

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 15/MP/2013

**Coram:
Shri V.S Verma, Member
Shri M. Deena Dayalan, Member**

**Date of Hearing: 11.4.2013
Date of Order: 4.9.2013**

In the matter of

Petition seeking Commission's permission to maintain status quo for injection of infirm power under UI mechanism till declaration of COD or 31.8.2013 whichever is earlier

And In the matter of

Neyveli Lignite Corporation, Chennai

.....Petitioner

Vs

1. Southern Regional Power Committee, Bangalore
2. Power Grid Corporation of India Ltd, Haryana
3. Power Grid Corporation Ltd, Bangalore
4. POSOCO, SRLDC, Bangalore
5. Tamil Nadu Generation & Distribution Corporation Ltd, Chennai
6. Kerala State Electricity Board, Thiruvananthapuram
7. Power Company of Karnataka Ltd, Bangalore
8. Puducherry Electricity Department, Puducherry
9. Andhra Pradesh Power Coordination Ltd, Hyderabad

...Respondents

Parties Present:

1. Shri S. Ravisankar, NLC
2. Shri K.Nambirajan, NLC
3. Shri S.Sankaran, NLC

ORDER

This petition has been filed by the petitioner, Neyveli Lignite Corporation (NLC) with the following prayers:

- (i) To permit injection of infirm power into the grid from NLC TPS II Expansion beyond 15.2.2013 till declaration of COD or 31.8.2013 whichever is earlier;
- (ii) To pass such orders as deemed fit by the Commission.

2. Petition No.117/MP/2012 was earlier filed by the petitioner seeking directions of the Commission for injection of infirm power till declaration of the commercial operation of NLC TPS II Expansion, in terms of Regulation 8(7) of the Central Electricity Regulatory Commission (Grant of Connectivity, Long Term Access and Medium Term Access in inter-State Transmission and related matters) Regulations, 2009 (hereinafter referred to as "Connectivity Regulations") and also for drawal of power from the grid under UI during testing and commissioning by the generating station. As regards injection of infirm power, the Commission, in exercise of power under first proviso to Regulation 8(7) of the Connectivity Regulations allowed the said prayer of the petitioner by order dated 2.11.2012 as under:

"13. It is however noticed that the petitioner had in its affidavit dated 10.5.2012 indicated the expected date of commercial operation as 30.9.2012 whereas in its letter dated 25.9.2012, the petitioner has indicated the expected date of commercial operation as 15.2.2013. The petitioner has indicated the timeline for different activities to be undertaken before declaration of commercial operation of the unit. In consideration of the submission of the petitioner and in exercise of power under first proviso to Regulation 8(7) of the Connectivity Regulations, we allow the petitioner to inject infirm power into the grid for testing including full load testing till 15.2.2013. However, such extension of time for injection of infirm power into the grid by the petitioner shall not entitle it to any increase in IDC and IEDC due to delay in declaration of CoD from the schedule CoD or any other benefit/relaxation of availability or efficiency norms"

Submissions of the petitioner

3. The petitioner in this petition has submitted that Unit-I of NLC TPS-II Expansion project was first synchronized with the grid with oil firing system on 18.5.2011 and on 27.6.2011 with lignite firing. It has also submitted that Unit generation was maintained at 120-140 MW only to contain the furnace temperature and the differential pressure in the combustor zone and to avoid choking of lignite conveyors. The petitioner has stated that the unit attained full load of 250 MW on 4.2.2012 and maintained at 250 MW only for a short period of 5 minutes. It has also submitted that the unit was under shut down during the following periods for the reasons mentioned below:

From 1.7.2011 to 3.8.2011	Modification in lignite transport feeders and rectification works in Boiler area.
From 8.8.2011 to 8.9.2011	Modification in extraction feeders, leaks in FBHE's repair in refractory etc.
From 24.9.2011 to 26.1.2012	Steam cooled wall screen tube puncture, failure of NMEJs.
From 20.3.2012 to 3.11.2012	FBHE coil puncture & support system failure, refractory failure in empty chamber of FBHEs

4. The petitioner has further submitted that Unit- I was lighted up on 4.11.2012 after attending to the FBHE coil punctures and refractory modification works. It has also been submitted that Unit was synchronised on 8.11.2012 and the load was maintained at 80-100 MW and could not be raised more than 125 MW due to restriction on combustor temperature and differential pressure in the upper portion of the combustor. The petitioner has stated that on 25.11.2012, the Unit was stopped to attend Seal pot no.2 red hotness, indicating the failure of refractory at that location and FBHE was also inspected on 3.12.2012 and found that part of the vertical spacer rods and horizontal spacer tubes have sheared in all the FBHEs as occurred in the previous shut down. The petitioner has added that M/s Lentjes, the process developer for BHEL from Germany, inspected the FBHEs along with BHEL, Trichy and informed that design change is required in the supporting arrangements. The petitioner has submitted that the re-engineering of the above is expected by last week of January, 2013. During the hearing on 28.2.2013, the representative of the petitioner while reiterating the above difficulties has also submitted that as per the new time line, re-engineering has been started in January, 2013 and the modifications works based on re-engineering would be completed during February to May, 2013 and re-commissioning of systems would be completed in June, 2013. Accordingly, the petitioner has requested that the difficulties encountered in declaring COD as enumerated may be considered and the petitioner may be permitted to inject infirm power into the grid for testing including full load testing till 31.8.2013 or COD whichever is earlier.

5. During the hearing, the representative of the petitioner submitted that further delay in the commissioning of Unit I was anticipated as the design of supporting structures inside FBHE were just completed as manufacturing and erection of coils and support structures in Fluidized Bed Heat Exchangers are expected to be completed by September, 2013. Accordingly, the petitioner requested for extension of time upto November, 2013.

Reply of the respondents

6. Southern Regional Power Committee (SRPC) in its reply dated 13.3.2013 has submitted that the scheduled date of COD of the units has been revised several times by the petitioner in the subsequent SRPC meetings. It has also submitted that the beneficiaries had been expressing serious concern over the delay in commission of these units which was upsetting the procurement plan of power purchase of the utilities. The respondent, apart from proposing some methodology has submitted that in case infirm power is injected under UI mechanism, the original beneficiaries who are power starved and waiting for number of years for receiving power from NLC TPS II Expansion may not be able to avail the power.

7. Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) in its reply dated 19.3.2013 has referred to the submissions of the petitioner and has stated that the previous design (of FBHEs) was inferior which had not been looked into either by the petitioner or BHEL. It has also submitted that the leaks in FBHE was observed during shut down during the period of 8.8.2011 to 8.9.2011 and the re-engineering proposal has come out after a period of 20 months from the date of first synchronisation. The respondent has also submitted that both NLC and BHEL had not taken up the issue critically resulting in huge loss to the public exchequer as the contracted power is not available and in turn the State Electricity Boards have to resort to the risk of purchasing high cost power to meet the requirement due to default on the part of the generator in honouring its commitment to the State Electricity Boards. It has further submitted that the absence of penalty clause for not commissioning the unit within the time indicated at the time of signing the Power Purchase Agreements has encouraged the public sector undertakings to take their own time to execute the project. Accordingly, the respondent, TANGEDCO while requesting the Commission to consider the inclusion of a penalty clause under the 2009 Tariff Regulations, has prayed that the Commission may fix a time limit for declaration of COD of a generating station /unit after its first synchronisation.

8. Southern Regional Load Despatch Centre (SRLDC) in its reply dated 26.3.2013 has submitted that Unit-I of NLC TPS-II (Expansion) may be considered as 'under construction' and once the Unit-I is ready for synchronisation, the petitioner may approach the Commission for injection of power for a specified period by furnishing the detailed activities to be carried out.

Rejoinder of petitioner

9. The petitioner has filed its rejoinder to the said replies of the respondents and has reiterated its submissions made in the petition. It has also submitted that it has taken sincere efforts to complete the project in time and the delay in the commissioning of the project is beyond the control of the petitioner due to technical issues which has hindered the scheduled date of commercial operation.

10. Based on the submissions made during the hearing on 11.4.2013, the petitioner vide its affidavit dated 15.4.2013 has submitted the revised commissioning programme of Unit-I of NLC TPS II Expansion project and has prayed for extension of time for injection of infirm power till November, 2013.

Analysis

11. We have considered the submissions of the parties and examined the documents on record. Clause (7) of Regulation 8 of the Connectivity Regulations, amended on 21.3.2012, provides as under:

“(7) Notwithstanding anything contained in clause(6) of this regulation and any provision with regard to sale of infirm power in the PPA, a unit of a generating station, including a captive generating plant which has been granted connectivity to the grid shall be allowed to inject infirm power into the grid during testing including full load testing before its COD for a period not exceeding six months from the date of first synchronization after obtaining prior permission of the concerned Regional Load Despatch Centre:

Provided that the Commission may allow extension of the period of testing including full load testing, and consequent injection of infirm power by the unit, beyond six months, in exceptional circumstances on an application made by the generating company at least two months in advance of completion of six month period:

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

Provided also that the onus of proving that the injection of infirm power from the unit(s) of the generating station is for the purpose of testing and commissioning shall lie with the generating company and the respective RLDC shall seek such information on each occasion of injection of power before COD. For this, the generator shall provide RLDC sufficient details of the specific testing and commissioning activity, its duration and intended injection etc."

Provided also that the infirm power so injected shall be treated as Unscheduled Interchange of the unit(s) of the generating station and the generator shall be paid for such injection of infirm power in accordance with the provisions of the Central Electricity Regulatory Commission (Unscheduled Regulations, 2009, as amended from time to time."

12. The petitioner has submitted that the difficulties encountered in the declaration of COD are project specific issues experienced during commissioning which are unique and not comparable to other projects. It has also submitted that the Circulating Fluidized Bed Combustion (CFBC) technology has been adopted for its project for the first time in order to avoid slagging in the boiler furnace walls and is also eco friendly. The submissions of the respondent, TANGEDCO that the delay is mainly due to choosing an untested technology and the petitioner being aware of the work involved should have monitored the project for timely execution, is not acceptable since there appears to be a bonafide intention on the part of the petitioner to adopt such a new technology in order to achieve high combustion efficiency and low air pollution, keeping in view that CFBC technology is more suited for combustion of low grade coal and lignite. Further, the prayer of the said respondent to consider the inclusion of a penalty clause under the 2009 Tariff Regulations and for fixation of a time limit for declaration of COD of a generating station /unit after its first synchronisation cannot be considered in this petition as these issues relate to the tariff regulations specified by the Commission for determination of tariff.

13. It is noticed that the Commission in its order dated 2.11.2012 had allowed extension of time upto 15.2.2013 for injection of infirm power from the project cconsidering the special circumstances of the case because of the new technology adopted by the petitioner. In the instant case, the delay appears to be on account of re-designing of coil support structures that had failed during load raising, completion of design of the supporting structures inside FBHE and manufacturing and erection of coils and support structures in Fluidized Bed Heat Exchangers. We also notice that the petitioner had faced similar problems in one of its

generating station namely, Barsingsar TPS (2x125 MW) which is based on CFBC technology wherein the main plant package had been supplied by M/s BHEL. Considering the factors in totality and due to unforeseen circumstances, the petitioner is allowed to inject infirm power into the grid for testing including full load testing till declaration of COD or 30.11.2013, whichever is earlier. However, the extension of time allowed for injection of infirm power into the grid shall not entitle the petitioner for any increase in IDC and IEDC due to delay in declaration of COD from the scheduled COD or any other benefit/relaxation of availability or efficiency norms.

14. As the petitioner has submitted that the design change is required in the supporting arrangement of FBHEs, the petitioner should also consider recourse to action against the contractor as per agreement for the delay, in accordance with the provisions, if any, of the contract. This would also address the concern of the respondents by way of reduction in the capital cost of the project.

15. Petition 15/MP/2013 is disposed of as above.

Sd/-
[M. Deena Dayalan]
Member

Sd/-
[V.S. Verma]
Member