

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 155/MP/2021

Coram:

Shri P.K.Pujari, Chairperson

Shri I.S.Jha, Member

Shri Arun Goyal, Member

Shri P.K.Singh, Member

Date of Order: 1st August, 2021

In the matter of

Petition under Section 79(1) (k) of the Electricity Act, 2003 read with Regulation 8 (7) of the Central Electricity Regulatory Commission (Grant of Connectivity, Long Term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009 seeking permission for injection of infirm power beyond 31.8.2021 in case of Parbati Hydroelectric Project-Stage-II.

And

In the matter of

NHPC Limited,
NHPC Office Complex,
Sector-33, Faridabad-121 003

...Petitioner

Vs.

1. Executive Director,
Northern Regional Load Despatch Centre,
(Power System Operation Corporation Limited),
18-A, Shaheed Jeet Singh Sansanwal Marg,
Katwaria Sarai, New Delhi-110 016

2. Member Secretary,
Northern Regional Power Committee,
18-A, Shaheed Jeet Singh Sansanwal Marg,
Katwaria Sarai, New Delhi-110 016

3. Chairman and Managing Director,
Power Grid Corporation of India Limited,
Saudamini, Plot No. 2,
Sector-29, Near IFFCO Chowk,
Gurgaon, Haryana-122 001

4. Parbati Koldam Transmission Company Limited,
Building No. 10 B, 12th Floor,
DLF Cyber City, Shankar Chowk,
Gurgaon, Haryana-122 002

5. Chairman,
Punjab State Power Corporation Ltd.,
The Mall, Near Kali Badi Mandir,
Patiala-147 00, Punjab
6. The Chairman,
Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6, Panchkula-134 109
7. The Chairman,
Uttar Pradesh Power Corporation Ltd.,
Shakti Bhawan, 14-Ashok Marg,
Lucknow-226 001, UP
8. The Chief Engineer and Secretary,
Engineering Department, 1st Floor,
UT Chandigarh, Sector-9 D, Chandigarh-160 009
9. The Chief Executive Officer,
BSES Rajdhani Power Ltd.
BSES Bhawan, Nehru Place, New Delhi-110 019
10. The Chief Executive Officer,
BSES Yamuna Power Ltd.,
Shakti Kiran Building, Karkadooma,
Delhi-110 072
11. The Chief Operating Officer,
Tata Power Delhi Distribution Ltd.,
Grid Sub-station Building,
Hudson Lines, Kingsway Camp, Delhi-110 009.
12. The Chairman-CUM-Managing Director,
Uttaranchal Power Corporation Ltd.,
Urja Bhawan, Kanwali Road, Dehradun-248 001
13. The Managing Director,
Jairpur Vidyut Vitran Nigam Ltd.,
Vidyut Bhawan, Janpath, Joyti Nagar,
Jairpur-302 005 Rajasthan
14. The Managing Director,
Ajmer Vidyut Vitran Nigam Ltd.,
Old Power House,
Hathi Bhatta, Jaipur Road,
Ajmer-305 001, Rajasthan
15. The Managing Director,
Jodhpur Vidyut Vitran Nigam Ltd.,
New Power House, Industrial Area,
Jodhpur-342 003, Rajasthan

16. The Principal Secretary,
Power Development Department,
New Secretariat, Jammu-180 001.

17. The Chairman,
Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House,
Shimla-171 004, Himachal Pradesh

18. The Director,
Directorate of Energy,
Shanti Bhawan, Phase-III, Sector-VI,
New Shimla-171 009, Himachal Pradesh

...**Respondents**

ORDER

This Petition has been filed by the Petitioner, NHPC Limited, seeking permission of the Commission for injection of infirm power into the grid up to 31.3.2023 or till declaration of commercial operation of 800 MW (4X200 MW) Parbati Hydroelectric Project, Stage-II (hereinafter referred to “the generating station”) in the State of Himachal Pradesh in terms of clause (7) of Regulation 8 of the Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State transmission and related matters) Regulations, 2009 (hereinafter referred to as ‘the Connectivity Regulations’). The Petitioner has made the following prayers:

“(a) Allow extension of time for injection of infirm power from all four units of Parbati Hydroelectric Project-Stage II beyond 31.8.2021 and upto 31.3.2023 or actual COD of individual units, whichever is earlier, as per provisions of Regulation 8(7)(b)(b) of Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009;and

(b) Pass such further order or orders as may be deemed fit and proper in the facts and circumstances of the case.”

2. The Petitioner has submitted that the generating station consists of four units (4x200 MW). Scheduled COD of the generating station was 11.9.2009. It is submitted that unit-I and unit-II of the generating station were first synchronized with

grid on 14.9.2018 and 22.9.2018 respectively with available water from Jiwa Nallah. However, due to unavailability of surplus 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-synchronised with the grid on 5.7.2019 and 6.7.2019 respectively.

3. The Commission in its order dated 7.8.2020 in Petition No. 587/MP/2020 had allowed injection of infirm power of all four units of the generating station up to 31.8.2021 or actual date of commercial operation, whichever is earlier. The Petitioner has submitted that the units could not be declared under commercial operation within given timeframe due to the following reasons:

(a) **Balance HRT works:** Completion of HRT is on the critical path of completion of the project. Out of the total length of HRT of 31526 meters, balance excavation of 1567.28 meters of HRT is still remaining due to the following reasons:

(i) HRT through Face-4: For HRT from face-4, TBM face is passing through highly abrasive and high strength quartzite rock. Delay has occurred due to the following factors:

*Rock bursting during and after excavation resulted in increase in quantum of support system like fore polling, continuous installation of ribs and McNally plates etc., which consumed considerable time;

*Hard rock conditions resulted in frequent change of cutters, which consumed considerable time;

*Frequent faults in hydraulic systems in TBM resulted in hindrance. The faults were rectified in the month of June, 2019 after taking a maintenance stopover;

*Second scheduled stopover maintenance was taken from 1st August to 7th August, 2019;

*Ingress of water of the order of 4000 lpm (litre per minute) in the month of August, 2019 hampered the excavation progress;

*Formation of large cavities (up to 4m high) due to rock-fall from the crown areas affected the progress in excavation work badly;

*Fore-polling was carried out in order to arrest the rock-fall which further reduced the time available for excavation, resulting in slow progress;

*Third scheduled stopover for maintenance of cutter head buckets, gripper cylinder and thrust cylinder were taken from 30.12.2019 to 10.1.2020;

*Two gripper cylinders and two main drive motors had to be replaced in the month of March 2020;

*Work came to standstill due to lockdown w.e.f. 22.3.2020 to 23.4.2020 due to covid-19 pandemic;

*Major maintenance of TBM was carried out from 27.4.2021 to 17.5.2021. However, during maintenance, repair and testing works of thrust and gripper cylinders, cutter head face hardening and main bearing seal replacement were carried out; and

*Excavation activities were hampered due to various travel restrictions imposed by Government during second wave of Covid-19 pandemic and the oxygen cylinder available with the contractor were taken-over by District Administration.

(ii) HRT through Face-2, Face-3 and Face-6: These HRT works were awarded to Valecha Engineering Ltd. in the year 2013. However, due to poor performance, the contract was terminated in December 2018. The tender for balance works (DBM package) was floated in the year 2019. However, it was extended multiple times due to poor response/ high rates from the bidders. Finally, 1500 meter stretch and downstream of Face-3 have been awarded to Gammon Engineers

and Contractors Private Limited on 2.6.2020. Mobilization activities were hampered as the site could not be handed over to the new contractor due to agitation/hindrances created by labours/workers of the previous contractor. Site could be handed over to the contractor only on 16.8.2020 after several rounds of negotiations involving labour unions, local people, contractor and the District Administration. After completion of dewatering activities and other associated works such as illumination, electrification and excavation activities were started on 3.1.2021. 106 meters of HRT from Face-6 will be excavated after completion of excavation from Face-4.

(b) **Sheelagarh Diversion works:** These works were part of Lot-PB2B package awarded to Valecha Engineering Ltd. in the year 2013. However, due to poor performance, the contract was terminated in December 2018. The tender for balance Nallah works was floated in the year 2019. However, it was extended multiple times due to poor response from the bidders. The details of balance works is as follows:

- *Construction of balance civil works of Manihar Trench weir, its feeder tunnel and outfall structure (Lot PB 2D-1);

- *Construction of balance civil works of Pancha Trench weir, its feeder tunnel and associated works (Lot PB-2D-2);

- *Construction of balance works of road at Sheelagarh area (Lot PB 2D-5); and

- *HM works of Nallah diversion works.

4. The Petitioner has submitted that in view of the above reasons, the entire project is expected to be completed by February, 2023 against the earlier completion schedule of December 2021.

5. The Petition is admitted by circulation.

6. We have considered the submissions of the Petitioner. The fourth and fifth provisos to Regulation 8(7) of the Connectivity Regulations provides as under:

“Provided that the Commission may in exceptional circumstances, allow extension of the period for inter-change of power beyond the period as prescribed in this clause, on an application made by the generating station at least two months in advance of completion of the prescribed period:

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

7. The Petitioner has submitted that it has made all efforts to ensure completion of activities of the units of the generating station within stipulated time but could not succeed for reasons beyond its control. The Petitioner has further submitted that due to COVID-19 pandemic, entire country was under lockdown for the period from 25.3.2020 to 31.5.2020. Therefore, the site activities of the units have been hampered and it could not start the balance works, especially HRT works, Nallah works and Sheelagarh Diversion works on time. The Petitioner has reiterated that due to reasons as enumerated in paragraph 3 above, it was not able to complete the testing, including full load testing within the prescribed period from the date of first synchronization of unit-I and unit-II of the generating station and the project as a whole is expected to be commissioned by February, 2023. Accordingly, the Petitioner has sought the permission to inject infirm power till 31.3.2023 or actual date of commercial operation, whichever is earlier. The Petitioner has submitted that revenue earned from injection of infirm power will be reduced from the capital cost of the project, which would decrease the tariff and it shall be beneficial to the beneficiary States of the Project.

8. Taking into consideration the difficulties faced by the Petitioner as submitted by it and in terms of the proviso to Regulation 8(7) of the Connectivity Regulations as quoted in paragraph 6 above, we hereby allow injection of infirm power into the

grid for commissioning tests including full load testing of all four units of the generating station for a further period of one year i.e. up to 31.7.2022. The Petitioner shall make all efforts to commission the project by February, 2023 as submitted. It is, however, clarified that 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.

9. In terms of the above, the Petition No. 155/MP/2021 is disposed of.

**Sd-
(P.K.Singh)
Member**

**sd-
(Arun Goyal)
Member**

**sd-
(I.S. Jha)
Member**

**sd-
(P.K. Pujari)
Chairperson**