8. The Petitioner vide its affidavit dated 13.8.2021, has furnished the Unit-wise reason for time overrun along with the delay analysis, indicating the activities delayed, the reasons for the said 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:

## **Analysis and Decision**

- 9. This commission is required to make a prudence check as stipulated under the Tariff Regulations. The provisions of the 2019 Tariff Regulations which provides for prudence check of the capital cost of existing or new projects (Regulation 20), IDC and IEDC (Regulation 21) and Regulation 22 (Controllable and uncontrollable factors (for deciding time overrun, cost escalation etc.,) are extracted below:
  - "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"

## 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 on 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.
- 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) The "controllable factors" shall include but shall not be limited to the following:
  - a. Efficiency in the implementation of the project not involving approved change in scope of such project, change in statutory levies or change in law or force majeure events; and
  - b. Delay in execution of the project on account of contractor or supplier or agency of the generating company or transmission licensee.
- (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.
- 10. The Commission vide ROP to hearing dated 14.9.2022, had directed the Petitioner to furnish the chronological details of delay corresponding to reasons provided for time overrun vis-à-vis the SCOD and actual COD and summary of critical parts of PERT chart. In response, the Petitioner has furnished the said details vide affidavit dated 6.10.2022.
- 11. It is observed that the overall delay in COD of Unit-I and Unit-II are 6.20 months (or 185 days) and 2.13 months (or 64 days), respectively. The Petitioner has attributed the reasons for delay in declaration of COD of the units, as follows:

SI.	Reasons for Delay (uncontrollable	No. of days	Affected activities		
No.	factors)	lost / affected			
1	Ban on Sand Mining	195	Main Plant & Offsite Civil works		
2	Re-engineering of Ash Handling System to	314	Ash Handling Plant and		
	account for requirement of FGD as per		associated systems		
	new environment norms				
3	Law and Order issues in 66 kV	60	Make-up water system		
	transmission line works				
4	Curfew in Khargone town	09	All Project activities		
5	Floods in Tamil Nadu	30	SG area works		
6	Disturbance due to Cauvery water dispute	30	SG area works		
7	Demonetization of currency by GOI	22	All Project activities		
8	Farmers unrest in the state of MP	15	All Project activities		
9	Roll out of GST	60	All Project activities		
10	Reduced manpower on account of	45	All Project activities		
	increased minimum wages				
11	Nationwide strike of truckers	09	All Project activities		
12	Delay in issuance of Consent to Operate for Unit-I	192	COD of Unit-I		
13	Non-availability of Power Evacuation	184	COD of Unit-I		
	System (Non-operationalization of LTA)				
14	Non-availability of Associated	230	COD of Unit-II		
	Transmission System for power				
	evacuation				
15	Delay in issuance of Consent to Operate	276	COD of Unit-II		
	for Unit-II				

12. Based on the submissions of the parties and the documents available on record, we proceed to examine on prudence check, the reasons for time overrun of the project, as stated in the subsequent paragraphs:

## **Unit-I- Milestone wise analysis of Time Overrun**

13. The Petitioner vide its affidavit dated 6.10.2022 has submitted the chronological details for the delay in COD of Unit-I as under:

SI. No.	Description of Activities	Original schedule (as per planning)		•		Time Over -Run	Major reasons for delay
		Start date	Completion date	Actual start date	Actual completio n date	Days	
1	Zero Date	31.3.2015		31.3.2015		0	

2	Boiler & ESP -	28.8.2015	8.8.2018	28.8.2015	10.2.2010	24.4	1 Curfow in Kharaana
2	Civil &	28.8.2015	8.8.2018	28.8.2015	10.3.2019	214	1. Curfew in Khargone Town
	Structural						2. Non-availability of
	Erection Works						sand due to ban on
	Election works						
							sand mining by State Govt.
							3. Floods in Tamil Nadu
							affected delivery of structural steel material
							4. Disturbance due to
							Cauvery water dispute
							caused supply chain
							hindrances
							5. Demonetization of
							higher currency notes
							resulted into exodus of
							manpower
							6. Farmers' unrest in
							Mandsaur (MP) caused
							supply chain disruption
							and delayed planned
							manpower
							augmentation
							7. Transition from
							prevailing tax structure
							to new GST based tax
							structure affected
							manufacturing and
							supply of material in the
							transition period
							8. Strikes and reduction
							of manpower on
							account of increased
							minimum wages as per
							new Govt. notification
							(hike in basic wages
							was about 40% more
							than the existing
							wages)
							9. Nationwide strike of
							truckers caused supply chain hindrances.
3	Steam	30.5.2016	31.1.2019	30.5.2016	27.6.2019	147	Delay due to reasons
٥	Generator	30.3.2016	31.1.2019	30.3.2016	27.0.2019	14/	as mentioned for
	Works						activities at Sl. No. 2
	VVUINO						and 5
4	TG on Barring	31.10.2018	31.10.2018	3.2.2019	3.2.2019	95	Delay in Civil &
-	10 on banning	31.10.2010	31.10.2010	3.2.2013	3.2.2013	90	Structural works owing
							to reasons of delay as
							mentioned for activity at
							Sl. No. 2
<u> </u>	I	I	l		1		

5	Steam Blowing	1.11.2018	30.11.2018	9.4.2019	22.5.2019	173	1. Delay in Civil & Structural works owing to reasons of delay as mentioned for activity at SI. No. 2. 2. Delay in MUW pipeline readiness owing to delayed civil works due to ban on sand mining. 3. Delay in MUW Pipeline readiness due to law-and-order issues in execution of 66 kV transmission line works leading to contingency arrangement of DG Pumps.
6	Synchronization	31.1.2019	31.1.2019	27.6.2019	27.6.2019	147	Delay due to reasons as mentioned for activity at SI. No. 5
7	Ash Handling Plant	29.7.2015	30.3.2019	10.11.2016	10.8.2019	133	Re-engineering of Ash Handling Facilities due to introduction of FGD as per new environmental norms.
8	Trial Operation	20.7.2019	23.7.2019	26.9.2019	29.9.2019	68	Delay due to reasons as mentioned for activity at SI. No. 5 and 6.
9	COD	31.7.2019	31.7.2019	1.2.2020	1.2.2020	185	1. Delay in Issuance of CTO on account of change in emission norms for thermal power stations by MOEF&CC. 2. Non-availability of Associated Transmission System for Power Evacuation (Non-operationalization of LTA). 3. Delay due to reasons as mentioned for activity at SI. No. 8

## A. Delay due to ban on sand mining

- 14. The Petitioner has vide its affidavit dated 13.8.2021, submitted the following:
  - (i) During the scheduled construction period of the Project there was non-availability of sand for prolonged durations due to imposition of ban on mining and sale of sand by various State Governments including Madhya Pradesh (MP) Govt. under direction