

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 221/MP/2012

Subject : Petition for providing adequate load shedding through automatic under frequency and df/dt relays in the State Systems of Northern Region and keeping them functional in terms of Regulations 5.2 (n) of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) (First Amendment) Regulations, 2012 (Grid Code) for ensuring security of the Northern Regional grid as well as the interconnected Indian grid.

Date of hearing : 14.2.2013

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

Petitioner : Northern Regional Load Despatch Centre, New Delhi

Respondents : Punjab State Transmission Corporation Ltd., Patiala
Haryana Vidyut Prasaran Nigam Limited, Panchkula
Rajasthan Rajya Vidyut Prasaran Nigam Ltd, Jaipur
Delhi Transco Limited, Delhi
Uttar Pradesh Power Transmission Corporation Ltd., Lucknow
Himachal Pradesh State Electricity Board, Shimla
Power Transmission Corporation of Uttarakhand Ltd., Dehradun
Power development Department, Jammu and Kashmir
Electricity Department, Union Territory of Chandigarh, Chandigarh
State Load Despatch Centre, Ablowal (Patiala), Punjab
State Load Despatch Centre, Panchkula, Haryana
State Load Despatch Centre, Heerapur, Rajasthan
State Load Despatch Centre, Delhi
State Load Despatch Centre, Lucknow, Uttar Pradesh
State Load Despatch Centre, Rishikesh, Uttarakhand
State Load Despatch Centre, Totu (Shimla), Himachal Pradesh
State Load Despatch Centre, Gladini, Jammu and Kashmir

Performa Respondents: Member-Secretary, Northern Regional Power Committee
Executive Director (NR-I), Power Grid Corporation of India Ltd.
Executive Director (NR-II), Power Grid Corporation of India Ltd.

Parties present : Shri V.V. Sharma, NRLDC
Shri Rajiv Porwal, NRLDC
Miss Joyti Prasad, NRLDC
Shri P.K.Pahwa, NRPC
Shri Ajay Talegaonkar, NRPC
Shri Naresh Kumar, NRPC
Shri R.P.Barwar, SLDC, RRVPNL
Shri Mahesh Kumar, RVPML

Shri D.S.Mahal, PSTCL
Shri Shashank K.Lal, Advocate, PDD, J & K
Shri Vikas Sharma, PDD, J & K
Shri Nasis Singh, PDD, J & K
Shri Darshan Singh, SLDC, Delhi
Shri B.L.Gujar, DTL
Shri P.K.Gupta

RECORD OF PROCEEDINGS

At the outset, the representative of the petitioner submitted that after hearing of the petition on 15.1.2013, the representative of NRPC inspected two nos. of 66 kV sub-station at Chandigarh on 28.1.2013 and the time delay of 10 seconds was observed in UFR setting instead of instantaneous setting and during inspection on 29.1.2013 at 220 kV Kunihar sub-station of HPSEB, it was found that df/dt relays were not in healthy condition. NRPC secretariat has reported these instances to the concerned utilities. The representative of petitioner further submitted no response has been received from the States of Uttarakhand, J&K, HP and Chandigarh.

2. In response to Commission's query regarding monitoring the UFR and df/dt relays and corrective actions being taken once the defects were observed during the inspection, Member Secretary, NRPC submitted that the defects observed during the inspection by NRPC Secretariat are reported to the concerned utilities for suitable rectification. The issues of non working of under frequency relays and rectification of defects was discussed in NRPC meeting held in the month of November, 2012 and constituents were advised to rectify the defective relays within a prescribed time frame. The representative of the NRPC further submitted that in U.P. System, out of 148 relays, 90 relays are defective and UPPCL has assured to rectify these relays by the May 2013. Other utilities are also taking action to procure additional relays.

3. The Commission enquired from the representative of NRPC that in case of non-rectification of the defects, whether the matter has been reported to the CERC as provided in Regulation 1.5 of the Grid Code through a petition in this regard. As UFR and df/dt relays are the most important defense mechanism for survival of the grid in case of any emergency conditions, necessary actions are required to be taken by all concerned in this regard. In response, Member Secretary, NRPC submitted that NRPC Secretariat works on behalf of the constituents and it was not considered proper to file a petition against their own constituents.

4. The Commission clarified that as per Regulation 5.2 (n) of the Grid Code, the responsibility of monitoring of UFR and df/dt relays is of NRPC secretariat and is not limited only to the reporting the defects to the utilities but also to ensure timely corrective measures to rectify the defects in a defined time. As per Regulation 1.5 of the Grid Code, in case problems are not sorted out in RPC, the same shall be reported to the Commission by Member Secretary, NRPC. If the discrepancies are not corrected, this should be reported to the Commission as violation of the Grid Code.

5. On the question of submission of monthly reports, the representative of the petitioner submitted that the responses observed in real-time from various control areas during under frequency events are regularly informed and discussed in the OCC meetings. These are being reflected in the agenda and minutes of these meetings. Since last few months, such occurrences has not been there.

6. The representative of the petitioner further prayed that since the matter was urgent, the survey of the sub-stations of PGCIL was carried out and the petition was filed in September, 2012 immediately after receiving the report from the CTU/PGCIL and the Commission has also conducted three hearings on the petition. The respondents, who have not filed their responses, be directed to ensure the healthiness of the UFR and df/dt relays installed in their control areas. He further requested to direct the respondents to submit the information within two weeks, as per prescribed format, to the Commission, NRPC Secretariat and NRLDC. The representative of the petitioner further submitted that the details of information received from Delhi, Rajasthan and Punjab are being examined and the deficiency, if any, shall be filed through the rejoinder within two weeks.

7. The representative of Power Development Department, Jammu and Kashmir submitted that PDD is procuring about 35 relays and would be installed.

8. The Commission directed as under:

- (a) All entities shall ensure healthiness of the defense mechanisms i.e. UFR, df/dt relays etc at all the time;
- (b) RPC secretariats shall monitor and ensure corrective actions within time frame;
- (c) All entities, who have not submitted the information, shall immediately file information, on affidavit with an advance copy to NRPC and NRLDC on or before 15.3.2013;

- (d) NRPC shall take up the issue in the next NRPC meeting and submit the time schedule for procurement/rectification of all the relays in the NR and submit compliance report by 15.3.2013 as per Regulation 1.5 of the Grid Code.
- (e) NRLDC shall submit the operational report of the load relief obtained from the under frequency relays to NRPC Secretariat and to the Commission by 22.3.2013; and
- (f) NRLDC and NRPC may file, any discrepancy detected on the submissions filed by the respondents, on affidavit, with copy to the respondents, by 1.4.2013.

9. The Commission directed the officer in charge of State STUs and SLDCs, who have not filed any response, appear before the Commission in next date of hearing to explain the reasons for non-compliance of the Commission's directions.

10. The petition shall be listed for hearing on 9.4.2013.

By order of the Commission

SD/-

(T. Rout)
Joint Chief (Law)