CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. MP/113/2014

Subject: Providing protection systems having reliability, selectivity, speed

and sensitivity and keeping them functional in terms of Regulation 5.2 (1) of the CERC (Indian Electricity Grid Code) (Second Amendment) Regulations 2014 read along with Regulation 3 (e) of the Central Electricity Authority (Grid Standards) Regulations, 2010, providing adequate load shedding through automatic under frequency relays(UFRs) in the state systems of North Eastern Region, keeping them functional in terms of Regulation 5.2 (n) of the CERC (Indian Electricity Grid Code) (Second Amendment) Regulations 2014 read along with Regulation 9 of the Central Electricity Authority (Grid Standards) Regulations, 2010 and providing of System Protection Schemes (SPS) in NER Grid to operate the transmission system closer to their limits and protect against situations like cascade tripping, tripping of critical elements in terms of Regulation 5.2 (o) of the CERC (Indian Electricity Grid Code) (Second Amendment) Regulations 2014 for ensuring security of the North Eastern Grid as well as the interconnected

Indian Grid.

Date of hearing : 21.8.2014

Coram : Shri M. Deena Dayalan, Member

Shri A.K. Singhal, Member Shri A.S. Bakshi, Member

Petitioner : North Eastern Regional Load Despatch Centre

Respondents : Assam Electricity Grid Corporation Limited

Parties present: Shri Amaresh, NERLDC

Shri G.K. Bhuyan, AEGCL Ms. Elizabeth Pyrbot, NEEPCO Shri S.R. Narasimhan, NLDC Ms. Jyoti Prasad, NLDC

Record of Proceedings

The representative of the petitioner submitted that there was a black out on 19.3.2014 in NER before filing the instant petition and subsequent to that there was another black-out on 25.7.2014 in NER grid. The representative of the petitioner further

submitted that the matter is serious and sought permission of the Commission to file an I.A. The representative of the petitioner submitted as under:

- (a) In the whole calendar year 2014, there have been 81 incidences of grid disturbance as defined in Central Electricity Authority (Grid Standards) Regulations, 2010 out of which two have been of Category- V, which is the most severe category.
- (b) On 19.3.2014 and 25.7.2014, there was multiple tripping of elements in NER grid resulted in a grid disturbance of Category –V, leading to black-out of most of North Eastern Regional grid.
- (c) North Eastern Region is the smallest of the five regions catering to the load of 1500 MW-2000 MW in seven States. Due to historical reasons, the transmission system in the North Eastern Region is very fragile and calls for high order of O&M practices. Further, protection systems have to operate correctly as per Grid Standards and defense mechanism has to be equally strong. There are series of failures and in one of the cases, faults were cleared in as much as 96 seconds after melting of the earth wire in 400 kV systems which obviously is a serious matter.
- As per NERPC submission, funding is the major constraint for (d) implementation of recommendation of protection audit and other improvement required. The Commission vide order dated 21.2.2014 in Petition No.220/MP/2012 had directed the utilities to list out deficiency which needs to be rectified on urgent basis and it was further directed that in order to implement the recommendations of the Protection Audit, a compliance mechanism with definite time line needs to be put in place. Under 'Category A' the deficiencies could be corrected without any procurement and all deficiencies of Category-B shall be rectified within 6 months from the date of order. The Commission in the said order dated 21.2.2014 also directed that non-availability of fund or delay in procurement process shall not be accepted as in excuse for non-implementation. Therefore, the constituents of NER may be directed to furnish action plan against each deficiency clearly stating the deficiencies which can be corrected without any procurement (Category A) and deficiencies involving procurement of equipment (Category B) to implement the recommendations of the Protection Audit.
- 2. The representative of Assam Electricity Grid Corporation Limited (AEGCL) submitted that AEGCL is committed to implement each and every provision of law and recommendation of the Protection Audit report. In 2013 immediately after the publication of the Protection Audit report, a DPR along with the BOQ on the requirement of the substation equipments for the entire state grid was prepared. The same was submitted to NERPC and CEA for onward submission to the DONER (Deptt. for Development of North Eastern Region). The representative of AEGCL submitted that as per the requirement from NLDC, AEGCL had prepared DPR for availing the grant from (Power

System Development Fund) PSDF. He further submitted that the State of Assam is facing financial crisis and requires ₹382 crore for implementation of recommendations of the Protection Audit.

- 3. After hearing the representative of the petitioner, the Commission directed to admit the petition and issue notice to the respondents.
- 4. The Commission directed the petitioner to serve copy of the petition on the respondents immediately. The respondents were directed to file their replies by 23.9.2014 with an advance copy to the petitioner, who may file its rejoinder, if any, on or before 7.10.2014.
- 5. The Commission directed NERPC to submit on affidavit by 25.9.2014 the analysis report and action taken by the constituents to address the issue arising therein after grid disturbances in North Eastern Region since January 2014 and status of installation of UFRs in NER.
- 6. The Commission directed constituents of NER to submit on affidavit, latest by 25.9.2014 the present status of implementation of the recommendations of third party Protection Audit.
- 7. The Commission directed that due date of filing the reply and rejoinders including analysis report and present status of implementation of the recommendations of third party audit should be strictly complied with.
- 8. The petitions shall be listed for hearing on 14.10.2014.
- 9. The Commission directed CEA and NERPC to depute an officer well acquainted with the facts of the case on the next date of hearing to assist the Commission.

By order of the Commission

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