

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram:

Shri Gireesh B. Pradhan, Chairperson

Shri A.K. Singhal, Member

Shri A.S. Bakshi, Member

Date: 6.5.2015

In the matter of:

Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) (Fourth Amendment) Regulations, 2014

Statement of Reasons

The Commission notified the (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009 (hereinafter "Connectivity Regulations"), which came into force with effect from 1.1.2010.

2. In order to facilitate the drawal of start-up power for commissioning and testing activities by upcoming generators, the Commission proposed amendment to the Clause (7) of Regulation 8 of the Connectivity Regulations. The proposed amendment was as under:-

"Amendment to Regulation 8 of the Principal Regulations: Clause (7) of Regulation 8 of the Principal Regulations shall be substituted as under, namely:

(7) Notwithstanding anything contained in Clause (6) of this Regulation and any provision with regard to sale of infirm power in the Power Purchase Agreement, a unit of a generation station including a captive generating plant which has been granted connectivity to the inter-State Transmission System in accordance with these regulations shall be allowed to inter-change infirm power with the grid during the commissioning period, including testing and full load testing before the COD, after obtaining prior permission of the concerned Regional Load Despatch Centre for the periods mentioned as under:-

- (a) Drawal of start-up power shall not exceed 10 months prior to the expected date of first synchronisation and 6 months after the date of first synchronization till the date of COD;
- (b) Injection of infirm power shall not exceed six months from the date of first synchronization.

Provided that the start-up power shall not be used by the generating station for the construction activities;



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;

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

Provided also that the infirm power so interchanged by the unit(s) of the generating plant shall be treated as deviation and the generator shall be paid/charged for such injection/drawal of infirm power in accordance with the provisions of the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2014, as amended from time to time or subsequent re-enactment thereof.”

3. The following procedure for availing start-up power from the grid by the generating stations under commissioning phase through deviation settlement mechanism was also posted for comments from the stakeholders and public:

“This procedure is called Procedure for drawl of Start-up Power for new Generating Stations, 2014.

This procedure describes the methodology to be followed by the upcoming generating stations seeking to avail start-up power during commissioning period

1.0 Scope:

This procedure is to be followed by all Regional Load Despatch Centre (RLDCs), Regional Power Committees (RPCs), and Generating stations including Inter State Generating Stations (ISGS) under Seller category.

2.0 Definitions:

Construction Power: Power required for carrying out construction and erection works of plant and equipment of a new Generating Station.

Start-up Power: Power required for running the Auxiliary equipment for commissioning activities of a new Generating Station.

Auxiliary Power: Power required to keep the auxiliaries like MDBFP, ID Fan, FD fan, CW pumps etc running after tripping of a generating unit during its trial operation.

3.0 General:

The Generating station may avail start-up power as a HT consumer of the DISCOM under whose supply area it falls or procure through Short Term Open Access in Inter-State / Intra-State Transmission System or under Deviation Settlement Mechanism from Inter-State Transmission System.

4.0 Pre-conditions for availing Start-up power under Deviation Settlement Mechanism:

The Generating Station intending to avail start-up power shall fulfil the following conditions:

- It shall have a valid Connectivity granted by CTU as per CERC (Grant of Connectivity, Long-term Access and Medium-term Open 2 Access and related matters) Regulations, 2009 (hereinafter referred to as Connectivity Regulations).
- It shall have signed Connection Agreement as per Con-6 of the Connectivity Regulations.
- It has established Connectivity with the ISTS It has commissioned all the switchyard equipments including Bus / Line reactor if any as per the grant of Connectivity (Con-3).
- It has established Data and Voice communication with the concerned RLDC as per clause 4.6.2 of IEGC.
- The Generating Station shall ensure necessary system protection in place as specified by concerned Regional Power Committee (RPC).
- It shall coordinate GT / ST tap positions as per the direction of concerned Regional Load Despatch Centre (RLDC).

5.0 Procedure for applying for Start up power:

1. The Generating Station shall submit a request for availing start-up power to the concerned RLDC at least one month prior to the expected date of availing the drawal of start-up power which may be up to 11 months before the expected date of first synchronisation of the unit.

2. While requesting for start-up power, the Generating Station shall furnish the following details to the concerned RLDC:

- A copy of grant of connectivity approval given by CTU
- Connection Agreement signed with CTU and other ISTS licensees as the case may be
- Single line diagram of the station
- Inspection report of the Electrical Inspectorate of CEA.

- Details of electrical scheme facilitating drawal of construction power
 - Details of electrical scheme facilitating drawal of start-up power by various phases of the Generating station clearly establishing the isolation between the schemes for construction power and start-up power.
 - Unit details like Unit size, MCR, Auxiliaries & their rating, etc.
 - Schedule of activities and their requirement of power in terms of quantity and period, etc.
3. The Generating Station shall submit an undertaking that:
- Drawal of power is only for the purpose of start-up power and not for the construction activity.
 - There is no violation of any of the agreements made with the Distribution Licensee or any other agency.
 - The Generating Station shall indemnify, defend and save the SLDCs/RLDCs harmless from any and all damages, losses, claims and actions including those relating to injury to or death of any person or damage to property, demands, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from this drawal.
 - The Generating Station shall abide by IEGC and all prevailing Regulations and the directions of RLDC from time to time.
 - The Generating Station shall reschedule the start-up activities as directed by RLDC due to reasons such as staggering the simultaneous drawl of start-up power by other Generating Stations.
 - The Generating Station shall pay the charges for Deviation within due date and comply with Deviation Settlement Regulations, 2014 as amended from time to time or subsequent re-enactment thereof.
 - The Generating Station shall send the SEM data to RLDC as per the provisions of IEGC for energy accounting.
 - The Generating Station shall pay all incidental charges such as Transmission charges, RLDC Fee & Charges, etc., as applicable, within the due date.
4. The Generating Station shall update the following information during the period of availing the start-up power and likely date of first synchronisation of the unit.
- The quantum of power to be availed on a weekly basis.
 - Monthly Energy data of Construction power availed from the local distribution licensee for the past 6 months period and monthly readings for the period subsequent to availing start-up power.

- Fortnightly certificate on the activities carried out, loading etc. indicating the start-up activities carried out during the fortnight including the details of loads above 500 kW which have been switched on for considerable period. The Generating Station shall also indicate whether all activities are progressing as per commissioning schedule or not.

6.0 Procedure to be followed by RLDC during the period of availing Start-up power:

1. The concerned RLDC shall convey the period and quantum and duration of the start-up power with a copy to RPC, SLDCs and local Distribution Licensee.

2. In case of units that have already commenced commissioning activities through another mechanism, switch over to Deviation Settlement Mechanism will be permitted subject to the availability of ATC margin left.

3. RLDC will issue suitable directions to the Generating Station on Real time basis for limiting / stopping the drawal of start-up power in case of Network constraint on grounds of threat to system security or frequency or Voltage falling below the limits specified in IEGC. Such direction shall be complied with by the Generating Station promptly.

4. The Generating Station is entitled to draw the start-up power under Deviations Settlement Mechanism up to the maximum period of 16 months (Ten months prior to expected date of synchronisation and six months after synchronisation till COD) from the date of commencement of drawal of start-up power from the grid. In case start-up power is required beyond the specified period, the Generating Station shall approach Hon'ble Commission at least two months in advance of the date up to which permission has been granted.

5. RLDC may direct the Generating Station to install under frequency/under voltage relays to operate below a threshold value with suitable dead bands.

6. RLDC shall permit drawal of start-up power by only one unit at a time within a generating station.

7. If simultaneous drawal of start-up power by more than one generating station is likely to cause system constraints, RLDC may stagger such drawal among various Generating Stations to relieve the constraint.”

4. Comments/suggestions/objections to the proposed amendments to the Connectivity Regulation and Procedure were invited from the stakeholders and other interested persons by 14.3.2014. POSOCO, Chhattisgarh State Power Distribution Company Limited, NTPC and Power Grid have offered suggestions/comments on the draft amendments.

5. The comments of the above mentioned organisations on various issues are discussed in subsequent paragraphs.

Amendment of Regulation 8 (7) of Connectivity Regulations

6. **Chhattisgarh State Power Distribution Company Limited (CSPDCL)'s submission:** CSPDCL has submitted that allowing interchange of infirm power during commissioning and testing before COD includes the drawal of power which will have following implications:

- a) **Commercial Implication:** In the inter-State transmission system, the available power is the power pertaining to suppliers and receivers and such power is accounted for bilaterally only as per open access schedule. In this case, the drawal of power is proposed to be allowed without seeking open access. The supply of such power cannot be accounted for qua any identified generator/supplier because no open access is required to be sought for such drawal of power.
- b) **Legal Implication:** As per provision of Electricity Act, 2003 (the Act), the drawal of power for own consumption by a generator renders the generator a consumer as per Section 2 (15) of the Act. In the Act, supply to a consumer is envisaged either by area local Distribution Licensee within its area of license or by anybody else for supply under open access. No other mode of supply is available to a consumer as per provisions of the Act, and therefore, the drawal of power for consumption by the generator from ISTS without availing open access as proposed under the draft regulation, is contrary to the provisions of the Act, and therefore not sustainable before the law.

Commission's Decision: We have considered the objections of CSPDCL. The generators have been availing start-up power from ISTS grid as per the then prevailing provisions in the Detailed Procedure under Connectivity Regulations and subsequently based on the Commission's orders dated 7.12.2012 in Petition No. 259/MP/2012 and 27/RP/2012 in Petition No. 117/MP/2012. As such, energy accounting under UI/Deviation Settlement for these drawals is in place. Accordingly, there is no commercial implication for DISCOMs as the generator is paying for the energy it draws under deviation settlement mechanism. The proposed amendment is to facilitate the generators for early commissioning of the projects through transmission line to be constructed under co-ordinated transmission planning by CTU and CEA. The drawal of start-up power from ISTS is being envisaged as an alternative avenue to the generator who may at its option take start-up power either from DISCOMs or from ISTS.

As regards the legal implications, it is pertinent to mention that Appellate Tribunal for Electricity in its judgment dated 24.5.2011 in Appeal No. 166 of 2010 has

ruled that generators requiring start-up power from the grid cannot be termed as 'consumers'. Therefore, the interpretation of CSPDCL to equate start-up power drawn by the generators with power required by the generating stations for their other consumptions is not correct. It has been made clear in the regulations that the start-up power cannot be used for construction activities which mean that a clear distinction has been made between consumption of power by a generating station as a consumer and drawal of start-up power from the grid for testing and commissioning.

7. **POSOCO's submissions:** POSOCO has suggested that Sub-clause (b) of Clause (7) of Regulation 8 of the Principal Regulations may be reworded as follows:

“(b) Injection of infirm power shall not exceed six months from the date of first synchronization or till COD whichever is earlier.”

Commissions' decision: 'Infirm power' by definition is the power injected by a generating station or unit thereof before the COD. A period of six months has been envisaged in the regulations because normally generating stations take about six months' time to complete all pre-commissioning activities. If they finish before six months and achieve COD, they will not be permitted to inject infirm power. If they fail to complete the pre-commissioning activities within six months, then they will be required to seek permission of the Commission. Therefore, the suggestion of POSOCO to add “or till COD whichever is earlier” at the end of the above clause does not serve any material purpose. Accordingly, the proposed provision in the draft amendment has been retained.

8. **POSOCO's submission:** POSOCO has submitted that the generating station under the control area jurisdiction of a distribution company may avail start-up power either through the supply from the DISCOM or open access or in case of ISTS connected entity, may draw from the grid as per deviation settlement mechanism. Submission of No Objection certificate from the local distribution company permitting drawal under the deviation settlement mechanism from ISTS may be included as a pre-requisite for the generating station while requesting for start-up power.

Commission's Decision: Regulation 8(7) is applicable in case of generating stations which have been granted connectivity to ISTS and not in case of generating

stations connected to intra-State transmission system. Since it has been held by the Appellate Tribunal that 'a generator requiring start-up power from the grid occasionally cannot be termed as a consumer', there is no requirement for a generating station granted connectivity to ISTS to seek No Objection from the local distribution company for the purpose of drawing start-up power from ISTS.

9. **POSOCO's Submission:** POSOCO has submitted that with the implementation of Deviation Settlement Mechanism and tightening of frequency band to '49.90 Hz – 50.05 Hz', accommodating number of generators injecting infirm power at the same time would be difficult. POSOCO has reiterated its proposal made vide its earlier letter dated 21.2.2014 regarding the procedure to be adopted by RLDCs to facilitate testing and commissioning of new units and has submitted that generating stations likely to inject infirm power should submit their testing schedule to RLDCs so that RLDCs may plan their testing keeping grid security in view.

Commission's Decision: In our view the regulations provide sufficient authority and guidelines to RLDCs to regulate injection of infirm power during testing and commissioning of a unit of the generating station keeping the grid security in view. Firstly, main clause (7) says that injection of infirm power can be made 'after obtaining prior permission of concerned RLDC for the periods mentioned as under'. Further, third proviso to clause (7) to draft Regulation 8 provides that 'the respective RLDC shall seek such information on each occasion of interchange of power before COD. For this, the generating station shall provide RLDC sufficient details of the specific commissioning activity, testing and full load testing, its duration and intended period of interchanges, etc.'" In our view, RLDCs have the full authority to ask the generating stations their schedule of testing so that RLDCs can plan the testing in a planned manner, particularly when more than one generator is likely to inject infirm power during the same time frame.

10. **NTPC's submission:** NTPC has submitted that Hydro test of Boiler(for 600 MW and 800 MW units) is scheduled 12 months prior to first synchronization and start-up power is required for testing and commissioning of make-up water pumps, pre-treatment and DM plants at least 2 to 3 months prior to the hydro test. NTPC has submitted that Master Net Work of commissioning activities for its two upcoming projects i.e. Solapur STPP (2 X 660 MW) and Kudgi STPP (3 X 800 MW) in support

of its contention. NTPC has proposed that drawal of start-up power should be permitted at least 15 months prior to the expected date of first synchronization instead of 10 months in the draft regulations.

Commission's decision: The Commission has noted that NTPC is in the process of commissioning various 660/800 MW units. Other generating companies in the country are now going for units with 660/800 MW capacity. Therefore, there is the requirement of specifying a realistic period for drawal of start-up power by these units. NTPC has indicated an approximate period of 15 months based on the specific schedule. We accept the suggestion of NTPC and accordingly, sub-clause (a) of Clause (7) of Regulation 8 has been modified as under:

“(a) Drawal of Start-up power shall not exceed 15 months prior to the expected date of first synchronisation and 6 months after the date of first synchronisation.”

11. PGCIL's submission: PGCIL has submitted that as per the proposed fourth amendment, the drawal of start-up power may be availed for maximum of 16 months prior to COD. Further, the explanatory memorandum states that due to technical reasons, the start-up shall have to be facilitated through main evacuation system planned for generation. This shall require that at least one element of evacuation system is made available 16 months prior to COD of generation. This may though be desirable but may not be feasible in all circumstances.

PGCIL has also submitted that a total period of 51 months shall be required for accomplishing the activities involved with the execution of the associated transmission system including 6 months for concluding LTA application, 2 months for taking decision by Empowered Committee regarding the methodology of implementation of transmission system, 2 months for publication of the Gazette Notification for earmarking the Bid Process Co-ordinator (BPC), 5 months for BPC activities and 36 months for execution of transmission system. A Generating companies Agency shall therefore need to approach CTU with their LTA applications seeking grant of Long Term Open Access at least 51 months before the requirement.

Commission's Decision: With regard to timeline as submitted by PGCIL, it is considered necessary that Project Developer should convey its decision to the CTU for availing start-up power from the grid at the time of seeking connectivity. CTU

shall accordingly include this option (whether start-up power required/ not required) in the application for grant of connectivity. The Project Developer shall keep adequate time period for implementation of such transmission system required for availing start-up power.

12. PGCIL's submission: With regard to Bank Guarantee related to construction activity, PGCIL has submitted that the interest of the transmission licensees needs to be protected for which the regulations may specify that generation developer requesting for start-up power should pay upfront BG for an amount equal to the transmission charges for the entire period i.e. from the scheduled date of drawal of start-up power till the scheduled COD of the generation project and further in case of subsequent revision of scheduled start-up power or COD date, the generating company should pay the applicable transmission charges for the transmission system. The construction BG of ₹5 lakh/MW may be suitably increased so as to express the seriousness towards long term access.

Commission's Decision: The above submission of PGCIL pertains to protection of interest of transmission licensees through payment of upfront BG equal to transmission charges for the entire period for which start-up power is required and further enhancement of construction BG of ₹5 lakh/MW. It is clarified that the suggestions of PGCIL are outside the scope of the present amendment and require stakeholders' consultation through the due process and therefore cannot be included in the present amendment. However, in order to ensure payment of transmission charges by the generating stations for drawal of start-up power, provisions under Clause 7 of Regulation 8 with regard to opening of LC equivalent to 2 months of transmission charges and stoppage of drawal of start-up power in case of default by the generating stations, have been made in the final regulations. The transmission charges for start-up power shall be reflected in the Regional Transmission Deviation account (RTDA) issued by the RPC.

13. Some generating stations have auxiliary service such as Desalination cum DM plants, CW pump house etc. These plants are required to be tested and synchronised alongwith the first generating unit. Since Desalination Plant cum DM plants and CW pump house etc are an integral part of the generating station and construction power drawn by the generator from alternative sources may not be

sufficient for its testing and commissioning, drawal of start-up power for testing and commission of such plants shall be allowed by RLDCs.

Procedure for availing Start up power from the Grid by the Generating Stations under commissioning phase through Deviation Settlement Mechanism

14. Scope of Procedure.

14.1 POSOCO has submitted that the following paragraph may be added to the existing provision of Scope of the procedure:

“This procedure is applicable to Generating stations without an existing Unit under commercial operation. Where one unit has been commissioned and if the start-up power is required by subsequent unit(s), the same may be availed from the existing units of the same plant under Commercial operation. In such case, the existing units shall factor the requirement of start-up power by the new upcoming units before contracting/scheduling the entire sent out capability under STOA so that there will not be any under-injection by the existing unit(s).

However, in case power from the unit(s) of the generating station already commissioned is fully allocated or committed under Medium Term Open Access (MTOA)/Long Term Access (LTA), subsequent unit(s) shall be allowed to draw start-up power under this procedure.”

14.2. The Commission finds that the suggestion of POSOCO comprehensively covers scope of the procedure for drawal of start-up power. Accordingly the suggestion has been accepted.

15. Para 2.0: Definition of ‘construction power’

15.1 POSOCO has submitted that definition of ‘construction power’ may be reworded as under:

“Construction Power: Power required for carrying out construction/erection works of plant and equipment of a new generating station including ancillary services such as desalination of sea water etc.”

15.2 **Commission’s Decision:** We agree with POSOCO that all construction activities including the construction activities of auxiliary services like desalination of sea water, CW pump house etc shall be covered under construction power. It is however clarified that these auxiliary services may be tested and synchronised along with the generating station or its units and may require the quantum of power which the load sanctioned for construction power may not be sufficient to meet. Therefore,

start-up power may be allowed to be drawn for the purpose testing and commissioning of ancillary services such as desalination plant, CW pump house etc.

16. Para 3.0: Start-up Procedure

16.1 NTPC has submitted that the existing project generation switchyard is already connected to the grid and start-up power to expansion unit can be availed through existing electrical system of the generating station. In most of the cases, existing ties (at 11 kV) are extended to new unit station bus as a technical requirement in order to provide backup station source between different units/stages. Hence, in such cases start-up power to expansion project is generally availed through this station tie (11 kV). By this, certain capital expenditures can be delayed and this would reduce the capital cost of the project. In such cases where such station level ties are not provided due to other technical reasons, start-up power can be availed from available EHV system connected to the grid. NTPC has suggested that the option for availing start-up power should be given to the generator to avail start-up power through station ties or through EHV grid. However, CTU shall install tariff meter at connection points for availing of start-up power by the Generating Station. In this regard generating station shall submit start-up power scheme along with interface metering requirement for start-up power to CTU. NTPC has proposed the following to be included under para 3.0 and 3.1 of the Procedure:

“3.0 General: Start-up Power

The generating station may avail start-up power as a HT consumer of the DISCOM under whose supply area it falls or procure through short term Open access in inter-State/intra-State Transmission System or under Deviation Settlement Mechanism from inter-State Transmission System.

3.1 In addition to above, brown field generating station may avail start-up power through the existing electrical system of generating station (765/ 400/ 220/ 132/ 33/ 11/ 6.6 kV) as applicable. CTU shall provide necessary interface meter for proper accounting for start-up power.”

16.2 Further, NTPC has proposed that brown field projects should be allowed to draw construction power from the existing generating station of the developer as the electricity system required for the drawal of start-up power would already be available and accordingly, NTPC has proposed addition of following sub-paras-

“3.2 Green field generating station shall avail construction power from local distribution licensee.

3.3 Construction power for brown field generating stations may be availed from the existing electrical system of generating station (33/ 11/ 6.6 kV level). CTU shall provide necessary interface meter for proper accounting for start-up power.”

16.3 Commission’s decision: The addition as proposed by NTPC i.e. drawal of start-up power by brown field projects from existing generating station is not related to the draft amendment. The amendment is for facilitating drawal of start-up power from grid. The arrangement of drawal of start-up power for new project whether directly from the grid or from the existing stage of the station may have to be decided by the generator in consultation with CTU/CEA at the time of co-ordinated planning/ seeking connectivity with the grid.

17. Para 5.1: Procedure for applying for start-up power

17.1 POSOCO has submitted that para 5.1 should be reworded by adding that “A copy of the request shall be submitted to the local Distribution Licensee”.

17.2 Commission’s decision: When a generator which has been granted connectivity to ISTS intends to avail start-up power from the ISTS grid, there is no requirement for the generator to give copy of the request to the local distribution company which is an alternative source of availing start-up power. We are not inclined to accept the suggestion of POSOCO. In the draft procedure, it was proposed that the request would be for a period upto 11 months. Since we have decided to allow start-up power upto 15 months prior to the expected date of synchronisation, the generator will be required to submit the request at least one month prior to the expected date of availing start-up power. Accordingly, para 5.1 has been modified as under:

“5.1 The Generating Station shall submit a request for availing start-up power to the concerned RLDC at least one month prior to the expected date of availing start-up power i.e. 16 months before the expected date of first synchronisation of the unit.”

18. Para 5.2: Submission of details to concerned RLDC by the generator

18.1 POSOCO has submitted for addition of a new point and modification of bullet points 5 and 6 as under:

- No objection certificate from the local distribution licensee permitting drawal under the Deviation Settlement mechanism from ISTS
- Details of electrical scheme facilitating the drawal of construction power, clearly establishing the isolation between the scheme for construction power and start-up power
- Details of electrical scheme facilitating start-up power by various phases of the generating station.

18.2 **Commission's decision:** For the reasons given in para 17.2 above, we are not inclined to accept the suggestion of POSOCO in the first bullet point above. However, the suggestions made in second and third bullet points have been accepted and included as sub-paras 5 and 6 under para 5.2 of the Procedure.

19. **Para 5.3: Submission of undertaking by the generator**

19.1 The first bullet point under para 5.3 draft Procedure read as under:

“Drawal of power is only for the purpose of start-up power and not for the construction activity.”

19.2 POSOCO has submitted that the first bullet point under para 5.3 may be amended as under:

“Drawal of power is only for the purpose of start-up power and not for the construction activity. The onus of proving that the drawal of power is for start-up Auxiliaries, testing and commissioning activities and not for construction power shall lie with the generating company alone.”

19.3 NTPC has commented that since it is proposed for drawal of construction power from existing system for brown field project, the said clause may be modified as under:

“Drawal of power is only for the purpose of start-up power and not for the construction activity (for green field project).”

19.4. **Commission's Decision:** The modification as proposed by NTPC i.e. drawal of construction power by brown field projects from existing generating station is not related to the amendment. The amendment is limited to allowing drawal of start-up power from grid. Otherwise also, the Commission is not inclined to allow drawal of

construction power under deviation settlement mechanism. However, the suggestion made by POSOCO has been accepted as it clearly delineates the onus of the generator.

20. Para 5.4: Up-dation of information by the generating station

20.1 Third bullet under Para 5.4 of the Procedure provides as under:

“Fortnightly certificate on the activities carried out, loading etc. Indicating the start-up activities carried out during the fortnight including the details of load above 500 kW which has been switched on for considerable period. The generating station shall also indicate whether all activities are progressing as per commissioning schedule or not.”

20.2 NTPC has submitted that in 660 MW/ 800 MW units, there are typically more than 100 nos. of feeders/ loads rated greater than 500 kW. Keeping ON/ OFF record of all these transformers and motors during commissioning stage will be cumbersome. NTPC has requested to avoid such detailing of commissioning activities and leave it to the developer. It has been submitted that in many remote places, many vendors adopt the practice of using portable DG set for commissioning activities. NTPC has suggested that the developer will provide a monthly certificate giving the quantum of start-up power consumed in the period and time stamping data of the ABT meters installed at the point of drawal of start-up power may be allowed to be furnished to RLDC month wise which would reflect the start-up power drawal pattern. NTPC has proposed modification of the said provision as under:

“Monthly data regarding the quantum of start-up power at the point of drawal of start-up power may be furnished to RLDC which would reflect the start-up power drawal pattern.”

20.3 POSOCO has suggested that the words “and subsequent program for injection of infirm power” may be added at the end of bullets 1 and the sentence “The schedule is to be updated on weekly basis, considering the deviations in the tentative schedule may be added at the end of bullet 3 under para 5.4 of the Procedure.

20.4 **Commission’s Decision:** The Commission finds merit in the submission of both NTPC and POSOCO. Accordingly, para 5.4 has been modified as under:

“5.4 The Generator shall update the following information during the period of availing the start-up Power and likely date of first synchronisation of the unit and subsequent program for injection of infirm power:

- (1) The quantum of power to be availed on a weekly basis.
- (2) The schedule is to be updated on a weekly basis, considering the deviations in the tentative schedule.
- (3) Monthly Energy data of Construction power availed from the local licensee for the past 6 months period and monthly readings for the period subsequent to availing start-up power.
- (4) Monthly details of start-up activities carried out during the month. The Generating Station shall also indicate whether all activities are as per commissioning schedule or not.”

21. **Para 6.4: Procedure to be followed by RLDC**

21.1 POSOCO has suggested that in para 6.4, the words “or till COD whichever is earlier” may be inserted.

21.2 **Commission’s Decision:** The Commission is of the view that for the reasons recorded in para 7 of this SOR, there is no requirement to insert the words as suggested by POSOCO. However, since the period of drawal of start-up power has been increased from the suggested 10 months to 15 months, this para has been modified as under:

“4. The generator is entitled to draw the start-up power under Deviation Settlement Mechanism, up to the maximum period of 21 months (Fifteen months prior to expected date of synchronization and six months after synchronization) from the date of commencement of drawal of start-up power from the grid. In case start-up power is required beyond the specified period, the generator shall approach C.E.R.C at least two months in advance of the date up to which permission has been granted.”

21.3 Para 6.6 of the draft Procedure reads as follows:

“6. RLDC shall permit drawal of start-up power by only one unit at a time within a generating station.”

21.4 NTPC has submitted that the draft regulations have proposed 16 months (10 months before first synchronisation plus 6 months from first synchronisation to COD) as the period allowed for drawal of start-up power. However, the Draft Procedure for start-up power has proposed that RLDC shall permit drawal of start-up power by only one unit at a time within a generating station. NTPC has submitted that in multi-unit

stations, units would be synchronized and declared commercial in succession. The CERC Tariff Regulations for 2014-19 have stipulated timeline for completion of projects for 0.5% additional RoE which provides that successive units shall be declared commercial at an interval of 4 months for 200/ 210 MW units and at an interval of 6 months for 500/ 660 /800 MW units. In award of multi-unit project, generally a time gap of 6-8 months is incorporated in the project schedule which will involve an overlap of start-up activities of two successive units. In case the overlap is avoided, it would even be contrary to the time interval provided in the tariff regulations for additional RoE of 0.5% as such overlap is inevitable even as per the said Regulations. Further, in case time overlap of start-up activities is avoided and projects are delayed, it will not only increase the capital cost of the projects but also deprive the beneficiaries from availing power. NTPC has submitted that there will be overlap in commissioning activities between successive units and therefore, more than one unit would require drawal of start-up power. It has been explained that the start-up power drawal takes place through a single station transformer initially which is used for multiple units in the beginning. The individual station transformers for each unit are commissioned at a later stage. As many offsite systems are common, it would not be possible to segregate start-up power unit wise. NTPC has further submitted that Clause 7 of Regulation 8 already contains a provision for drawal of start-up power in a staggered mode in case of any grid constraints. NTPC has proposed that para 6.6 may be deleted.

21.5. Commission's Decision: We find merit in the submission of NTPC. However, allowing more than one unit to draw start-up power at a time needs to be viewed from the grid security point of view. Accordingly, para 6.6 has been modified as under:

“6.2 RLDC may permit drawal of start-up power for one or more units at a time within a generating station keeping grid security in view.”

22. Suggestions regarding Application Form and Undertaking: POSOCO has suggested certain modifications to forms and the format for undertaking. The same have been found to be useful and have been suitably incorporated.

23. NTPC has suggested certain modification to Regulation 2(1) (b) (i) (e) of the Connectivity Regulations which pertains to eligibility of renewable energy generating

stations of 5 MW and above being developed by a generating company in its existing generating station as applicant for connectivity. The suggested comments are beyond the scope of the present amendment and therefore have not been considered.

sd/-
(A.S. Bakshi)
Member

sd/-
(A.K. Singhal)
Member

sd/-
(Gireesh B. Pradhan)
Chairperson