

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 59/MP/2014

- Subject : Providing protection systems having reliability, selectivity, speed and sensitivity and keeping them functional in terms of Regulation 5.2 (I) of the CERC (Indian Electricity Grid Code) (First Amendment) Regulations, 2012 read along with Regulation 3 (e) of the CERC (Grid Standards) Regulations, 2010 for ensuring security of the Eastern Regional grid as well as the inter-connected Indian grid.
- Date of hearing : 15.1.2015
- Coram : Shri Gireesh B. Pradhan, Chairperson
Shri A.K. Singhal, Member
Shri A.S. Bakshi, Member
- Petitioner : Eastern Regional Load Despatch Centre
- Respondents : Odisha Power Transmission Corporation Limited and others
- Parties present : Ms. Jayantika Singh, SRLDC/POSOCO
Shri R.B. Sharma, Advocate, OPTCL

Record of Proceedings

The representative of ERPC and ERLDC submitted as under:

(a) The Commission vide RoP dated 11.7.2014 had directed the respondents to engage CPRI to undertake complete third party audit. Accordingly, audit was carried out by CPRI and its report was sent to ERPC and ERLDC which shows that OPTCL has taken action to rectify defects in the system but most of them have not been completed till date.

(b) There have been 5 major incidences of multiple tripping in the month of December, 2014 as well as 2 incidences in the month of January, 2015 in OPTCL system. Meramundali 400 kV sub-station was involved in most of these incidents.

(c) On 11.1.2015, five 400 kV transmission lines, namely 400 kV D/C Meramundali-Angul, 400 kV D/C Meramundali-IBTPS and 400 kV D/C Meramundali-Duburi-2 tripped on overvoltage at Meramundali sub-station. All these tripping happened at 1305 hrs which is not a lean period and at a time when there is huge injection from IPPs JITPL and GMR at Angul sub-station. All the above 400 kV lines had again tripped on 2.1.2015 due to overvoltage at Meramundali. As per SCADA data, voltage at Meramundali sub-station remained as high as 440 kV for half an hour. The PMU data has indicated that voltage at neighbouring nodes were within permissible limits i.e. around 415 kV.

(d) OPTCL is not submitting any EL (Event log) and DR (Disturbance Record). OPTCL is just sending relay details which cannot be used to derive any conclusion. There have been repeated failures of lightning arresters on 400 kV transmission lines at 1401 hrs and 1905 hrs on 5.12.2014, at 1748 hrs on 6.12.2014 and at 1643 hrs on 17.12.2014 which shows poor O&M.

2. Learned counsel for OPTCL submitted as under:

(a) The petitioner should have called OCC meeting to discuss the above mentioned disturbances. The persistent overvoltage is due to inherent planning problem.

(b) LOA has been placed on CPRI for independent third party audit for major 400 kV and four 220 kV sub-station in OPTCL system. All the constituents of Eastern Region are governed by ERPC. Since, ERPC has identified only four areas and we have placed orders for third party audit only in these four areas. OPTCL can place further order if the committee suggests for further audit.

(c) All distance protection relays have been procured and are to be installed. OPTCL is facing some problem in installing relays which were to be installed by 31.12.2014. OPTCL has also filed compliance memo vide affidavit dated 6.1.2015.

(d) OPTCL is guided by the views of the Protection Coordination Committee of ERPC wherein petitioner is also a member. The multiple tripping issues can be discussed in the Protection Coordination Committee of ERPC for implementation. Further the petitioner needs to pin point the problem.

(e) The major disturbances in OPTCL system are being deliberated on monthly basis in PCC meetings of ERPC in presence of OPTCL's representatives.

3. The representative of ERLDC submitted that in spite of claim of the respondent in respect of replacement of CBs at Meramundali, as per tripping report submitted by OPTCL in respect of tripping on 11.1.2015, only two dias out of total eight dias seems to be completed and there is very poor coupling between buses as most of the dias are not completed.

4. Learned counsel for OPTCL submitted that OCC/PCC is the right forum to discuss protection system related issues. OPTCL has already replaced all of electromechanical relays with numeric ones but OPTCL want to check the performance of these relays before replacing these with new relays.

5. The Commission directed ERLDC to check LOA placed on CPRI by OPTCL and confirm its adequacy. In case LOA is inadequate, ERLDC shall suggest to the petitioner the areas to be included in third party audit. ERLDC was directed to file status report in this regard by 20.2.2015.

6. Subject to the above, the Commission reserved order in the petition.

By order of the Commission
Sd/-
(T. Rout)
Chief (Law)