

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 386/MP/2024**

**Coram:**

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

**Date of Order: 23<sup>rd</sup> October, 2024**

**In the matter of**

Petition under Section 79 of the Electricity Act, 2003 read with Regulation 19 (3) of Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2023 seeking approval for allowance of the drawl of start-up power from the grid for a period of six months from 28.11.2024 for Unit 1 of Khurja Super Thermal Power Station (2x660 MW) at Khurja in Bulandshahar District, Uttar Pradesh.

**And**

**In the matter of**

**THDC India Limited,  
Pragati Puram, Bypass Road,  
Rishikesh-249 201 (Uttarakhand)**

**....Petitioner**

**Vs**

**1. Grid Controller of India Limited,  
B-9, Qutab Institutional Area,  
Katwaria Sarai,  
New Delhi-110016.**

**2. Uttar Pradesh Power Corporation Limited,  
Shakti Bhawan, 14 Ashok Marg,  
Lucknow- 226001 (UP).**

**3. Uttarakhand Power Corporation,  
Limited, Urja Bhawan, Kanwali Road,  
Dehradun-248001.**

**4. Rajasthan Urja Vikas Nigam Limited,  
Vidyut Bhawan, Jiyoti Nagar,  
Jaipur- 302005 (Rajasthan).**

**5. Jaipur Vidyut Vitran Nigam Limited,**  
Vidyut Bhawan, Janpath, Jyotinagar,  
Jaipur-302005 (Rajasthan).

**6. Ajmer Vidyut Vitran Nigam Limited,**  
Old Powerhouse, Hatthi Bhatta, Jaipur road,  
Ajmer-305001 (Rajasthan).

**7. Jodhpur Vidyut Vitran Nigam Limited,**  
New Powerhouse, Industrial Area,  
Jodhpur-342003 (Rajasthan).

...Respondents

### ORDER

This Petition has been filed by the Petitioner, THDC India Limited (hereinafter referred to as 'THDCIL'), under Regulation 19 of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2023 (hereinafter referred to as 'the Grid Code'), as amended from time to time, with the following prayers:

*"a) Admit the present Petition;*

*b) Allow the drawl of start-up power from the grid for a period of Six months from 28.11.2024 for Unit 1 of Khurja Super Thermal Power Station (2x660 MW) at Khurja in Bulandshahar District, Uttar Pradesh under Regulation 19 (3) of the CERC (Indian Electricity Grid Code) Regulations, 2023;*

*c) Pass such orders as deemed fit and necessary in the facts and circumstances of the present case."*

2. The Petitioner, THDCIL, is a generating company owned and controlled by the Government of India, as defined under Section 79(1)(a) read with Section 2(31) of the Electricity Act, 2003 ('the Act'). The Petitioner is in the process of establishing its first supercritical thermal power station, namely, the Khurja Super Thermal Power Plant (hereinafter referred to as 'the generating station'), located in the Bulandshahar district of Uttar Pradesh. The total installed capacity of the generating station is 1320 MW, consisting of two units, each with a capacity of 660 MW (i.e., 2x660 MW).

3. The Investment Approval (hereinafter referred to as the "IA") for the generating station was granted by the Ministry of Power, Government of India, vide letter No. M-20/2014-IPC(Vol-I) dated 8.3.2019. Units I and II were scheduled to be declared under commercial operation on 9.3.2023 and 9.9.2023, respectively.

4. The Petitioner has submitted that in terms of Regulation 19(2) (a) of the Grid Code, the drawl of the Start-up power shall not exceed 15 months prior to the expected date of first synchronization and one year after the date of first synchronization. The Petitioner, vide its email dated 24.8.2023, approached the Grid Controller of India (in short 'GCIL') for the grant of permission to draw start-up power for Unit 1 under the Deviation Settlement Mechanism from 27.8.2023. GCIL, vide letter dated 29.8.2023, accorded the permission for the period from 29.8.2023 to 31.12.2023 for a cumulative total quantum of 18 MW (in a staggered manner) for the drawal of start-up power for Unit 1 (660 MW) of the generating station.

5. The Petitioner has submitted that it had sought further extensions from the GCIL for the drawl of start-up power under the Deviation Settlement Mechanism for Unit 1 (660 MW) of Khurja STPP. The details of the application and extensions, as allowed by GCIL, are as under:

S. No	Application Date by THDCIL	Approval Date by GCIL	Quantum (In MW)	Period
1	20.12.2023	20.12.2023	18	1.1.2023-30.6.2024
2	24.06.2024	25.06.2024	18	1.7.2024- 13.8.2024
3	08.08.2024	09.08.2024	30	14.8.2024-31.8.2024 [For 30 MW]

			40	1.9.2024-28.11.2024 & 29.11.2024-31.12.2024 (subject to synchronization)
--	--	--	----	---

6. The Petitioner has submitted that Unit-1 of the generating station could not be declared COD due to the following reasons:

(a) The global outbreak of COVID-19, recognized by WHO as a force majeure event, caused widespread disruptions to business and industrial activities worldwide, including THDCIL's projects. The nationwide lockdown imposed by the Government of India, coupled with panic and fear, halted construction as workers left for their homes. Both waves of the pandemic introduced challenges like restricted movement, suspended transport services, and workforce reductions, severely impacting project timelines due to supply chain disruptions, permit delays, and worker absenteeism. Social distancing and travel restrictions further added inefficiencies, leading to unavoidable delays in commissioning projects due to a lack of engineering support and difficulties in sourcing equipment and;

(b) Technical issues, including disturbances in the axial position and breakdowns, have significantly impacted the timely commissioning of the generating station.

(c) The axial position of the Low-Pressure (in short, "LP") inner casings was inadvertently disturbed, which reduced the axial clearances between the LP rotors and the inner casings. Consequently, during thermal expansion, rubbing occurred between the rotors and the casing blades. This disturbance likely happened during the assembly of push

rods between the Intermediate Pressure (“IP”)-LP1 and LP1-LP2 casings or while erecting the crossover pipe assembly.

(d) Additionally, the High-Pressure Reheat (HRH) spring supports near the IP turbine were found to be inadvertently locked during the machine's rolling, exerting unwanted force on the IP turbine casing, which is connected to the LP-1 and LP-2 casings *via* the push rods and crossover pipe. This further restricted the expansion of the composite casing and worsened the rubbing between the rotors and the inner casings. This issue is still ongoing and THDCIL is currently in the process of resolving it to ensure the synchronization purposes.

(e) While the unit was undergoing critical testing and commissioning procedures, an unforeseen technical issue arose, causing a breakdown and resulting in non-synchronization of Unit 1 on 12.8.2024. This breakdown necessitated immediate repair to ensure the safe and reliable operation of the unit. The process of diagnosing the breakdown, replacing the parts, and carrying out repairs extended the project timeline. Due to the complexity of the equipment involved, the breakdown required specialized technical expertise and coordination between multiple teams, including engineers, contractors, and equipment suppliers, which added to the duration of the repair process. The interruption during testing was unforeseen and unavoidable, leading to an extended commissioning timeline for Unit 1 of the generating station.

7. The Petitioner has submitted that Unit 1 (660 MW) of the generating station is expected to achieve the COD on or before 31.10.2024. Unit 2 (660 MW) of the generating station is under the advanced commissioning stage with its first synchronization, and the COD of Unit 2 is expected in the month of March 2025.

8. The Petitioner has submitted that it is seeking an extension of time for drawal of start-up power for Unit-1 of the generating station for bona-fide reasons for the completion of the balance works and not to derive any undue advantage out of it.

9. The Petition is admitted by circulation.

10. We have considered the submissions of the Petitioner. Regulation 13 of the GNA Regulations provides as under:

*“13. Injection of infirm power and drawal of start- up power: Connectivity grantee shall be eligible to inject infirm power and draw start up power in accordance with the provisions of the Grid Code.”*

11. Regulation 19 (2) and (3) of the Grid Code provides as under:

*“19. Drawal of start-up power and injection of infirm power (1) A unit of a generating station including unit of a captive generating plant that has been granted connectivity to the inter-State Transmission System in accordance with GNA Regulations shall be allowed to inter-change power with the grid during the commissioning period, including testing and full load testing before the COD, after obtaining prior permission of the concerned Regional Load Despatch Centre:*

*Provided that the concerned Regional Load Despatch Centre while granting such permission shall keep grid security in view.*

*(2) The period for which such inter-change shall be allowed shall be as follows:*

*(a) Drawal of start-up power shall not exceed 15 months prior to the expected date of first synchronization and one year after the date of first synchronization; and*

*(b) Injection of infirm power shall not exceed one year from the date of first synchronization.*

*(3) Notwithstanding the provisions of clause (2) of this Regulation, the Commission may allow extension of the period for inter-change of power beyond the stipulated period on an application made by the generating station at least two months in advance of the completion of the stipulated period.”*

12. The Petitioner has submitted that the generating station, being a new system, structure, and components, are being incorporated for establishing the robustness in design, erection, and operation based upon the regulatory recommendations. The Petitioner has further submitted that due to the Covid-19 pandemic, disturbance occurred in the axial position of the Low-Pressure inner casings, locking of HRH spring supports near the IP turbine during the machine's rolling, and breakdown during the testing period, etc. Unit 1 (660 MW) of the generating station could not be synchronized. Therefore, the Petitioner could not declare the COD of the Unit 1. Accordingly, the Petitioner has requested an extension of time for the drawl of start-up power from the grid for a period of six months beyond 28.11.2024 and up to 28.5.2025 for Unit 1 of the generating station. According to the Petitioner, Unit 1 is expected to be commissioned by 31.10.2024. The Petitioner has submitted that as per Regulation 19(3) of the Grid, the generating station is required to approach the Commission at least two months in advance of the completion of the stipulated period. However, there is a possibility for further delay in achieving the COD for Unit 1 even from the expected date of 31.10.2024. Therefore, the Petitioner has filed the present Petition for seeking permission for drawal of start-up power beyond 28.11.2024 as allowed by GCIL.

13. We have considered the submissions and the difficulties stated by the Petitioner, as quoted in paragraph 6 above. In the given facts and circumstances, we are inclined to invoke our power under the provision of Regulation 19 (3) of

---

Order in Petition No. 386/MP/2024

the Grid Code. In the exercise of the power, we hereby allow the drawl of start-up power, including full load testing of Unit 1 of the generating station from 28.11.2024 to 28.5.2025. The Petitioner is hereby directed to make all possible efforts to commission Unit-1 by 30.10.2024 as submitted. It is, however, clarified that the extension of time granted as above shall not automatically entitle the Petitioner for IEDC/IDC for the delay in declaration of COD from the scheduled COD, which shall be decided separately in accordance with the relevant provisions of the Tariff Regulations. Let an extract copy of the order be provided to the concerned Regional Load Despatch Centre, which will while granting such permission, keep the grid security in view.

14. With the above, the Petition No. 386/MP/2024 is disposed of.

**Sd/-**  
**(Harish Dudani)**  
**Member**

**sd/-**  
**(Ramesh Babu V.)**  
**Member**

**sd/-**  
**(Jishnu Barua)**  
**Chairperson**