

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

**Coram
V S VERMA, MEMBER
M DEENA DAYALAN, MEMBER**

**Date of Hearing: 16.07.2013
Date of Order: 18.09.2013**

Petition No 259/MP/2012

In the matter of

Interlocutory Application for directions under Sections 79 and 94 of the Electricity Act, 2003 read with Regulations 103, 111 & 112 of the CERC (Conduct of Business) Regulations, 1999 for clarification of Order dated 02.11.2012 passed by this Hon'ble Commission in petition No. 117/MP/2012 relating to Anticipated delay in the declaration of commercial operation date for the 2x220 MW NLC-Thermal Power Stations-II Expansion Power Plant

**And in the matter of
EMCO Energy Ltd.**

Petitioner

Vs

Western Regional Load Despatch Centre

Respondent

Review Petition No. 27/RP/2012

In

Petition No. 117/MP/2012

In the matter of

Review Petition under section 94(1) (f) of the Electricity Act, 2003 seeking review of order dated 2.11.2012 and directions

And in the matter of

M/s KSK Mahanadi Power Co. Ltd.

Review Petitioner

Vs

1. Member-Secretary, Southern Regional Power Committee
2. Power Grid Corporation of India Limited, Gurgaon

3. Power Grid Corporation of India Limited, Bhubaneswar
4. POSOCO, Bangalore
5. Tamil Nadu Generation and Distribution Cor. Ltd., Chennai
6. Kerala State Electricity Board, Thiruvananthapuram
7. State Power Purchase Co-ordination Committee, Bangalore
8. Puducherry Electricity Department, Puducherry
9. Andhra Pradesh Power Co-ordination Committee, Hyderabad Respondents

Parties Present

1. Shri V. Suresh, SRLDC
2. Shri Ajay Dua, NTPC
3. Shri K.V.S. Baba, POSOCO
4. Shri S.S. Barpande, NLDC
5. Shri S. Vallinayagam, TANGEDCO

ORDER

Both the petitions have their seeds in the Commission's order dated 2.11.2012 in Petition No 117/MP/2012 filed by Neyveli Lignite Corporation Ltd.

2. The petitioner, EMCO Energy Ltd., has made the following prayers, namely

- “(a) Hold that the direction contained in the Order dated 02.11.2012 in Petition No. 117/MP/2012 directing the amendment of the procedure for drawl of power in Clause 6.2 of the Detailed Procedure shall not affect the generators who have commenced the pre-commissioning and are in the process of commissioning and declaring commercial operation as the case of the Petitioner herein;*
- (b) Direct the WRLDC to allow the Petitioner to draw power for testing and commissioning purposes through UI till declaration of COD of the generating units subject to the final decision / outcome of the present proceedings before the Hon'ble Commission;*
- (c) Pass urgent and immediate orders in terms of Prayers (a) and (b) above;*

- (d) *Initiate proceeding to consider the implication of the withdrawal of UI mechanism for drawl of power for commissioning and hear all interested and concerned parties.*
- (e) *Pass any such further order or orders as this Hon'ble Commission may deem fit in the facts and circumstances of case.”*

3. The Review Petitioner, M/s KSK Mahanadi Power Co. Ltd, has made the following prayers, namely -

- “(a) Review the order dated 2.11.2012, passed in Petition No.117 of 2012, to the extent of the amendment of the CTU procedure regarding drawl of power in clause 6.2 of the regulations;*
- (b) Alternative, direct the WRLDC to allow the Review Petitioner as a special case to draw power till the testing and commissioning of the Unit No.3 (1st unit of the project) is completed on UI rates from the ISTS, in terms of the detailed procedure; and*
- (c) Pass such other and further order or orders as this Hon'ble Commission may deem fit and proper under the facts and circumstances of the present case and in the interest of justice.”*

4. The Commission has notified 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 (the Connectivity Regulations). By virtue of Regulation 27, the Central Transmission Utility, which has been nominated as the Nodal Agency under these regulations, submitted the detailed procedure for the purpose of these regulations for approval of the Commission after considering the comments from the public received on the draft procedure made available on its website. The detailed procedure submitted the Central Transmission Utility in accordance with Regulation 27 was approved by the Commission in its order dated 21.12.2009. Clause 6.2 of the detailed procedure

approved by the Commission *inter alia* provides that a generating station, which has been granted connectivity to the grid shall be allowed to undertake interchange of power including drawl of power for commissioning activities and injection of infirm power into the grid during full load testing before being put into commercial operation. Clause 6.2 is extracted hereunder:

*"However, generating station, including captive generating plant which has been granted connectivity to the grid shall be allowed to undertake interchange of power **including drawl 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 obtaining permission of the concerned Regional Load Dispatch 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 or which is determined by the Commission, will be governed by the Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2009. The power injected into the grid from other generating stations during such testing shall also be charge at UI rates." (Emphasis added)*

5. The Commission in its order dated 2.11.2012 in Petition No 117/MP/2012 had directed that the words "including drawl of power for commissioning activities" appearing in clause 6.2 of the detailed procedure (highlighted above in bold letters) be omitted since it was inconsistent with the Connectivity Regulations. The extracts from the Commission's order dated 2.11.2012 are reproduced below:

"14. The other question for our consideration is the drawl 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 30.04.2012 in accordance with clause 6(2) of the approved procedure under Connectivity Regulations. The said provision is extracted a sunder:

"However, generating station, including captive generating plant which has been granted connectivity to the grid shall be allowed to undertake interchange of power including drawl 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 obtaining permission of the concerned Regional Load Dispatch 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 or which is determined by the Commission, will be governed by the Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2009. The power injected into the grid from other generating stations during such testing shall also be charge at UI rates."

It is observed that the Connectivity Regulations do not provide for drawl 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 to facilitate implementation of the regulation cannot travel beyond the scope of the regulations to allow drawl 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 26.04.2012 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 drawl 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 word "including drawl 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 07.01.2008 to the Central Electricity Regulatory Commission (Terms of 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 open 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."

It is to be noted that the 2004 Tariff Regulations was valid till 31.03.2009. 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 drawl of start-up power under UI, it should be done through an amendment to the Connectivity Regulation 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 drawl of power can be regulated by the RLDCs, the duration for which such drawl shall be allowed and the rate at which such UI power can be drawn and submit for consideration of the Commission."

6. The petitioner set up 2 x 300 MW coal-based power project in the State of Maharashtra (the power project). The petitioner entered into long-term PPA dated 14.3.2010 for supply of power to MSEDCL. LOI dated 14.8.2012 was also issued in favour of the petitioner for supply of power to Union Territory of Dadra & Nagar Haveli. The power project has been granted connectivity at 400 kV Bhadravati sub-station of PGCIL, for which the Connection Agreement as required under the

Connectivity Regulations has been entered into by the petitioner and PGCIL. The petitioner has also executed the Bulk Power Transmission Agreement dated 17.1.2009 (BPTA) with PGCIL for evacuation of power.

7. The petitioner has stated that the pre-commissioning activities of the power project started in October 2012 and was stated to be ready for synchronisation, testing and commissioning in the first week of December 2012. It has been stated that the petitioner started drawing power from the Regional grid as per the Connection Agreement for undertaking pre-commissioning activities and the charges were settled under the UI mechanism after approval by Western Region Load Despatch Centre (WRLDC).

8. The petitioner has stated that in view of the Commission's direction at para 14 of the order dated 2.11.2012 *ibid*, WRLDC vide letter dated 16.11.2012 informed that the petitioner would no longer be permitted to draw power under UI. The petitioner has pointed out that the power project is not connected with the STU network. It has been stated that the construction power was being drawn from the distribution licensees through 33 kV transmission line which is not adequate to carry the load of start-up power requirement for commissioning activities, and as such is unable to draw power from the State grid for pre-commissioning and the start-up purposes. The petitioner has pointed out that the Commission has not been allowed any transitional period to enable the generators to make an alternative arrangement for drawing power. Accordingly, the petitioner has submitted, it does not have any other alternative but to draw power from the Regional grid and settle the dues under the UI

mechanism. The petitioner submits that the requirement for start-up power is only about 15 to 20 MW which will not jeopardize the grid stability.

9. The petitioner has stated that it has already commenced testing, synchronization etc and the commissioning activities are in final stage and has urged that at this stage it is of utmost importance that there should be no disturbance to the commissioning since the commissioning activities had begun. Therefore, the petitioner seeks to clarify that the direction to delete the portion in clause 6.2 of the detailed procedure which permits it to draw power from the Regional grid for undertaking pre-commissioning activities should not affect the power project.

10. The Review Petitioner who is stated to be in the process of commissioning one unit of its 6 x 660 MW thermal power plant situated in the State of Chhattisgarh has been permitted by WRLDC to draw power for the commissioning activities from the Regional grid through PGCIL network. The Review Petitioner too is aggrieved by the direction given by the Commission in para 14 of the order dated 2.11.2012. The Review Petitioner has advanced the arguments similar to those of the petitioner in Petition No 259/MP/2012.

11. WRLDC in its reply, drawing support from the order dated 2.11.2012 has stated that a new generating station may avail power for undertaking pre-commissioning activities and for start-up purposes through another HT consumer drawing power at a voltage above 11 kV level or purchase power through power exchanges or avail short-term open access. WRLDC has pointed out that in Southern Region, certain entities whose details have been given, availed power for undertaking pre-commissioning activities and start-up purposes through short-term

open access or by making arrangements as HT consumer with the distribution company in the State of Tamil Nadu. WRLDC has pointed out that a generating station may have to draw power from the grid for undertaking the pre-commissioning activities or start-up purposes under the following circumstances, namely –

- (a) For first unit in case of new generating station.
- (b) For reason of stabilization problems after synchronization of the generating station or its units with the grid.
- (c) On account of outage of all units simultaneously.

12. WRLDC has suggested that in the above noted circumstances, the generating station may be permitted to draw power from the grid under UI with certain restrictions of period and quantity etc, subject to formulation of regulatory guidelines by the Commission.

13. Tamil Nadu Generation and Distribution Company Ltd (TANGEDCO) in its reply has urged that for testing and commissioning purposes the quantum of power requirement as well as its duration can be foreseen by the generator and therefore, the generator can make alternative arrangements for power supply. It has been urged in the circumstances the question of allowing the generator to avail start-up power under the UI mechanism should not arise since it will be inconsistent with the very concept of the UI scheme. TANGEDCO has pointed out that by allowing the generator to avail power for pre-commissioning or start-up purposes under the UI scheme, the UI charges may go up as the frequency of the system will tend to become lower in view of an unexpected/unscheduled increased load, and increase in UI rate may be more pronounced when number of generators drawing such power is large. Based on this, TANGEDCO has argued that other constituents will have to pay

higher UI charges under power deficit conditions. TANGEDCO has suggested that the generator should make arrangement with the distribution licensees for drawl of power for testing and commissioning through a 220 kV/110 kV transmission line. TANGEDCO has suggested that foreseeing the power requirement for testing and commissioning, the generators should opt for construction power through 110 kV lines or above voltage rating. TANGEDCO has however conceded that the generating stations which are not connected to 220 kV/110 kV network of the State distribution system have no other alternative but to draw such power from the Regional grid since 33 kV lines available for drawing the power for construction cannot cater to such requirement which is of the order of 30 to 40 MW.

14. TANGEDCO has sought strict enforcement of the present regulations which allow maximum of 6 months' time between synchronization with the grid and commercial operation and if necessary by prescribing the stringent penal provisions if the generator fails to achieve commercial operation within the stipulated period. TANGEDCO has suggested that in cases of delay in commercial operation beyond six months the generators should not be allowed IDC beyond six months. TANGEDCO has also pointed out that continuous injection of infirm power beyond the stipulated time/ period may lead to grid disturbance.

15. The representative of NTPC who was present during one of the hearings submitted that NTPC was facing similar difficulties in respect of its generating stations under commissioning such as Mauda, Barh-II etc. He submitted that most of the State Commissions do not have a category of consumers for supply of power at 220 kV/400 kV voltage level and therefore, for enabling the generating stations to draw start-up power as a consumer at 220 kV/400 kV from the State network, a

separate category of consumers would need to be created by the State Commissions which may take time. He further submitted that as the drawl would be through the transmission system of PGCIL or any other inter-State transmission licensees, open access and energy accounting issues would also need to be settled which may take time and may delay the commissioning activities.

16. We have heard learned counsel for the petitioner/Review Petitioner and the representatives of the respondents. We have carefully considered the issues in the light of submissions of the parties.

17. The Commission in its order dated 7.12.2012 directed that as an interim measure, the generators be permitted to draw power from the grid under UI for testing and commissioning activities, subject to fulfillment of the requirements of grid security and compliance of the directions of RLDCs. The relevant part of the order is extracted hereunder:

“8. We have considered the issues raised in the petitions. The Commission in its order dated 2.11.2012 in Petition No.117/MP/2012 had directed to delete the words “including drawl of power for commissioning activities” in clause 6.2 of the Detailed Procedure issued under Connectivity Regulations, as the same was not in conformity with the provisions of Connectivity Regulations. At the same time, the Commission had directed the staff to examine the issue of making provision for drawl of start-up power under UI in the Connectivity Regulations through proper amendment. On account of the above decision, a number of generators, who had arranged their affairs to conduct testing and commissioning by drawing UI power from the grid, are facing difficulties to arrange power for these activities through some form of access at such short notice, affecting their schedules for completion of testing and commissioning activities. Considering the fact that a generic issue of drawal of start-up power for testing and commissioning activities affecting the generating stations is involved, we admit the petitions and issue of notice to the respondents. The respondents shall file their replies to the petitions by 30.12.2012. Rejoinders if any shall be filed by 10.1.2013.

9. As an interim measure, we direct that pending consideration of the issue raised in these petitions, concerned RLDCs shall permit the Petitioner and the Review Petitioner and similarly placed generators including the petitioner in Petition No. 117/MP/2011 to draw power from the grid under UI for testing and commissioning activities, subject to fulfillment of the requirements of grid security and compliance of the directions of RLDCs, till further order.”

18. It is seen that petitioners in both the petitions were in advance stage of commissioning of their respective units and were drawing start-up power after approval of the Regional Load Dispatch Centre. The direction of the Commission in the order dated 2.11.2012 that start-up power cannot be drawn as UI has placed the generators in difficulty since RLDCs had advised the generators in their region to draw start-up power from the grid only after availing some type of open access. Accordingly, the petitions have been filed for appropriate relief noted above.

19. The pre-commissioning / start-up power is required for about 8-10 months prior to unit commissioning for test run of major auxiliaries and for boiler light up/ synchronization. The auxiliaries being large drives especially MDBFT, ID fan motors etc,. In the large size supercritical units of 660 MW and 800 MW the size of largest drive i.e. MDBFP ranges from 11.5 MW to 19 MW. These large drives involve drawing starting MVA in the range of 100 MVA, which necessitates strong grid support in terms of short circuit MVA. Therefore, the start-up power is generally preferred to be drawn through the planned transmission system for Grid Connectivity at 400/765 KV level, matching with start-up power schedule. The option of drawl of this power through 220 kV grid can be considered, subject to the technical suitability (strong grid). During commissioning/ start-up activities, the load profiles vary considerably, in the range of 5-25 MW. Such start-up power requirement is not

expected to be higher than the auxiliary power consumption of the generating station which could be of the order of 40 MW in case of a 660 MW unit or 50 MW in case of 800 MW units. This is also substantiated by the sample hourly drawals of start-up power for 2 units of NTPC stations namely Barh STPS (2 x 660 MW) and Vindhyachal STPS Stage IV (2 x 500 MW).

20. We find force in the submission of the petitioners that the huge quantum of power needed for undertaking pre-commissioning activities and start-up cannot be drawn through the normal distribution network which operates at 33 kV level. This has also been accepted by TANGEDCO that 33 kV lines available for drawing the power for construction cannot cater to the requirement which is of the order of 30 to 40 MW. TANGEDCO has suggested that the generator should avail power for construction purpose by laying lines at higher levels of voltage. It is true that it may be possible to take such power from the State Discom after laying the distribution line which may withstand the requirement of load. However, it may not be cost effective to develop infrastructure for the generating stations connected to the ISTS for the start-up power, which would be required initially before commercial operation and thereafter only occasionally in the eventuality of outage of all units of the generating station. However, the generator in its discretion can take start-up power from the distribution company.

21. In a large sized grid, such drawal of start-up power is unlikely to create any system security problem in the normal course. In any case, drawal of start-up power by generating stations would be with the approval of RLDCs and may be disallowed by the system operator, in case of threat to grid security. In case, the number of

stations intending to avail start-up power simultaneously is very large and is likely to jeopardize the grid security, the concerned RLDC may stagger their start-up supply looking into the grid security angle.

22. The requirement of start-up power is not always firm in nature and it is difficult to be adhered to through a schedule, even if power is contracted through short-term open access. The deviation from the schedule becomes inevitable. Therefore, settlement through UI would in any case be unavoidable. In such a situation, generating station would become entitled to UI for under-drawl. In case of drawl of start-up power through the UI mechanism, the generating station pays the UI charges.

23. Though the generator is free to tie up start-up power through short-term open access or through the distribution licensee, the most viable alternative is drawl from the Regional grid since the generator is connected to the ISTS. Any drawal of power by the generator through Regional grid without any open access shall have to be paid for at the applicable UI rates.

24. TANGEDCO has suggested that the regulations that specify the period between synchronization and commercial operation should be strictly enforced by levying penalty or disallowing the IDC for the extended period. We find these suggestions to be outside the scope of the present proceedings. Each case has to be examined and decided against the facts and circumstances applicable.

25. In the light of above discussion, it is directed that drawal of start-up power

under UI shall be permitted in respect of the generating stations which have been approved for direct connectivity to the ISTS by the CTU. While allowing drawal of start-up power, the concerned RLDC should satisfy itself that the power drawn is for the purpose of start-up only and not for the purpose of construction activities in the generating station which should be met by making arrangement with the concerned distribution company. The generator shall be obliged to furnish all necessary information called for by the RLDC while permitting start-up power. It is however clarified that the generators are not precluded from making alternative arrangement for start-up power through some form of open access.

26. We direct the staff of the Commission to process the proposal for amendment of the Connectivity Regulations based on the above decision.

27. With the above directions, both the petitions stand disposed of.

Sd/-
(M DEENA DAYALAN)
MEMBER

Sd/-
(V S VERMA)
MEMBER