# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

# **Petition No. 277/MP/2025**

Coram:

Shri Jishnu Barua, Chairperson Shri Ramesh Babu V., Member Shri Harish Dudani, Member Shri Ravinder Singh Dhillon, Member

Date of Order: 20th March 2025

#### In the matter of

Petition under Section 79 of the Electricity Act 2003, read with Regulations 57 and 58 of the CERC (Indian Electricity Grid Code/IEGC) Regulations, 2023, seeking appropriate relief for seeking relaxation due to difficulty faced by the Petitioner in implementing Regulation 24 (2) of CERC (Indian Electricity Grid Code/IEGC) Regulations, 2023 and Conduct of Business Regulations 2023, to declare 'COD' without the implementation of Automatic Generation Control ("AGC") and allow time to the Petitioner for implementation of AGC for Parbati HE Project Stage-II 800 MW (4X200 MW).

#### And

### In the matter of

NHPC Limited, NHPC Office Complex, Sector – 33, Faridabad, Haryana – 121003

...Petitioners

Vs

Grid Controller of India Limited,
 B-9 (1<sup>st</sup> Floor), Qutab Institutional Area,
 Katwaria Sarai,
 New Delhi -110016

North Eastern Regional Power Committee
 18-A, Qutub Institutional Area,
 Katwaria Sarai,
 New Delhi - 110016

Order in Petition No. 277/MP/2025

 Central Transmission Utility of India Limited Floor No. 5-10, Tower-1, Plot No.-16, IRCON International Tower, Institutional Area, Sector-32, Gurugram, Haryana – 122001

M/s Indigrid Infrastructure Trust
 Hoor, Berger Tower, C-001/A2, Sector-16B,
 Gautam Buddha Nagar,
 Noida, Uttar Pradesh – 201301

 Power Grid Corporation of India Limited SAUDAMINI, Plot No-2, Sector-29 Gurugram, Haryana – 122001

...Respondents

#### **Parties Present:**

Ms. Swapna Seshadri, Advocate, NHPC
Shri Utkarsh Singh, Advocate, NHPC
Shri Parth Bhalla, Advocate, NHPC
Shri Aman Mahajan, NHPC
Shri Ajit Kumar Yadav, NRLDC
Shri Paritosh Pathak, NRLDC

#### Order

The Petitioner - NHPC Limited is a Navratna Enterprise under the Ministry of Power, Government of India. The Petitioner has undertaken the Parbati Hydro Electric Project Stage-II 800 MW (4X200 MW)/Parbati-II Project in the state of Himachal Pradesh, which is under the active stage of construction. The instant petition has been filed by the Petitioner seeking appropriate relief for relaxation against difficulty faced by the petitioner in implementing Regulation 24(2) of CERC (Indian Electricity Grid Code/IEGC) Regulations, 2023, and Conduct of Business Regulations 2023, to declare 'COD' without the installation and enablement of Automatic Generation Control (AGC).

- 2. This Petition has been filed by the Petitioner, NHPC Limited, seeking the following reliefs:
  - (a) Admit the present Petition;
  - **(b)** Grant relaxation in Regulation 24(2) of the CERC (Indian Electricity Grid Code) Regulations, 2023, regarding the implementation of AGC for declaration of COD of Parbati-II HEP 800 MW under Regulations 57 and 58 of the CERC (Indian Electricity Grid Code) Regulations, 2023;
  - (c) Grant Ten (10) months' time extension to the Petitioner to enable the commissioning of AGC, i.e., by November 2025 or parallel to the commissioning of OPGW, whichever is later under Regulations 57 and 58 of the CERC (Indian Electricity Grid Code) Regulations, 2023;
  - (d) Pass such orders as deemed fit and necessary in the facts and circumstances of the present case.

#### **Submission of the Petitioner**

- 3. The Petitioner has mainly submitted the following:
  - (a) The Investment Approval for the Parbati-II Project was accorded by the Ministry of Power; Government of India vide letter No. 7/2/2002-DO(NHPC) on 11.9.2002 for Parbati-II Project (4x200 MW) for a total capital expenditure of Rs. 3919.59 Crores. In terms of the IA, the Parbati II Project was to be completed within 7 years from the date of the approval by the Government of India. The SCOD for the Parbati-II project as per the IA was September 2009, and the Parbati II Project is scheduled for commissioning in March 2025.
  - (b) Unit-I and Unit-II of the Parbati-II Project were first synchronized with the grid on 14.9.2018 and 22.9.2018, respectively, with available water from Jiwa Nallah. However, due to the unavailability of sufficient water, Unit-I and Unit-II could not be declared under commercial operation. Accordingly, with the prior permission of NRLDC, Unit-I and Unit-II of the generating station were re-synchronized with the grid on 5.7.2019 and 6.7.2019, respectively. Accordingly, the Petitioner has been injecting infirm power from the Parbati-II Project after the synchronization of units.

- (c) Meanwhile, on 28.8.2019, this Commission passed the Order in Petition No. 319/RC/2018 on the issue of "Automatic Generation Control (AGC) implementation in India". To comply with the aforesaid directions passed in Petition No. 319/RC/2018, the Petitioner, in May 2020, placed an Order for the implementation of AGC to M/s Andritz for 11 power stations of the Petitioner.
- (d) Thereafter, the Commission, vide Order dated 3.8.2023, notified the IEGC Regulations 2023, and the same came into force with effect from 1.10.2023. As per the Regulation, prior to the declaration of the COD, the generating station has to confirm the enablement of AGC to the appropriate Load Dispatch Center.
- (e) In terms of the aforesaid provision of IEGC Regulations 2023, it is evident that prior to the declaration of COD, the generating station has to confirm the enablement of AGC to the appropriate load despatch centre.
- (f) On 15.7.2024, CTUIL issued the distribution list implementation of ISTS Transmission/Communication Schemes approved by NCT in its 20<sup>th</sup> meeting held on 25<sup>th</sup> June 2024 under Regulated Tariff Mechanism (RTM) wherein for Parbati-II-line-PKTCL (Joint venture between Indigrid & Powergrid and majority portion is owned by Indigrid) is the implementing agency for the communication scheme details of which are as under-.

II. Communication Scheme approved by NCT		
1.	A. Supply and installation of 24 Fibre OPGW on PKTCL lines for	PKTCL
	providing redundant communication for Parbati Pooling (Banala)	
	(PG) S/s, Parbati-II (NHPC) & Parbati-III (NHPC) stations.	
	<b>B.</b> Supply and installation of 24 Fibre OPGW & FOTE for providing	POWERGRID
	redundant communication for Parbati Pooling (Banala) (PG) S/s,	
	Parbati-II (NHPC) & Parbati-III (NHPC) stations.	

(g) There is a slight delay in implementation and installation of the AGC for the Parbati-II Project, which is primarily due to the non-availability of Optical Ground Wire Connectivity for Parbati-Banala-Koldam Corridor ("OPGW connectivity") and uncertainty in the schedule of OPGW connectivity, since the Petitioner was coordinating with M/s Indigrid (for PKTCL

- part of work) on the implementation schedule for OPGW connectivity in Parbati-Banala-Koldam Corridor for commissioning.
- (h) The implementing agency, M/s Indigrid, has confirmed that the OPGW connectivity shall be functional for the Parbati II Project transmission line by January/February 2026. Considering the same, due to the non-availability of OPGW connectivity and uncertainty in the schedule for implementation of OPGW connectivity, the Order for implementation of AGC at the Parbati-II Project could not be initiated earlier, and now the Petitioner is seeking to move ahead in planning and implementation of AGC in terms of the same. Therefore, it is being proposed that the implementation schedule of AGC at the Parbati-II Project shall be ensured to be in line with the commissioning schedule of OPGW connectivity, i.e., the implementation of the AGC can be completed by January 2026.
- (i) Parbati-II Project is expected to be commissioned by March 2025 and undergo a trial run in terms of the provisions of the IEGC 2023.
- (j) The order for the implementation of AGC in the Parbati-II project is scheduled to be issued in the last week of March/first week of April 2025. The anticipated timeline for the installation of AGC is six months, with completion expected by October 2025. It is further requested to kindly permit the testing and commissioning of AGC by November 2025, considering that the period from June to October constitutes the peak hydro-power generation season for the project and would be difficult for the Petitioner to enable testing during the said peak period.
- (k) As per Regulation 24(2) of the IEGC 2023, prior to the declaration of the COD, the generating station has to confirm the enablement of AGC to the appropriate Load Despatch Centre.
- (I) The Parbati-II Project is expected to be commissioned by March 2025, and the implementation schedule of AGC at the Parbati-II Project has been ensured to the commissioned by November 2025 or in line with the commissioning schedule of OPGW connectivity, which is scheduled to be completed by January 2026.

(m) In view of the submissions made above, the Commission may be pleased to allow the commissioning of AGC by November 2025.

# Hearing dated 4.3.2025

4. The Petition was heard on 4.3.2025, wherein the learned counsel for the Petitioner submitted that the present Petition had been filed seeking relaxation of Regulation 24(2) of the IEGC Regulations, 2023 for the declaration of COD of the Project, without the implementation of AGC and for granting time for such implementation for Parbati HEP Stage-II, 800 MW (4X200 MW).

# **Analysis and Decision**

- 5. The present Petition has been filed by the Petitioner seeking reliefs, mainly on account of the difficulty faced by it in the implementation of Regulation 24 (2) of the IEGC Regulations, 2023, i.e., for the declaration of 'COD' of Parbati-II HEP 800 MW without the enablement /implementation of the AGC and to allow time extension for the same.
- 6. The Petitioner is seeking relaxation in Regulation 24(2) of the CERC (Indian Electricity Grid Code) Regulations, 2023, regarding the implementation of AGC for declaration of COD of Parbati-II HEP 800 MW under Regulations 57 and 58 of the CERC (Indian Electricity Grid Code) Regulations, 2023 considering that there is delay in implementation and installation of the AGC for the Parbati-II Project, which is primarily due to the non-availability of Optical Ground Wire Connectivity for Parbati-Banala-Koldam Corridor ("OPGW connectivity") and uncertainty in the schedule of OPGW connectivity, because for which the Petitioner could not go ahead to plan the implementation of AGC.
- 7. Regulation 24(2) of the IEGC Regulations, 2023 provides as under:

# "24. DOCUMENTS AND TESTS PRIOR TO DECLARATION OF COMMERCIAL OPERATION:

(1) xxx (2) All thermal generating stations having a capacity of more than 200 MW and hydro generating stations having a capacity of more than 25 MW shall submit documents confirming the enablement of automatic operation of the plant from the appropriate load despatch centre by integrating the controls and telemetering features of their system into the automatic generation control in accordance with the CEA Technical Standards for Construction and the CEA Technical Standards for Connectivity."

- 8. On 28.8.2019, this Commission passed the Order in Petition No. 319/RC/2018 on the issue of "Automatic Generation Control (AGC) implementation in India". The extract of the said para is as under:
  - 34. "In the interest of reliable and safe grid operation, the Commission directs that all the ISGS stations whose tariff is determined or adopted by CERC shall be AGC-enabled and the ancillary services including secondary control through AGC be implemented as per the following direction:
    - i. All thermal ISGS stations with installed capacity of 200 MW and above and all hydro stations having capacity exceeding 25 MW excluding the Run-of-River Hydro Projects irrespective of size of the generating station and whose tariff is determined or adopted by CERC are directed to install equipment at the unit control rooms for transferring the required data for AGC as per the requirement to be notified by NLDC. NLDC shall notify the said requirements within one month of this order.
    - ii. All such ISGS stations whose tariff is determined or adopted by CERC shall have communication from the nearest wide band node to the RTU in the unit control room.
    - iii. The Central Transmission Utility (CTU) is directed to have communication availability from NLDC/ RLDCs to the nearest wide band node/ switchyard for the generating stations in a redundant and alternate path ensuring route diversity and dual communication."
- 9. Petitioner has submitted that to comply with the said direction, in May 2020, an order has been placed with M/s Andritz for the implementation of Automatic Generation Control (AGC) across 11 of its power stations. While AGC was successfully implemented in the majority of these power stations, the Parbati-III Power Station remained an exception. This was due to the unavailability of Optical Ground Wire (OPGW) connectivity along the Parbati-Banala-Koldam corridor, which is being constructed by M/s Indigrid Infrastructure Trust.
- 10. Petitioner has stated that the absence of this critical infrastructure has been a persistent bottleneck, preventing the full realization of AGC capabilities at Parbati-III. This same issue is now at the heart of the delay in implementing AGC at the Parbati-II Power Station. Parbati-II Project is expected to be commissioned by March 2025. The OPGW connectivity, which is essential for the seamless operation of AGC, remains incomplete, as M/s Indigrid Infrastructure Trust has yet to finalize the necessary infrastructure. The delay in commissioning the OPGW connectivity has created a significant impediment, as the Petitioner cannot proceed with the AGC implementation without this foundational component in place.

11. We now consider the submissions of the Petitioner. Regulations 57 of the IEGC Regulations, 2023 provides as under:

#### "57. Power to Relax

The Commission, for reasons to be recorded in writing, may relax any of the provisions of these regulations on its own motion or on an application made before it by an affected person to remove the hardship arising out of the operation of any of these regulations, applicable to a class of persons.

- 12. It is an established principle of law that the Power to Relax has to be strictly construed and is to be exercised judiciously and with caution. When and only when undue hardship is caused by the application of the rules or regulations, the power to relax is to be exercised.
- 13. In the present case, the delay in the enablement of Automatic Generation Control (AGC) was due to a delay in the commissioning of the Optical Ground Wire (OPGW) connectivity, which is being installed by M/s Indigrid. The Petitioner was unable to proceed with the placement of the order for the implementation of AGC as per the requirements outlined under Regulation 24(2) of the Indian Electricity Grid Code (IEGC) 2023 due to the uncertainty surrounding the commissioning schedule of the OPGW connectivity. Without a confirmed timeline, the Petitioner could not confidently proceed with the necessary steps to ensure compliance with the regulatory requirements. According to the latest communication from M/s Indigrid, dated 8.1.2025, the OPGW connectivity is expected to become operational by January 2026. This timeline has only recently been confirmed, leading to a significant delay in the overall implementation process. The confirmation of the OPGW connectivity schedule in January 2025 has now provided the Petitioner with a clearer roadmap, allowing them to plan and execute the implementation of AGC in alignment with the projected operational date of January 2026. The placement of the order for the implementation of AGC in the Parbati-II project is scheduled to be issued in the last week of March/first week of April 2025 by the petitioner. The anticipated timeline for the installation of AGC is six months, with completion expected by October 2025.
- 14. Regarding the timeline for implementation of the AGC, the petitioner has submitted that the period from June to October constitutes the peak hydro-power generation season for the project. This timeframe aligns with the monsoon season, during which water availability is at its

highest, enabling maximum energy production. Given the critical nature of this period for the project's operational efficiency and power generation output, undertaking testing and implementation activities for the Automatic Generation Control (AGC) system during these months would be highly impractical as it will lead to spillage of water, which is not advisable. Such activities could potentially disrupt operations and adversely impact the project's performance during its most productive phase. Accordingly, the Petitioner has proposed to schedule the testing and implementation of the AGC system outside this peak monsoon period as it would ensure minimal disruption to the project's operations while allowing for the efficient and effective integration of the AGC system and also will avoid spillage of water.

- 15. After carefully considering the Petitioner's submissions and keeping in mind the difficulties faced by the Petitioner, we find it appropriate to exercise our powers under Regulation 57 of the IEGC Regulations 2023 to grant the requested relief. Since the OPGW connectivity shall be functional for the Parbati II Project transmission line by January 2026, we are relaxing the requirements of Regulation 24(2) of the IEGC Regulations 2023 (as referenced in paragraph 7 above) concerning the submission of documents confirming the enablement of automatic plant operation from the relevant load dispatch center prior to the declaration of COD for Parbati-II HEP. However, this relaxation for the implementation or enablement of AGC, post-COD of Parbati II HEP, shall not extend beyond January 2026. We hereby issue these directions accordingly.
- 16. Further, we also make it clear that the relaxation granted as above shall not automatically entitle the Petitioner to claim the IEDC/IDC for the delay in the declaration of COD of the said Unit beyond the scheduled date. Such entitlement will be examined and determined separately in accordance with the relevant provisions of the Tariff Regulations.
- 17. Petition No. 277/MP/2025 is disposed of in terms of the above.

Sd/ Sd/ Sd/ Sd/ Sd/
(Ravinder Singh Dhillon) (Harish Dudani) (Ramesh Babu V.) (Jishnu Barua)
Member Member Member Chairperson