# CENTRAL ELECTRICITY REGULATORY COMMISSION **NEW DELHI**

## **Petition No. 117/MP/2012**

Coram Dr. Pramod Deo, Chairperson Shri S. Jayaraman, Member Shri V.S. Verma, Member Shri M. Deena Dayalan, Member

**Date of Hearing: 31.5.2012** Date of Order: 02.11.2012

#### In the matter of

Anticipated delay in the declaration of commercial operation date for the 2x220 MW NLC-Thermal Power Station-II Expansion Power Plant.

### And in the matter of

Seeking permission to maintain status-quo for injection of infirm power an drawal of power for commissioning activities under UI mechanism till declaration of commercial operation date.

### And in the matter of

Neyveli Lignite Corporation Limited, Chennai ..... Petitioner

- Vs
- Member-Secretary, Southern Regional Power Committee 1.
- Power Grid Corporation of India Limited, Gurgaon 2.
- Power Grid Corporation of India Limited, Bhubaneswar 3.
- POSOCO, Bangalore 4.
- Tamil Nadu Generation and Distribution Cor. Ltd., Chennai 5.
- 6. Kerala State Electricity Board, Thiruvananathapuram
- State Power Purchase Co-ordination Committee, Bangalore 7.
- Puducherry Electricity Department, Puducherry 8.
- 9. Andhra Pradesh Power Co-ordination Committee, Hyderabad

.....Respondents

## The following were present:

- 1. Shri R. Suresh, NLC
- 2. Shri S.Balaguru, Advocate, TANGEDCO
- Shri V. Suresh, SRLDC

### **ORDER**

The petitioner, Neyveli Lignite Corporation Limited has filed this petition seeking directions regarding injection of infirm power and drawal of power for the commissioning activities under UI mechanism till declaration of the commercial operation of NLC TPS II Expansion.

2. The petitioner has submitted that unit 1 of NLC TPS-II Expansion project was synchronized with the grid with oil firing system on 18.5.2011 and lignite firing on 27.6.2011. However, due to numerous teething problems, there is delay in declaration of the date of commercial operation, resulting in prolonged injection of infirm power. The petitioner has submitted that as per 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"), injection of infirm power can be made into the grid with the prior permission of the Regional Load Despatch Centre. Subsequent to the Second Amendment to the Connectivity Regulations which came into effect from 21.3.2012, a time limit of six months has been stipulated for injection of infirm power. The petitioner has submitted that Southern Regional Load Despatch Centre has allowed injection of infirm power till 30.4.2012. Under the circumstances, the petitioner has filed the present petition for permission to inject infirm power into the grid and draw the start-up power till the commercial operation date of the generating station. Accordingly, the petitioner has made the following main prayers:

- "b) To maintain status quo in the injection of infirm power from NLC, TPS-II Expansion till declaration of COD or 2.10.2012 whichever is earlier;
- (c) To maintain status quo in drawing power under UI mechanism for the commissioning activities of NLC-TPS-II Expansion up to the date of commercial operation."
- 3. Tamil Nadu Generation and Distribution Corporation Ltd. (TANGEDCO) in its reply filed vide affidavit dated 20.4.2012 has submitted that the petitioner had informed during the 11th meeting of the Southern Regional Power Committee (SRPC), that the first unit of TPS II Expansion would be commissioned by July, 2010 and second unit by January 2011. Subsequently, in the 12<sup>th</sup> meeting of SRPC, the Petitioner intimated the revised schedule of commissioning as August 2010 and February 2011, respectively. However, the petitioner has now stated in the petition that the generating station was synchronized on 18.5.2011 and is facing numerous problems, leading to delay in declaration of the commercial operation date. TANGEDCO has submitted that in accordance with the second amendment of the Connectivity Regulations, the UI mechanism for injection of infirm power should not be extended beyond six months i.e. 18.11.2011
- 4. The petition was heard on 26.4.2012 and was admitted. During the hearing, the representative of the petitioner submitted that the SRPC in its letter dated 16.3.2012 has allowed drawl of power for commissioning activities under UI mechanism till 30.4.2012 and advised the petitioner to make alternative arrangements thereafter for drawl of commissioning power. The representative of the petitioner submitted that NLC TPS II Expansion be allowed to draw commissioning power from the grid till the Commercial Operation Date. Since UI is not a mechanism to draw power for testing during commissioning, the petitioner

was directed to make arrangement through some form of access to meet its requirement of start-up power during commissioning. We had further directed the petitioner to file details of activities to be undertaken and the time required for completion of these activities with a firm commitment for the date of commercial operation of the units of NLC TPS II Expansion.

The petitioner in its reply vide affidavit dated 10.5.2012 has enumerated the 5. activities required to be undertaken before declaration of the commercial operation of units of the generating station. In the said affidavit, it has been indicated that the commercial operation would be declared on 30.9.2012. It has been further submitted that the petitioner was taking necessary steps for making alternative arrangements for availing start up power supply for NLC-TPSII Expansion, as per observations of the Commission. Member Secretary, SRPC in its reply dated 25.5.2012 has submitted that the Petitioner in its letter dated 10.8.2010 had requested SRLDC to grant permission to avail start up power from September 2010 for 400 kV ISTS grid through back charging of generator transformer, in accordance with clause 6 of the approved procedure under Connectivity Regulations, at the applicable UI rate. SRLDC vide their letter dated 27.8.2010 had granted permission to the petitioner for availing start up power for commissioning activities of TPS-II Expansion Unit-I on UI basis from SR grid. However, considering the communication received from some of the Southern Regional entities, the matter was listed for discussion during the Commercial Committee Meeting held on 29.9.2010. The Committee after detailed deliberations decided in the light of clause 6.2 of the detailed procedure under Connectivity Regulations to allow drawl of start-up power for commissioning activities of NLC TPS-II Expansion. Subsequently, the petitioner asked for

extending the permission to avail start up power drawl on UI basis till commercial operation of the generating station. The issue was deliberated in the 18<sup>th</sup> Meeting of the SRPC held on 23.12.2011 and it was agreed to allow drawl of the commissioning power under UI mechanism till end of April 2012 and alterative arrangement for drawl of commissioning power should be made by the petitioner in case of requirement continued beyond 30<sup>th</sup> April, 2012. SRPC has further submitted that NLC TPS II Expansion was drawing commissioning power under UI mechanism for more than 1½ years. Therefore, there should be some time limit for such drawl of infirm power. It has been further submitted that suitable clause for allowing drawl of power for commissioning activities under UI mechanism with certain time limit may be incorporated for enabling implementation and effective compliance of the provisions by the generating stations.

- 6. TANGEDCO in its additional submission dated 25.5.2012 has submitted that according to 2009 Tariff Regulations, excess revenue earned by way of selling infirm power at UI rates will reduce the capital cost of the project. The very fact that the petitioner is pressing for extension of time clearly indicates that the petitioner is not earning any revenue on account of sale of infirm power at UI rate and accordingly there is no reduction in the capital cost. TANGEDCO has further submitted that since sufficient time has been granted for declaring the COD from the date of synchronization, the rate for infirm power injected by the petitioner be fixed by adopting the norms specified in the 2009 Tariff Regulations.
- 7. The matter was further heard on 31.5.2012. It was submitted by the petitioner during the hearing that in the light of the observation of the Commission, the petitioner has firmed up start-up power with TANGEDCO, and as per the

arrangement, NLC has been treated as HT power consumer of TANGEDCO w.e.f. 29.5.2012. The petitioner has submitted that this arrangement would be costlier compared to drawl of power from the grid under UI and has requested to maintain status quo with regard to drawal of commissioning power under the UI..

8. We have considered the submissions of the petitioner and the respondents. The petitioner has filed the present petition for allowing injection of infirm power into the grid beyond the permissible period specified in the Connectivity Regulations and also to allow it to draw start up power from the grid till the date of commercial operation. As regards the injection of infirm power into the grid, it is noticed that the first unit of the generating station was synchronized with the grid with oil firing system on 18.5.2011 and lignite firing on 27.6.2011. However, the unit was stopped on 1.7.2011 due to problem in lignite feeders. The unit is designed to use Circulating Fluidised Bed Combustion (CFBC) technology which intends low air pollution and high efficiency of combustion. Being a new technology, NLC TPS II Expansion is facing teething problem at the initial stage on validating various schemes and processes in the system which require more time to achieve its sustained full capacity as compared to conventional thermal plant. The petitioner in its affidavit dated 10.5.2012 has submitted the various activities / tests required to be undertaken before the unit I is brought back in service for declaring commercial operation on 30.9.2012. The petitioner in its letter dated 25.9.2012 has submitted a revised schedule of the activities and tests to be undertaken for bringing back unit I in service and for declaring the commercial operation date. As per the said schedule, various tests and activities are to be carried out from 15.4.2012 till 31.12.2012. Light up of the boiler is proposed to be undertaken in the first week of January 2013 from LDO and HFO

firing; synchronization is proposed on 13.1.2013; and the COD is proposed to be declared on 15.2.2013. Accordingly, the petitioner has requested for permission to inject infirm power till 15.2.2013.

9. Clause 7 of Regulation 8 of Central Electricity Regulatory Commission (Grant of Connectivity, Long Term Access, Medium Term Open Access and related matters) Regulations, 2009 as amended vide Second Amendment vide notification dated 21.3.2012 provides for the injection of infirm power into the grid during testing 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."

10. The above regulation allows a generating station to inject infirm power into the grid for the purpose of testing and full load testing for a period of six months from the date of first synchronization. In exceptional cases, the generating station is allowed to inject infirm power into the grid with the approval of the Commission. As regards the cases of the generating stations whose date of first synchronization is prior to the notification of the second amendment on 21.3.2012, the Commission vide its order dated 11.9.2012 in Petition No. 119/MP/2012 has clarified as under:

"The case of the petitioner is that the units of the generating station were synchronized with effect from 3.8.2011 and 12.8.2011 respectively. The units injected infirm power during testing for two months i.e. till 1.10.2011. However, due to problems encountered in the civil structure, the project remained completely under shut down. After completion of the rectification and restoration works, the units of the generating station were synchronized to the grid on 5.5.2012 and 9.5.2012 respectively and the infirm power from the units were injected into the grid. After completion of the testing, the petitioner has declared the commercial operation of the project w.e.f. 12.7.2012 in consultation with the PTC India Ltd/Long term beneficiary of the project. The petitioner has placed on record a report on restoration work carried out in the project. On perusal of the documents in record, it is evident that the testing was abandoned w.e.f 2.10.2011 due to problems in the civil structure and testing again started from the first week of May 2012 after rectification and restoration works were complete. If the period of six months is counted from the first synchronization in accordance with the provisions of Clause 8 (7) of the Connectivity Regulations as amended w.e.f. 21.3.2012, the petitioner becomes ineligible for injection of infirm power for the purpose of testing from both units of the project w.e.f. 3.2.2012 and 12.2.2012 respectively. This is not the purpose of the Amendment Regulations to retrospectively take away the rights of the generators to inject infirm power during testing by counting the period of six months from a date prior to the notification of the regulations. Since it is a settled principle of law that the delegated legislation would have prospective application only, there is a requirement to adopt purposive interpretation of the words "six months from the first synchronization" so that the purpose of the regulation is served. It is pertinent to mention that the purpose of specifying a time limit of six months for injection of infirm power was to discourage the generators from delaying declaration of commercial operation of their projects and to encourage sale of power through the different forms of access. The purpose of the Amendment

- 11. In the light of the above, the six months period allowed for injection of power under Regulation 8 (7) of the Connectivity Regulations expires on 21.9.2012. The petitioner under the extraordinary circumstances has requested for further extension of the period for injection of infirm power till 15.2.2013. The petitioner is stated to have adopted Circulating Fluidised Bed Combustion (CFBC) technology in the generating station for achieving low air pollution and high efficiency of combustion. The technology is being used for the first time in India and therefore, no prior experience is available. The petitioner has to attend to all teething problems before the unit is put under commercial operation. Although the additional time sought is mostly not for testing and commissioning but also for replacement of damaged parts. Considering the special circumstances of the case because of new technology, we are of the view that extension of the period of injection of infirm power can be granted in exercise of our power under Regulation 8 (7) beyond 21.9.2012.
- 12. TANGEDCO has submitted that the petitioner is delaying to declare the commercial operation of the unit as the revenue earned through sale of infirm power is barely sufficient to meet the fuel cost and does not contribute towards reduction of capital cost. TANGEDCO has suggested that the Commission should

fix the rate of infirm power so that the petitioner gets more than the fuel cost and the additional revenue generated over and above the fuel cost is utilized by the petitioner for reduction of capital cost. We do not find any merit in the submission of TANGEDCO. The rate of infirm power has been deliberately fixed at Rs.1.65/kWh keeping in view the average fuel cost of NTPC generating stations and the purpose is not to award the generator more than the fuel cost which will itself be a disincentive for the generating station to prolong injection of infirm power. There is no provision in the regulations which enables the Commission to fix the rate of infirm power in deviation of the rates specified in the Central Electricity Regulatory Commission (Unscheduled Interchange and related matters) regulations, 2009 as amended. Moreover, in case of the generating station, its beneficiaries are pre-identified and therefore, it is in the interest of the petitioner that the commercial operation of the unit is declared at the earliest so that it gets the annual fixed charges in addition to the fuel cost. Therefore, we reject the submission of TANGEDCO that the petitioner should not be allowed time beyond six months for injection of infirm power.

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.

14. The other question for our consideration is the drawal of power from the grid under UI during testing and commissioning by the generating station. We have noted from the submission of SRPC that the petitioner was granted permission to avail start-up power till 30.4.2012 in accordance with clause 6(2) of the approved procedure under Connectivity Regulations. The said provision is extracted as under:

"However, generating station, including captive generating plant which has been granted connectivity to the grid shall be allowed to undertake interchange of power including drawal of power for commissioning activities and injection of infirm power into the grid during full load testing before being put into commercial operation even before availing any type of open access, after obtaining permission of the concerned Regional Load Despatch Centre, which shall keep grid security in view while granting such permission. This infirm power from a generating station or a unit thereof, other than those based on non-conventional energy sources, the tariff of which is determined by the Commission, will be governed by the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The power injected into the grid from other generating stations during such testing shall also be charged at UI rates."

It is observed that the Connectivity Regulations do not provide for drawal of power under the UI during testing and commissioning. The detailed procedure which has been issued under the Connectivity Regulations to facilitate implementation of the regulations cannot travel beyond the scope of the regulations to allow drawal of start-up power under the UI. Moreover, UI by its very nature is deviation from schedule and cannot be conferred the status of scheduled power for the purpose of commissioning and testing. Since these events are planned in advance, the generators should arrange for power for this

purpose through some form of access. In that view of the matter, we had directed the petitioner in the Record of Proceedings dated 26.4.2012 to make arrangement for start-up power through some form of access. The petitioner has arranged start-up power from TANGEDCO as a HT power consumer but has stated that the power is costlier than the UI power. We are not inclined to reconsider our directions in respect of drawal of the commissioning power. This will not only be applicable in case of the petitioner, it will be applicable in case of all generators. Accordingly, we direct that the words "including drawal of power for commissioning activities" in clause 6.2 of the detailed procedure shall stand deleted with immediate effect. However, the cases of the generators which have drawn power from the grid under the UI prior to the issue of this order shall not be reopened.

- 15. We are aware that the Commission in the Statement of Reasons to the amendment dated 7.1.2008 to the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) regulations, 2004 (2004 Tariff Regulations) had observed that a generating station should be allowed to draw power under UI from the first synchronization till commercial operation. The relevant observation is extracted as under:
  - "10. Power Grid Corporation of India Ltd. has further suggested as follows:-

"In case of a first generating unit in a new power station, there could be situations when the generator draws auxiliary supply from the grid on a net basis when the unit is out. Such drawals also need to be charged at UI rates if this amendment comes into force. For the period of construction to the first synchronization of unit, the generator could have any arrangement either through Short Term pen access (STOA) or through the retail supplier for the area. From the period of first synchronization to commercial operation the

arrangement needs to be only UI rates to avoid any accounting complications."

11. The Commission finds this suggestion reasonable. There is nothing in the 2004 regulations to prevent operationalisation of this suggestion, and the same may be adopted as a logical corollary to the proposed amendments regarding infirm power, whenever a generating company wishes to go through this route."

It is to be noted that the 2004 Tariff Regulations was valid till 31.3.2009. There is no provision in the 2009 tariff Regulations or the UI Regulations or Connectivity Regulations which allow a generator to avail start-up power under UI from the date of first synchronization till the date of commercial operation. As already observed, the provision in the detailed procedure cannot enlarge the scope of the regulations and accordingly, we have directed for deletion of the said provision from the detailed procedure. However, if a provision is required to be made for drawal of start-up power under UI, it should be done through an amendment to the Connectivity Regulations after taking into account all relevant factors including grid security. We direct the staff to examine the issue whether UI power should be allowed to be drawn by the generators during commissioning and testing without jeopardizing grid security, how such drawal of power can be regulated by the RLDCs, the duration for which such drawal shall be allowed and the rate at which such UI power can be drawn and submit for consideration of the Commission.

16. Petition No. 117/MP/2012 is disposed of in terms of the above.

sd/- sd/- sd/- sd/- (M Deena Dayalan) (VS Verma) (S Jayaraman) (Dr Pramod Deo) Member Member Chairperson