

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 131/MP/2013

Coram:

Shri Gireesh B.Pradhan, Chairperson

Shri V.S. Verma, Member

Shri M. Deena Dayalan, Member

Shri A.K. Singhal, Member

Date of hearing: 12.11.2013

Date of order: 22.11.2013

In the matter of

Maintainability security of the interconnected power system of Indian in terms of Regulation 5.2 of the Indian Electricity Grid Code and compliance of Regulation 5.4.2 and 6.4.8 of the IEGC read along with Regulation 111 of the Central Electricity Regulatory Commission (Conduct of Business) Regulation, 1999.

And

In the matter of

North Eastern Regional Load Despatch Centre,
Power System Operation Corporation Ltd.,
Dongtich Lower Nongrah, Lapalang,
Shillong-793006

.....Petitioner

Vs

1. Chief General Manager (LDC), SLDC, AEGCL, Kahilipara, Guwahai- 781 019 (Assam)
2. Superintending Engineer (SLDC), MeECL, Lumjingshai, Short Round, Road, Shillong-793 001
3. Additional General Manager (Commercial and SO), TSECL, Banamalipur, Agartala-799 001, Tripura
4. Chief Engineer (West Zone), Department of Power, Government of Arunachal Pradesh, Itnagar- 791 111
5. Engineer-in-Chief (Power), Department of P&E, Government of Mizoram, Aizwal- 796 001
6. Chief Engineer (Power), Department of Power, Government of Nagaland, Kohima-797 001



7. Chief Engineer(Power) Department of Power, Government of Manipur, Keishampat, Imphal-795

..... Respondents

1. Member- Secretary, NERPC, Meghalaya State Housing Finance Co-operative Society Ltd Building, Nongrim Hills, Shillong-793 003

2. Executive Director, NERTS, Power Grid Corporation of India Limited, Dongtieh-Lower Nongrah, Lapalang, Shillong- 793 006

.... Proforma Respondents

The following were present:

- 1) Shri P.P. Bandyopadhyay, NERLDC
- 2) Ms. Jyoti Prasad, NRLDC
- 3) Shri S.S. Barpanda, NRLDC
- 4) Shri F.E. Kharshing, MePTCL

ORDER

The petitioner, North Eastern Regional Load Despatch Centre, has submitted that the CEA Manual of Transmission Planning Criteria defines rare contingencies as temporary removal of complete generating stations or complete sub-station (including all the incoming and outgoing feeders) from service, HVDC Bipole and stuck breaker condition. The interconnected system would be able to withstand such rare contingencies only if there is adequate redundancy in the system, the automatic controls (primary response and PSS in generating units, controllers in FACTS devices etc.) are available, the safety net (UFR, UVLS, df/dt, SPS) is adequate and the manual action by the operators is fast and effective.

2. The petitioner has submitted that subsequent to the grid failures on 30.7.2012 and 31.7.2012, certain rare contingencies have occurred in the North Eastern Region which have caused insecure operating conditions as under:-

(a) There are large fluctuations in the grid parameters such as frequency and voltage caused due to manual connection/disconnection of large block of load changeover, withdrawal of hydro, etc. and large step change in the drawal schedule due to large change in the quantum of buy/sell in Short Term Open Access at the time of hour boundary/ time block boundary.

(b) There are instances of drawal/ injection with huge deviation from the schedule far beyond 12% or 150 MW (whichever is less) quoting the reason that system frequency is above 49.8 Hz.

3. The petitioner has submitted that the SLDCs and constituents of the North Eastern Region are not taking steps in accordance with Regulation 5.2 (j), 5.4.2 (b), 5.4.2 (a), 6.4.8 of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 (Grid Code) as amended from time to time which affects secure grid operations. The petitioner has enumerated the steps taken by it for enforcing grid discipline in paras 14 and 15 of the petition. The petitioner has further submitted that CTU has submitted a draft proposal for 'Grid Security Expert System (GSES)' to CEA. The petitioner has submitted that GSES would help in remote demand disconnection by SLDC/RLDC, real time assessment of quantum of load relief available through safety net and supervision of healthiness of the safety net. The petitioner has submitted that the inputs from the State Utilities/RPCs are vital for finalizing the scheme and implementing the same quickly.

4. The petitioner has sought the following directions to all the respondents for safe operation of the grid:-

- (a) "Direct all the STUs/SLDCs of the North Eastern Region to properly forecast their demand and make adequate arrangements to avoid dependence on Unscheduled Interchange for meeting their demand or for injecting short term surplus power, irrespective of the frequency.
- (b) Direct all the STUs/SLDCs of the North Eastern Region to give their inputs to implement the Grid Security Expert System and direct the NERPC secretariat should actively associate themselves in getting these schemes implemented in terms of NLDC letter reference POSOCO/NLDC dated 11th September, 2012 to Member GO&D.
- (c) Direct all the STUs/SLDCs Regional Entities of the North Eastern Region not to vary of drawl/ generation more than 20 MW without prior intimation to consent of the NERLDC.
- (d) Pass such other order or directions as deemed fit in the circumstances of the case."

5. No reply has been filed by the respondents despite notice.

6. We have perused the petition and heard the representative of the petitioner. It is observed that most of the issues raised in the petition pertain to general non-compliance of the provisions of the Grid Code by the constituents of the North Eastern Region. In our view, such general non-compliance should be discussed at the RPC level. However, if there is any specific non-compliance of any of the provisions of the Grid Code, the same should be brought to the notice of the Commission for appropriate directions. In this connection, Regulation 1.5 of the Grid Code is relevant which is extracted as under:-

"1.5. RLDCs shall report to the Commission instances of serious or repeated violation of any of the provisions of the IEGC and incidences of persistent non-compliance of the directions of the RLDCs issued in order to exercise supervision and control required for ensuring stability of grid operations and for achieving the maximum economy and efficiency in the operation of the power system in the region under its control.

(ii) The Regional Power Committee (RPC) in the region shall also continuously monitor the instances of non-compliance of the provisions of IEGC and try to sort out all operational issues and deliberate on the ways in which such cases of non-compliance are prevented in future by building consensus. The Member Secretary RPC may also report any issue that cannot be sorted out at the RPC forum to the Commission. The RPC shall also file monthly reports on status of UI payment and installation of capacitors by states vis-à-vis the requirements/ targets, as decided in the RPC."

7. In view of the above provisions, we direct NERPC to monitor the compliance of various provisions of the Grid Code by the SLDCs and the constituents of North Eastern Region and bring to the notice of the Commission any instance of specific violation of the Grid Code by any of the constituents which could not be sorted out despite deliberations and discussion in the RPC forum. The petitioner is directed to bring to the notice of the Commission through petition any specific instance of serious or repeated violation of any of the provisions of the Grid Code or persistent non-compliance of its directions by any of the constituents of the North Eastern Region in accordance with Regulation 1.5 of the Grid Code.

8. The petition is disposed of in terms of the above.

sd/-
(A.K.Singhal)
Member

sd/-
(M. Deena Dayalan)
Member

sd/-
(V.S.Verma)
Member

sd/-
(Gireesh B.Pradhan)
Chairperson