00	781.75	781.75
Security Expenses <i>claimed</i>	1759.00	1935.00	2406.00	2023.02	2093.83	2167.11
Security Expenses <i>allowed</i>	1759.00	1935.00	2406.00	2023.02	2093.83	2167.11
Total O&M Expenses Claimed	16706.00	18038.00	34126.00	34304.02	36574.84*	38257.05*
Total O&M Expenses Allowed	16706.00	18038.00	34126.00	34304.02	35227.58	36436.86

* Note: Sum is excluding Ash Transportation since it was claimed separately vide affidavit dated 6.4.2022



Operational Norms

126. The Petitioner has considered the following operation norms:

Normative Annual Plant Availability Factor (NAPAF) (%)	85%
Heat Rate (kCal/kwh)	2262.79
Auxiliary Power Consumption (%)	6.25%
Specific Oil Consumption (ml/kwh)	0.5

Normative Annual Plant Availability Factor (NAPAF)

127. Regulation 49(A) of the 2019 Tariff Regulations provides as under:

“(A) Normative Annual Plant Availability Factor (NAPAF)

*(a) For all thermal generating stations, except those covered under clauses (b), (c), (d), & (e) - 85%;
xxx.”*

128. As the NAPAF of 85% claimed is in terms of the above regulation, the same is allowed.

Gross Station Heat Rate (kCal/kWh)

129. Regulation 49(C)(b)(i) of 2019 Tariff Regulations provides as under:

“(i) For Coal-based and lignite-fired Thermal Generating Stations:

1.05 X Design Heat Rate (kCal/kWh)

Where the Design Heat Rate of a generating unit means the unit heat rate guaranteed by the supplier at conditions of 100% MCR, zero percent make up, design coal and design cooling water temperature/back pressure.

Provided that the design heat rate shall not exceed the following maximum design unit heat rates depending upon the pressure and temperature ratings of the units:

Pressure Rating (Kg/cm2)	150	170	170
SHT/RHT (°C)	535/535	537/537	537/565
Type of BFP	Electrical Driven	Turbine Driven	Turbine Driven
Max Turbine Heat Rate (kCal/kWh)	1955	1950	1935
Min. Boiler Efficiency			
Sub-Bituminous Indian Coal	0.86	0.86	0.86
Bituminous Imported Coal	0.89	0.89	0.89
Max. Design Heat Rate (kCal/kWh)			
Sub-Bituminous Indian Coal	2273	2267	2250
Bituminous Imported Coal	2197	2191	2174

Pressure Rating (Kg/cm2)	247	247	270	270
SHT/RHT (°C)	537/565	565/593	565/593	600/600
Type of BFP	Turbine Driven	Turbine Driven	Turbine Driven	Turbine Driven
Max Turbine Heat Rate (kCal/kWh)	1900	1850	1810	1800
Min. Boiler Efficiency				
Sub-Bituminous Indian Coal	0.86	0.86	0.865	0.865



Bituminous Imported Coal	0.89	0.89	0.895	0.895
Max. Design Heat Rate (kCal/kWh)				
Sub-Bituminous Indian Coal	2222	2151	2105	2081
Bituminous Imported Coal	2135	2078	2034	2022

Provided further that in case pressure and temperature parameters of a unit are different from above ratings, the maximum design heat rate of the unit of the nearest class shall be taken:

Provided also that where heat rate of the unit has not been guaranteed but turbine cycle heat rate and boiler efficiency are guaranteed separately by the same supplier or different suppliers, the design heat rate of the unit shall be arrived at by using guaranteed turbine cycle heat rate and boiler efficiency:

Provided also that where the boiler efficiency is lower than 86% for Subbituminous Indian coal and 89% for bituminous imported coal, the same shall be considered as 86% and 89% for Sub-bituminous Indian coal and bituminous imported coal respectively, for computation of station heat rate:

Provided also that maximum turbine cycle heat rate shall be adjusted for type of dry cooling system:

Provided also that in case of coal based generating station if one or more generating units were declared under commercial operation prior to 1.4.2019, the heat rate norms for those generating units as well as generating units declared under commercial operation on or after 1.4.2019 shall be lowest of the heat rate norms considered by the Commission during tariff period 2014-19 or those arrived at by above methodology or the norms as per the sub-clause (C)(a)(i) of this Regulation:

Provided also that in case of lignite-fired generating stations (including stations based on CFBC technology), maximum design heat rates shall be increased using factor for moisture content given in sub-clause (C)(a)(iv) of this Regulation:

Provided also that for Generating stations based on coal rejects, the Commission shall approve the Station Heat Rate on case to case basis.

Note: In respect of generating units where the boiler feed pumps are electrically operated, the maximum design heat rate of the unit shall be 40 kCal/kWh lower than the maximum design heat rate of the unit specified above with turbine driven Boiler Feed Pump."

130. The Petitioner has considered the Gross Station Heat Rate (GSHR) of 2262.79 kCal/kWh, based on a maximum turbine heat rate of 1832 kCal/kWh and boiler efficiency of 85.01% for sub-bituminous Indian coal. The Petitioner has also submitted the details of the guaranteed parameters with regard to Boiler efficiency, Turbine cycle heat rate, and the Unit heat rate, duly certified by the OEM. It is observed that the Boiler efficiency claimed by the Petitioner is lower than the permissible limit of 86%, Accordingly, in line with Regulation 49(C)(b)(i) of the 2019 Tariff Regulations, the Boiler efficiency of 86%, has been considered for the computation of Station Heat Rate. Based on the same, the GSHR is calculated as 2236.74 kCal/kWh.

Specific Oil Consumption

131. Regulation 49(D)(a) of 2019 Tariff Regulations provides as under:

“(a) For Coal-based generating stations other than at (c) below: 0.50 ml/kWh”

132. As the secondary fuel oil consumption of 0.50 ml/kWh claimed is in terms of the above Regulation, the same is allowed.

Auxiliary Power Consumption

133. Regulation 49(E)(a) of 2019 Tariff Regulations provides as under:

“(a) For Coal-based generating stations except at (b) below:

S. No.	Generating Station	With Natural Draft cooling tower or without cooling tower
(i)	200 MW series	8.50%
(ii)	300 MW and above	
	Steam driven boiler feed pumps	5.75%
	Electrically driven boiler feed pumps	8.00%

Provided that for thermal generating stations with induced draft cooling towers and where tube type coal mill is used, the norms shall be further increased by 0.5% and 0.8%, respectively: Provided further that Additional Auxiliary Energy Consumption as follows shall be allowed for plants with Dry Cooling Systems:

Type of Dry Cooling System	(% of gross generation)
Direct cooling air cooled condensers with mechanical draft fans	1.0%
Indirect cooling system employing jet condensers with pressure recovery turbine and natural draft tower	0.5%

Note: The auxiliary energy consumption for the unit capacity of less than 200 MW sets shall be dealt on case-to-case basis.”

134. In terms of the above regulations, the Petitioner has considered the auxiliary energy consumption of 6.25% during the period from the COD of Unit-I to 31.3.2022 and 7.25% each for the years 2022-23 and 2023-24. The Petitioner has considered an additional auxiliary consumption of 1% on account of FGD in 2022-23 and 2023-24. Since FGD is yet to be put to use, the additional auxiliary consumption claimed has not been considered. The Petitioner is permitted to claim the normative auxiliary consumption on account of implementation of the FGD



system as and when the same is put to use. Accordingly, the auxiliary consumption of 6.25% is allowed.

Interest on Working Capital

135. Sub-section (a) of clause (1) of Regulation 34 of the 2019 Tariff Regulations provides as under:

“34. Interest on Working Capital: (1) The working capital shall cover:

(a) For Coal-based/lignite-fired thermal generating stations:

(i) Cost of coal or lignite and limestone towards stock if applicable for 10 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;

(ii) Advance payment for 30 days towards cost of coal or lignite and limestone for generation corresponding to the normative annual plant availability factor;

(iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor and in case of use of more than one secondary fuel oil cost of fuel oil stock for the main secondary fuel oil;

(iv) Maintenance spares @ 20% of operation and maintenance expenses including water charges and security expenses;

(v) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on the normative annual plant availability factor; and

(vi) Operation and maintenance expenses including water charges and security expenses for one month.

(b) xxxxxx

(2) The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined:

Provided that in case of new generating station the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months as used for infirm power preceding date of commercial operation for which tariff is to be determined.

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof as the case may be is declared under commercial operation whichever is later.

Provided that in case of truing-up the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.

(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency.”

Fuel Cost and Energy Charges in Working Capital

136. Regulation 34(2) of the 2019 Tariff Regulations provides that the computation of the cost of fuel as part of Interest on Working Capital (IWC) is to be based on the landed price and GCV of fuel as per actuals for the third quarter of preceding financial year, in case of each financial year for which tariff is to be determined. Regulation 43(2) of the 2019 Tariff Regulations provides as under:

“(2) Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the following formulae:

(a) For coal based and lignite fired stations:

$$ECR = \{(SHR - SFC \times CVSF) \times LPPF / CVPF + SFC \times LPSFi + LC \times LPL\} \times 100 / (100 - AUX)$$

(b) For gas and liquid fuel-based stations:

$$ECR = SHR \times LPPF \times 100 / \{(CVPF) \times (100 - AUX)\}$$

Where,

AUX = Normative auxiliary energy consumption in percentage.

CVPF = (a) Weighted Average Gross calorific value of coal as received, in kCal per kg for coal-based stations less 85 Kcal/Kg on account of variation during storage at generating station;

(b) Weighted Average Gross calorific value of primary fuel as received, in kCal per kg, per litre or per standard cubic meter, as applicable for lignite, gas and liquid fuel based stations;

(c) In case of blending of fuel from different sources, the weighted average Gross calorific value of primary fuel shall be arrived in proportion to blending ratio:

CVSF = Calorific value of secondary fuel, in kCal per ml;

ECR = Energy charge rate, in Rupees per kWh sent out;

SHR = Gross station heat rate, in kCal per kWh;

LC = Normative limestone consumption in kg per kWh;

LPL = Weighted average landed cost of limestone in Rupees per kg;

LPPF = Weighted average landed fuel cost of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month. (In case of blending of fuel from different sources, the weighted average landed fuel cost of primary fuel shall be arrived in proportion to blending ratio);

SFC= Normative specific fuel oil consumption, in ml per kWh;

LPSFi= Weighted Average Landed Fuel Cost of Secondary Fuel in Rs./ ml during the month:

Provided that energy charge rate for a gas or liquid fuel based station shall be adjusted for open cycle operation based on certification of Member Secretary of respective Regional Power Committee during the month.”

137. The Petitioner has claimed the cost of fuel component in the working capital and Energy Charge Rate (ECR) based on the following:

(a) Operational norms as per the 2019 Tariff Regulations.

(b) Price and ‘as received GCV of coal (after reducing the same by 85 kCal/kWh in terms of above quoted Regulation) procured for the three months of March 2019, April 2019, and May 2019 for

Unit-I and for the month of December 2020, January 2021 and February 2021 for the COD of Unit-II.

(c) Price and GCV of secondary fuel oil for the three months of March 2019, April 2019 and May 2019 for Unit-I and for the months of December 2020, January 2021 and February 2021 for the COD of Unit-II.

138. Accordingly, the Petitioner has claimed an ECR of Rs. 4.216 per kWh from the COD of Unit-I to the COD of Unit-II and Rs. 2.523 per kWh from the COD of Unit-II to 31.3.2024:

	<i>(Rs. in lakh)</i>					
	2019-20 (1.6.2019- 31.3.2020)	2020-21 (1.4.2020- 28.2.2021)	2020-21 (1.3.2021- 31.3.2021)	2021-22	2022-23	2023-24
Cost of coal for 40 days	32035.70	32035.70	38209.43	38938.16	38938.16	38938.16
Cost of secondary fuel oil for 2 months	263.33	262.61	486.04	433.17	433.15	434.34
Cost of limestone for 50 days					690.58	690.58

139. On perusal of the Form-15 furnished by the Petitioner vide its affidavit dated 11.3.2022, it is observed that the Petitioner has included the opening stock of coal and its corresponding value while computing the weighted average price of coal for the three months prior to each COD. However, in terms of Regulation 34(2) of the 2019 Tariff Regulations, the computation of the cost of fuel as part of IWC is to be based on the landed price and GCV of fuel as per actuals, which means that only the fuel received during these three months, is to be considered, and no opening stock, shall be included therein. Accordingly, the opening stock of coal and its corresponding values have been excluded while computing the weighted average price and GCV of coal. Further, it is also observed that the Petitioner has not provided the GCV of domestic coal supplied as received at the Station for NTPC Mines, so the weighted average GCV and price of coal are computed provisionally based on available data, and the Petitioner is directed to provide the necessary information during truing-up. For the present, the weighted average price and GCV of oil as furnished by the Petitioner have been considered. The Petitioner is directed to furnish Form-15, in respect of both the coal and secondary fuel oil, based on fuels



received during the respective years of the period 2019-24, at the time of truing up of tariff. Further, from the Form-15 submitted, it is noticed that the GCV loss between the GCV 'as billed' and GCV 'as received' for the period from March 2019 to May 2019 is more than 1200 kCal/kg. The Petitioner is therefore directed to submit a detailed report on the steps taken to reduce GCV loss, along with the necessary documentary evidence, at the time of the truing-up of the tariff. Accordingly, the weighted average price and GCV of coal and oil claimed and allowed for the period 2019-24, is as under:

	For the period from COD of Unit-I to COD of Unit-II	
	Claimed	Allowed
Weighted average price of coal (Rs. /MT)	5195.14	5195.14
Weighted average GCV of coal (kCal/kg) *	2987.34	2987.34
Weighted average price of oil (Rs. /KL)	52903.64	52903.64
Weighted average GCV of oil (kCal/Ltr.)	10550.00	10550.00

	For the period from COD of Unit-II to 31.3.2024	
	Claimed	Allowed
Weighted average price of coal (Rs. /MT)	3541.22	3541.22
Weighted average GCV of coal (kCal/kg) *	3414.50	3414.50
Weighted average price of oil (Rs. /KL)	48943.44	48943.44
Weighted average GCV of oil (kCal/Ltr.)	10617.59	10617.55

* Weighted average GCV of coal as received net of 85 kCal/kg.

140. Accordingly, the fuel component in working capital, Energy charges, and ECR claimed and allowed for the period 2019-24 is as under:

	(Rs. in lakh)			
	Claimed		Allowed	
	For the period from COD of Unit-I to 31.3.2020	For the period from 1.4.2020 to COD of Unit-II	For the period from COD of Unit-I to 31.3.2020	For the period from 1.4.2020 to COD of Unit-II
Cost of coal for 50 days (generation corresponding to NAFPAF)	32035.70	32035.70	31666.06	31666.06
Cost of secondary fuel oil for 2 months	263.33	262.61	263.33	262.61
ECR (Rs./kWh)	4.216	4.216	4.168	4.168



(Rs. in lakh)

	Claimed		Allowed	
	For the period from COD of Unit-II to 31.3.2021	For 2021-22 to 2023-24	For the period from COD of Unit-II to 31.3.2023	For FY 2023-24
Cost of coal for 40 days (generation corresponding to NAPAF)	38209.43	38938.16	37768.54	37768.54
Cost of secondary fuel oil for 2 months	486.04	#	485.91	487.24
ECR (Rs./kWh)	2.523	2.523	2.495	2.495

Rs.433.17 lakh for 2021-22, Rs.433.15 lakh for 2022-23 and Rs.434.34 lakh for 2023-24.

141. Further, in line with our decision on the claims of the Petitioner for O&M expenses and Auxiliary Energy consumption towards the FGD system, as above, the working capital on account of FGD related components has not been considered in this order.

142. The Petitioner, on a month-to-month basis, shall compute and claim the energy charges from the beneficiaries based on formulae given under Regulation 43 of the 2019 Tariff Regulations.

Maintenance Spares

143. The Petitioner, in Form-O, has claimed the maintenance spares in the working capital as under:

(Rs. in lakh)					
2019-20 (1.6.2019-31.3.2020)	2020-21 (1.4.2020-28.2.2021)	2020-21 (1.3.2021-31.3.2021)	2021-22	2022-23	2023-24
3341.20	3607.60	6825.20	6860.80	7314.97	7651.41

144. Regulation 34(1)(a)(iv) of the 2019 Tariff Regulations provides for maintenance spares @ 20% of the O&M expenses (including water charges and security expenses). Accordingly, maintenance spares @ 20% of the O&M expenses (including the water charges and security expenses) allowed for the period 2019-24 are as under:



<i>(Rs. in lakh)</i>					
2019-20 (1.6.2019 to 31.3.2020)	2020-21 (1.4.2020 to 28.2.2021)	2020-21 (1.3.2021 to 31.3.2021)	2021-22	2022-23	2023-24
3341.20	3607.60	6825.20	6860.80	7045.52	7287.37

Receivables

145. In terms of Regulation 34(1)(a)(v) of the 2019 Tariff Regulations, the receivables equivalent to 45 days of capacity charges and energy charges are worked out and allowed as under:

<i>(Rs. in lakh)</i>						
	2019-20 (1.6.2019 to 31.3.2020)	2020-21 (1.4.2020 to 28.2.2021)	2020-21 (1.3.2021 to 31.3.2021)	2021-22	2022-23	2023-24
Variable Charges- 45 days	28696.68	28696.68	34356.15	34356.15	34356.15	34356.15
Fixed Charges- 45 days	16148.92	16887.61	27800.47	27717.84	27796.61	28403.93
Total	44845.60	45584.29	62156.62	62073.99	62152.76	62760.08

O&M Expenses (1 month)

146. The Petitioner, in Form-O, has claimed O&M expenses for 1 month in the working capital as under:

<i>(Rs. in lakh)</i>					
2019-20 (1.6.2019- 31.3.2020)	2020-21 (1.4.2020- 28.2.2021)	2020-21 (1.3.2021- 31.3.2021)	2021-22	2022-23	2023-24
1392.17	1503.17	2843.83	2858.67	3047.90	3188.09

147. Regulation 34(1)(a)(vi) of the 2019 Tariff Regulations provides for the O&M expenses equivalent to 1 month of the O&M expenses (including water charges and security expenses). Accordingly, O&M expenses equivalent to 1 month of the O&M expenses (including water charges and security expenses) allowed are as under:

<i>(Rs. in lakh)</i>					
2019-20 (1.6.2019- 31.3.2020)	2020-21 (1.4.2020- 28.2.2021)	2020-21 (1.3.2021- 31.3.2021)	2021-22	2022-23	2023-24
1392.17	1503.17	2843.83	2858.67	2935.63	3036.40

Rate of Interest on Working Capital

148. In line with Regulation 34(3) of the 2019 Tariff Regulations, the rate of interest on working capital is considered as 12.05% (i.e., 1 year SBI MCLR of 8.55% as on 1.4.2019 + 350 bps) for the year 2019-20, 11.25% (i.e., 1 year SBI MCLR of 7.75% as on 1.4.2020 + 350 bps) for the year 2020-21, 10.50% (i.e., 1 year SBI MCLR of 7.00% as on 1.4.2021/1.4.2022 + 350 bps) for the period 2021-23 and 12.00% (i.e., 1 year SBI MCLR of 8.50% as on 1.4.2023 + 350 bps) for the year 2023-24. Accordingly, Interest on working capital has been computed as under:

	<i>(Rs. in lakh)</i>					
	2019-20 (1.6.2019 to 31.3.2020)	2020-21 (1.4.2020 to 28.2.2021)	2020-21 (1.3.2021 to 31.3.2021)	2021-22	2022-23	2023-24
Cost of Coal towards Stock - (20 days generation corresponding to NAPAF) (A)	12666.42	12666.42	15107.42	15107.42	15107.42	15107.42
Cost of Coal towards Generation – (30 days generation corresponding to NAPAF) (B)	18999.63	18999.63	22661.13	22661.13	22661.13	22661.13
Cost of Secondary fuel oil - (2 months generation corresponding to NAPAF) (C)	263.33	262.61	485.91	485.91	485.91	487.24
Maintenance Spares @ 20% of O&M expenses (D)	3341.20	3607.60	6825.20	6860.80	7045.52	7287.37
Receivables – (45 days of the sale of electricity at NAPAF) (E)	44845.60	45584.29	62156.62	62073.99	62152.76	62760.08
O&M expenses - 1 month (F)	1392.17	1503.17	2843.83	2858.67	2935.63	3036.40
Total Working Capital (G = A+B+C+D+E+F)	81508.36	82623.73	110080.10	110047.91	110388.36	111339.64
Rate of Interest (H)	12.05%	11.25%	11.25%	10.50%	10.50%	12.00%
Interest on Working capital (I = G x H) – (annualized)	9821.76	9295.17	12384.01	11555.03	11590.78	13360.76
Interest on Working capital (J) – (pro-rata)	8184.80	8505.72	1051.79	11555.03	11590.78	13360.76

Annual Fixed Charges for the period 2019-24

149. Accordingly, the annual fixed charges allowed for the generating station for the period 2019-24, are summarized as under:



(Rs. in lakh)

	2019-20 (1.6.2019 to 31.3.2020)	2020-21 (1.4.2020 to 28.2.2021)	2020-21 (1.3.2021 to 31.3.2021)	2021-22	2022-23	2023-24
Depreciation	33767.89	36843.80	62070.88	62782.44	64098.23	66562.36
Interest on Loan	31546.28	29673.19	47010.85	45480.36	42362.42	39701.40
Return on Equity	39502.63	43127.14	69900.92	70700.63	72182.37	74957.28
Interest on Working Capital	9821.76	9295.17	12384.01	11555.03	11590.78	13360.76
O&M Expenses	16706.00	18038.00	34126.00	34304.02	35227.58	36436.86
Total (annualized)	131344.56	136977.29	225492.67	224822.48	225461.38	231018.66
Total (pro-rata)	109453.80	125343.61	19151.43	224822.48	225461.38	231018.66

Note: (1) All figures (except for the total on a pro-rata basis) are on an annualized basis. (2) All figures under each head have been rounded. The figure in total column in each year is also rounded. As such, the sum of individual items may not be equal to the arithmetic total of the column.

150. The pro-rata fixed charges shall be calculated using the bases as shown under:

	2019-20 (1.6.2019 to 31.3.2020)	2020-21 (1.4.2020 to 28.2.2021)	2020-21 (1.3.2021 to 31.3.2021)	2021-22	2022-23	2023-24
Number of days in the year	366	365	365	365	365	366
Number of days for which tariff is to be calculated	305	334	31	365	365	366

151. The annual fixed charges approved as above, are subject to truing up in terms of Regulation 13 of the 2019 Tariff Regulations.

Summary

152. The summary of the annual fixed charges claimed and approved are as under:

(Rs. in lakh)

	2019-20 (1.6.2019- 31.3.2020)	2020-21 (1.4.2020- 28.2.2021)	2020-21 (1.3.2021- 31.3.2021)	2021-22	2022-23	2023-24
Claimed	132018.31	137638.19	232842.92	232174.66	238925.91	249141.79
Allowed	131344.56	136977.29	225492.67	224822.48	225461.38	231018.66

Application Fee and Publication expenses

153. The Petitioner has sought the reimbursement of the filing fees paid by it for filing the tariff Petition for the period 2019-24 and for publication expenses. The Petitioner shall be entitled to reimbursement of the filing fees and publication expenses in connection with the present Petition



directly from the beneficiaries on a pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

154. Similarly, RLDC Fees & Charges paid by the Petitioner in terms of the Central Electricity Regulatory Commission (Fees and Charges of Regional Load Dispatch Centre and other related matters) Regulations, 2019, shall be recovered from the beneficiaries. In addition, the Petitioner is entitled to the recovery of statutory taxes, levies, duties, cess, etc., levied by the statutory authorities in accordance with the 2019 Tariff Regulations.

155. Petition No. 181/GT/2019 is disposed of in terms of the above.

Sd/-
(Harish Dudani)
Member

Sd/-
(Ramesh Babu V)
Member

Sd/-
(Jishnu Barua)
Chairperson

