

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 436/MP/2019

Coram:

**Shri P.K. Pujari, Chairperson
Dr. M. K. Iyer, Member
Shri I. S. Jha, Member**

Date of order: 27th December, 2019

In the matter of:

Anticipated delay in the declaration of Commercial Operation Date of Unit I and II of the 2x500 MW NLCIL- Neyveli New Thermal Power Project (NNTPP).

And

In the matter of

Seeking Commission's permission to maintain status-quo for drawal of start-up power and injection of infirm power under UI mechanism till declaration of Commercial Operation Date of Unit I and II or 31.3.2020, whichever is earlier.

And

In the matter of:

NLC India Limited
No. 8, 1st Floor, Mayor Sathyamurthy Road,
FSD, Egmore Complex of FCI, Chetpet
Chennai – 600 031.

.....Petitioner

Vs

1. The Member Secretary,
Southern Regional Power Committee
29, Race Course Cross Road, Bangalore – 560 009

2. Executive Director (SEF & CE)
Power Grid Corporation of India Limited
'Saudamini', Plot No. – 2, Sector – 29,
Nr. IFFCO Chowk, Gurgaon – 122 001, Haryana.

3. The General Manager (Commercial)
Power Grid Corporation of India Limited
Southern Region Transmission System II,
Nr. RTO Driving Test Track,
Singnayakanahalli, Yelahanka-Dodaballapur Road,
Bangalore-560 064.



4. The General Manager
POSOCCO, Southern Regional Load Despatch Centre,
29, Race Course Cross Road, Bangalore – 560 009.
5. The Chief Engineer/Planning
Tamil Nadu Generation & Distribution Corporation Limited
6th Floor, Eastern Wing, 144, Anna Salai,
Chennai – 600 002.
6. The Chief Engineer/Corporate Planning TRAC
Kerala State Electricity Board,
8th Floor, Vidyuthi Bhavanam,
Pattom, Thiruvananthapuram – 695 004.
7. The Director (Commercial)
State Power Purchase Co-ordination Committee,
Power Company of Karnataka Limited
Kaveri Bhavan, Bangalore – 560 009.
8. The Superintendent Engineer
Puducherry Electricity Department,
137, N.S.C Bose Road, Puducherry – 605 001.
9. The Chief Engineer/Commercial
Andhra Pradesh Power Co-ordination Committee
Vidyuth Soudha, 48-12-4/1, Elluru Road,
Gunadala, Vijaywada, Andhra Pradesh – 520 008.
10. The Chief Engineer/Commercial
Telangana State Power Co-ordination Committee
Vidyuth Soudha, Khairatabad, Hyderabad – 500 082.

.....**Respondents**

Parties Present:

Ms. Poorva Saigal, Advocate, NLC India Limited
Shri J. Dhamasekaran, NLC India Limited
Shri A. K. Sahni, NLC India Limited
Shri S. Vallinayagam, Advocate, TANGEDCO

ORDER

This Petition has been filed by the Petitioner, NLC India Limited, seeking permission of the Commission for drawal of start-up power and injection of infirm power into the grid up to 31.3.2020 or till declaration of commercial operation, whichever is earlier, in respect of Units-I and II of 1000 MW (2x500 MW) Lignite



based Neyveli New Thermal Power Project (hereinafter referred to as 'generating station' or 'Project') at Neyveli District in the State of Tamil Nadu 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 'Connectivity Regulations') as amended from time to time.

2. The Petitioner has submitted that the generating station consists of two lignite fired units of 500 MW each (2x500 MW). Scheduled Commercial Operation Date of Units I and II were 9.6.2015 and 9.12.2015 respectively. Unit-I of the generating station was synchronized with the grid on 28.3.2019.

3. The Commission in its order dated 17.7.2019 in Petition No. 167/MP/2019 had allowed injection of infirm power till 31.12.2019 or date of commissioning of the generating station, whichever is earlier. However, Unit-I could not be declared under commercial operation due to the following reasons:

'(a) Boiler Circulation Water Pump Failure: During the process of raising the Unit load in phases, the Boiler Circulation Water Pump got failed on 9.8.2019. This equipment is one of the critical equipment in once through boiler, required for wet mode operation of the Unit upto load of about 250 MW. Delay in replacement was faced, as it is an imported and high cost item, which needs replacement and schedule to replace with mandatory spares by BHEL. Further, difficulties were faced in lifting the heavy weight pump, due to space constraint and elevation. After arrangement of winches with erection of additional support structures, the pump was replaced and purging was carried out for two days to achieve the purity. Meanwhile, utilising this opportunity, the boiler was tested for finding out leaks and the punctures identified in the water wall, SH-1 outlet header (LHS & RHS) and Impulse tubing joints leakages were attended.

(a) Unit-I Boiler was lighted up again on 30.8.2019 for carrying out the various activities viz., balance 2 mills dry out, tuning of auto control loops, further load rising in phases for stabilisation and Safety Valves Floating, etc. During this phase, several problems were faced with lignite firing, such as



lignite feeder's problem, achieving the steam purity, problems in Lignite handling system, fly ash and bottom ash handling system.

(b) Breakdown of Submerged Scrapper Conveyer (SSC): SSC-B of Unit-I which was in service, got tripped on overload on 4.9.2019 and load was reduced accordingly. Attempts were made to start the SSC failed, and the SSC was drained, but no mechanical obstruction was found in the chain. Though the motor was running normally in both the directions, when decoupled, after coupling it was tripping on overload. It was decided to replace with standby SSC-A on 5.9.2019 and the same was positioned in a time period of 30 hrs. for the first time with available resources during boiler in service along with commissioning of traverse motors and cleared for operation on the same day. However, Unit was shut down on 16.9.2019 to attend submerged slag conveyor (SSC-A) chain cut and other leaks in boiler pressure parts, as SSC-B was already under maintenance works.

(c) Unit-I was lighted up on 24.9.2019 after making SSC-A ready and full load was achieved (510 MW) for the first time on 29.9.2019. Load reduced for completion of Safety Valve floating. After completion of Safety Valve Floating, Unit was stopped on 1.10.2019 to attend Water Wall Punctures and for repairing Turbine Driven Boiler Feed Pump (TDBFP) – 1A.

(d) After attending Water Wall Punctures, Unit was lighted up on 7.10.2019 for the process of CoD. During the course of raising the Unit Load, various problems were encountered in Mills, Lignite Feeders and Lignite Handling System. Due to Bunker Choke, Mechanical Break Downs, Slow Filling up of Boiler Bunkers, Unit was operated at low loads for 10 days, continuously with Fuel Oil Support.

(e) Boiler Circulation Water Pump Failure (Second Time): The failed Boiler Circulation Water Pump (BCWP) was dismantled for inspection on 3.10.2019. M/s BHEL confirmed it as stator coil failure and the damaged stator was moved to OEM works at Delhi, for further repair on 24.10.2019. The root cause analysis report for the same is yet to be received from the OEM. The Spare Boiler Circulation Water Pump (BCWP) which was put into service on 29.8.2019 also got failed on 14.10.2019 and the unit was forced to be shut down on 16.10.2019.

(f) During this shut down period, Bunker Choke Removal Works, Feeders Repair Works, commissioning of Bunker Air Blasters, Repair of TDBFP-1A are being undertaken and are in progress.'

4. The Petitioner has submitted that the above mentioned problems encountered in commissioning of the Units are unexpected and beyond the control of the Petitioner. The Petitioner has submitted that it is taking all efforts to rectify the above



defects and achieve COD of Units-I and II by December, 2019 and February, 2020 respectively.

5. The Petition was heard after notice to the Respondents. None of the Respondents have filed any reply despite notice.

6. During the course of hearing, the learned counsel for the Petitioner reiterated the submissions made in the Petition and requested to allow the Petitioner for injection of infirm power into the grid for commissioning tests including full load test of Unit-I and Unit-II beyond 26.7.2019 and upto 31.3.2020 or COD of the Project, whichever is earlier. The learned counsel for the Petitioner further informed that the trial run operation in respect of Unit I of the Project has already been commenced.

7. Learned counsel for the Respondent, TANGEDCO objected to the request/prayer of the Petitioner for further extension and submitted that on number of occasions, the Petitioner has already been granted the extension for drawal of start-up power and injection of infirm power of the Units. Learned counsel submitted that as per the investment approval, the Scheduled COD of the Unit-I and Unit-II were 9.6.2015 and 9.12.2015 respectively and even after prolonged delay of 4 years, the Petitioner could not achieve the COD of the generating station. Learned counsel submitted that technology employed by the Petitioner is outdated and on account of delay in achieving COD by the Petitioner, the Respondent is required to purchase the costly power from the Power Exchanges.

8. The Petitioner vide Record of Proceedings for the hearing dated 17.12.2019 was directed to submit the status of the trial run operation of Unit I and the anticipated Commercial Operation Date of the Unit II of the generating station. The



Petitioner, vide its affidavit dated 20.12.2019, has submitted that the trial run operation of Unit-I was successfully completed on 19.12.2019 and is expected to commence the commercial operation on 28.12.2019 after obtaining the necessary trial operation completion certificate from Southern Region Load Despatch Centre. As regards Unit- II, the Petitioner has submitted that the performance test and COD of Unit-II shall be in the month of February, 2020.

9. We have considered the submission of the Petitioner. 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.”

10. The Petitioner has submitted that it has made all efforts to ensure completion of activities of Unit-I and Unit-II of the generating station within stipulated time but could not succeed for reasons beyond its control. The Petitioner has submitted that due to various reasons, namely, Boiler Circulation Water Pump Failures, breakdown of Submerged Scrapper Conveyor (SSC), Water Wall Punctures and various problems encountered in Mills, Lignite Feeders and Lignite Handling System, etc. it could not complete trial run operation and achieve COD within the prescribed period from the date of first synchronization of Unit I and Unit II of the generating station. The Petitioner has submitted that time is required beyond 31.12.2019 to complete the balance works, namely, insulation works, delay in refractory dry out and erection of mills and DCS system integration, etc. and to carry out the operation of testing



and commissioning including injection of infirm power into the grid. Taking into consideration the difficulties expressed by the Petitioner and in terms of the proviso to Regulation 8 (7) of the Connectivity Regulations as quoted in Para 9 above, we allow the Petitioner to draw the start-up power and to inject the infirm power into the grid for commissioning tests including full load test of Unit-I and Unit-II upto 31.3.2020 or actual date of commercial operation, whichever is earlier. We expect the Petitioner to make all efforts to ensure the commercial operation of the Units by this date. 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 will be decided in accordance with the relevant provisions of the Tariff Regulations. Accordingly, the Respondent, TANGEDCO may raise the issues with regard to delay in commissioning of the generating station and increase in capital cost, etc. at the time of determination of tariff of the generating station which will be dealt in accordance with law.

11. With the above, the Petition No. 436/MP/2019 is disposed of.

Sd/-
(I.S. Jha)
Member

Sd/-
(Dr. M.K. Iyer)
Member

Sd/-
(P.K. Pujari)
Chairperson

