

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 44/MP/2016

Coram:

Shri Gireesh B. Pradhan, Chairperson

Shri A.K.Singhal, Member

Shri A.S.Bakshi, Member

Dr. M.K.Iyer, Member

Date of Hearing : 29.3.2016

Date of Order : 31.3.2016

In the matter of

Petition seeking Commission`s permission to continue drawal of startup power from the Southern grid as per deviation settlement mechanism till first synchronization or 31.7.2016, whichever is earlier.

And

In the matter of

Nuclear Power Corporation of India Ltd.,
Nabhikiya Urja Bhawan,
Anushaktinagar, Mumbai-400 094

...Petitioner

Vs

1. The Member Secretary, Southern Regional Power Committee,
29, Race Course Cross Road, Bangalore-560 009
2. Executive Director
Power System Operation Corporation (POSOCO) SRLDC
29, Race Course Road, Bangalore-560 009.
3. Executive Director
Power System Operation Corporation (POSOCO)
B-9, First Floor, Qutub Institutional area,
Katwaria Sarai, New Delhi-110 016.

..Respondents

Parties present:

Shri Sandeep Sarwate, NPCIL
Shri Sanjay Mulkaalwar, NPCIL

ORDER

This petition has been filed by the petitioner, Nuclear Power Corporation of India Ltd under 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 and Central Electricity Regulatory Commission (Deviation Settlement Mechanism) Regulations, 2014 with the following prayers:

"(a) To permit drawal of start up power from the grid under Deviation Settlement Mechanism (DSM) for KNPP-2 commissioning till synchronization or 31.7.2016, whichever is earlier; and

(b) To pass such order(s) as deemed fit by the Hon`ble Commission."

2. Kudankulam Nuclear Power Project ('the project') of the petitioner is located at Kudankulam, Tirunelveli District in the State of Tamil Nadu and is being implemented in two stages consisting of Unit-1 and Unit-2 of 1000 MW each. The project is being setup with the technical cooperation of Russian Federation and is based on WER-1000 type of reactors. The first unit of the project has been declared under commercial operation on 31.12.2014.

3. The petitioner has submitted that integrated leak rate test of containment of the unit-2 of the project has been carried out in the month of January 2015 and hot run of the primary system was completed in the month of April 2015.

The Commissioning of systems required for initial fuel loading has been completed and in this regard, application has been made to Regulatory Authority, namely Atomic Energy Regulatory Board for grant of consent for fuel loading and first criticality. The petitioner has submitted that fuel loading and criticality are expected to be completed by May 2016 and unit-2 is likely to be synchronized by July 2016.

4. The petitioner has submitted that all critical equipment of the project needs to be subjected to be Pre-Service Inspection (PSI) on completion of hot dummy run conducted with Dummy fuel assemblies (without nuclear fuel) where all the coolant pumps and the steam generators are operated at their rated temperature and pressure conditions. The hot run test has been conducted from 27.2.2015 to 19.4.2015. The petitioner has submitted that based on the operational experience in the first unit of the project, especially in refuelling machine area, improvements became necessary. All these were carried out in the second unit/refuelling machine. The petitioner has submitted that during operation of first unit, certain equipments of unit-2, which were already erected, had to be dismantled and shifted to unit-1 due to the delay in spares and had to be reinstalled with new ones. The petitioner has submitted that as per new guidelines of regulatory agencies, certain checks are to be carried out 100% which resulted in further delay.

5. The petitioner has submitted that after reactor criticality, a number of tests are required to be carried out on various system to meet the following purposes:

(i) To determine the reactor characteristics and to demonstrate that they are as per the design;

(ii) To test all the controls and interlocks functioning during steady as well as transient conditions;

(iii) To test all the reactor protection systems and demonstrate their operability;

(iv) To determine the actual parameters and characteristics of turbine, feed water system and other equipment and systems and demonstrate their compliance with design;

(v) To demonstrate the capability of various control systems to control the parameters during the transient conditions;

(vi) To test the protections of all major equipment such as turbine, generator, transformers, 400 kV CBs and feed water pumps, etc.

(vii) Conduct of these tests is mandatory from the plant performance evaluation requirements laid down in the agreement with the plant supplier and regulatory point of view as well.

(viii) All the tests to be carried out during each stage are pre-defined;

(ix) All the tests of each stage are to be carried out and reports to be submitted to Atomic Energy Regulatory Board (AERB) for review and obtaining their clearances.

6. The petitioner in its petition, while praying for extension of time for drawal of start-up power for unit-2, has submitted that commissioning activities of reactor systems are in progress and nearby completion. The petitioner has submitted that after obtaining clearance from AERB, the initial fuel loading and first approach to criticality would commence. The petitioner has requested to grant permission for drawal of start up power from the grid for Unit-2 of the project up to 31.7.2016.

7. During the course of hearing on 29.3.2016, the representative of the petitioner submitted that subsequent to the AERB nod, fuel loading and criticality is expected to be completed by May, 2016 and unit-2 would be synchronized with the grid by July, 2016 and requested to grant permission for drawal of start-up power for unit-2 upto 31.3.2016.

8. We have considered the prayer of the petitioner. The petitioner has sought permission for drawal of start-up power for unit-2 of the project from the grid upto 31.7.2016. The Fourth Proviso to Regulation 8 (7) of the Connectivity Regulations, as amended from time to time, 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."

9. The petitioner has submitted that the unit-2 of the project started drawing start-up power from the grid since 31.12.2014 and was permitted to draw start up power for a period of fifteen months before the date of first synchronization as per the provisions of the Connectivity Regulations which would expiry on 31.3.2016. It is noted that certain critical activities such as commissioning activities of reactor system and initial fuel loading, etc. are in progress and are required to be completed before synchronization of the unit-2. We are of the view that non-availability of start-up power would hamper the progress of commissioning work which would jeopardize the commissioning activities and result in further delay in declaring COD of unit-2. Accordingly, we allow the petitioner to draw start-up power from the grid for unit-2 upto 31.7.2016 or first synchronization, whichever is earlier.

10. With the above, the Petition No. 44/MP/2016 is disposed of.

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| Sd/- (Dr. M.K.Iyer) Member | sd/- (A.S. Bakshi) Member | sd/- (A. K. Singhal) Member | sd/- (Gireesh B. Pradhan) Chairperson |
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