

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 006/SM/2014

Sub : Non compliance of Regulation 5.2(n) of CERC (Indian Electricity Grid Code) Regulations, 2010 for ensuring security of the Northern Regional Grid as well as the Interconnected Indian grid.

Respondents : Shri Anurag Aggarwal, CMD, PSTCL and others

Date of hearing : 22.5.2014

Coram : Shri Gireesh B. Pradhan, Chairperson
Shri M. Deena Dayalan, Member
Shri A.K. Singhal, Member

Parties present : Shri S.K. Soonee, POSOCO
Shri V.K. Aggarwal, NLDC
Ms. Jyoti Prasad, POSOCO
Ms. Supriya Singh, NRLDC
Shri Rajiv Porwal, NRLDC
Shri Rahul Srivastav, Advocate, UPSLDC
Shri Zahir Ahmad, UPSLDC
Shri M.K. Gupta, SLDC UP
Shri Amit Kumar Singh, SLDC Uttarakhand
Shri A.K. Baid, RVPNL
Shri A.K. Arya, RVPNL
Shri Sunil Sharma, UT of Chandigarh
Shri Prem Prakash, DTL
Shri B.L. Gujar, DTL
Shri S.P. Singh, DTL
Shri Hem Joshi, HVPNL
Shri Rajesh Kumar Goel, HVPNL
Shri Ravi Sher Singh, HVPNL

Record of Proceedings

The representative of NRLDC submitted as under:

- (a) The Commission in its order dated 23.12.2013 in Petition No. 221/MP/2012 had directed all SLDCs to map their UFR and dt/dt relays on

SCADA so that NRLDC would be able to monitor these relays. NLDC again informed to all the constituents of Northern Region (NR) and the same issue was also discussed in OCC meetings of NRPC.

(b) The work of mapping relays on SCADA in NR is still pending. Regarding feedback by the constituents in NRPC, except Delhi no constituent has informed NRPC that UFRs have already been provided for Stage-I and II (49.2 Hz and 49.0 Hz respectively) and for other two stages (48.8 Hz AND 48.6 Hz) they are discussing with the distribution companies of the State.

(c) Since the frequency has not gone below 49.2 Hz (1st stage) for long time, it is not possible for RLDC to say whether these relays would work in real time or not when frequency reaches 49.2 Hz.

(d) NRPC had inspected some of the relays in NR 5-6 months ago. After inspection, it was found that some of the relays were not working which need to be set right and regular inspection should be ensured.

(e) On 12.3.2014, there was large tripping in Western Region (WR) when the entire CGPL station of 4000 MW (at that time running around 3500 MW) tripped. At that time, the rate of change of frequency was much higher (0.3 Hz per sec in WR), most of the df/dt relays had not operated in, and very little support was observed from these relays in WR.

(f) In NR, as per data from Phasor Measurement Units (PMUs), rate of change of frequency was above 0.1 Hz/sec for around 500 to 600 ms. Some of the relays in NR should, therefore, have operated in Stage-I (0.1 Hz/sec.). However, during discussion in OCC meeting, none of the States discussed about relay operated in their State. Therefore, no operation of df/dt relays has taken place in WR and NR on 12.3.2014.

2. In response to the Commission's query regarding the latest status report on the compliance of the Commission's order dated 23.12.2013 in Petition No. 221/MP/2012, the representative of NRLDC submitted that latest status report would be filed shortly. The representative of the NRLDC further submitted that some of the constituents have filed their replies in the compliance of the Commission's order dated 23.12.2013 in Petition No. 221/MP/2012.

3. After hearing the parties present, the Commission directed NRLDC to file the following on affidavit, by 15.7.2014:

(a) Report of 12.3.2014 incidence and steps taken thereafter.

(b) Report on the incident of 12.3.2014 wherein the df/dt relays should have operated.

(c) Report on mapping of UFRs and df/dt relays on to SCADA system by STUs and put the report on its website.

4. Subject to above, the Commission reserved its order in the petition.

By order of the Commission

**Sd/-
(T. Rout)
Chief (Law)**