Docket No. AD16-15

FERC Technical Conference on Reliability

Comments of The Edison Electric Institute

EEI appreciates the annual reliability conference as an important opportunity to share with the Commission observations on the status of and outlook for bulk power system reliability in this country, as well as describing issues that may need addition attention or priority. As a starting point, EEI strongly believes that the body of NERC reliability standards continues to approach a mature level for addressing the Commission's statutory responsibilities. NERC standards development, approval, and implementation over the past ten years have dramatically improved the disciplines of bulk system planning and operations and therefore have reduced the likelihood of widespread system outages. Maturity does not suggest complacency, bulk power system reliability remains a critical strategic matter for the country and therefore EEI urges the Commission to continue to examine the issues and its potential actions going forward in this context.

Overall, EEI invites the Commission to become more engaged on the issues on an informal basis going forward, and ensure that Commission staff also seek to engage industry participants on the issues. The complex nature of system planning and operations, and the networks and systems within the Interconnections naturally invite these kinds of engagements. EEI, its management and staff, and member companies, stand ready to support how best to engage on the issues.

Critical infrastructure protection

The electric industry has made great strides. This year, companies have begun an enormous transition to a new design basis for the NERC critical infrastructure protection (CIP) standards. The 'version 5' standards, approved by the Commission in Order No. 791 issued on November 23, 2014 contain an important structural shift in order to improve management of reliability risks caused by CIP-related problems, events or disturbances. This basis is intended to provide an enduring structure that will not require modifications for new types of malicious action. In addition, the industry has begun implementation of CIP-014, the mandatory NERC physical security standard, requirements that our companies have taken very seriously with a broad range of strategic investments and management actions.

The industry also looks forward to approval and implementation of TPL-007, the proposed NERC standard aimed at addressing geomagnetic disturbances. EEI and other trade associations joined in supporting approval of the standard and believe that it will provide a reasonable approach to addressing GMD types of risks. As the scientific understanding of geomagnetism and geoelectric phenomena improves, the Commission can review whether reliability risks need further consideration by NERC.

Going forward, EEI strongly recommends that the Commission consider issues in a broad context and with system-wide considerations. Corporate strategic and management actions rest on a strong foundation and decisions are made with great care and deliberation. Application of these business principles to NERC and electric reliability would naturally invite broad long-term strategic questions, questions that will very likely yield different answers when compared to looking at day-to-day problems or events, or individual components.

For example, EEI feels very strongly that the CIP V5 requirements set an appropriate and reasonable approach to the broad range of reliability risks presented for critical infrastructure protection. On the other hand, vendor management risks under consideration by the Commission for potential new

NERC requirements to address cyber-related asset procurement raises some broad questions on the business risks beyond the control of jurisdictional entities, as well as the reach of Commission jurisdiction. In addition, the security of critical electric infrastructure information is a key system-wide priority. EEI views CIP-014-1 as a strong benchmark for protecting sensitive data and information by ensuring that such data remains within the direct control of jurisdictional entities.

Renewables integration

Renewable electricity generation has correctly developed in those areas of the country offering the strongest available potential resources to support sustainable development. In some regions of the country both wind and solar resources represent a material proportion of generation, while in other regions more traditional generating resources are more appropriate.

The Commission over the past few years has recognized the reliability-related issues involving integration of increasing amounts of renewable generation resources. Due to the increasing renewable resource portfolio, the Commission has both an open inquiry and a proposed rulemaking to examine large and small generator interconnection agreements. EEI submitted comments in both dockets to help inform the Commission's understanding and potential actions.

In particular, EEI recommended that the Commission continue its examination by holding three technical conferences on renewables-related reliability issues, one for each of the three Interconnections. In discussions with member companies on the issues, it is very clear that each of the Interconnections have somewhat unique planning and operations issues, and have taken somewhat different approaches to the issues related to renewable resource integration. Given its size and complexity, the areas within the Eastern Interconnection also have some unique issues. The organized wholesale markets add another layer of complexity. The tried-and-true 'no one size fits all' has relevance in this issue area.

EEI is confident that the mandatory NERC reliability standards will continue to adapt to the relevant facts and circumstances; however, the unique and in some cases local realities make it challenging to develop comprehensive requirements applicable to all asset owners and operators. EEI does not at this time envision a specific reliability gap in the standards related to the increasing renewable portfolio. EEI also is confident that the NERC reliability assessment program will continue to maintain a strong focus on emerging issues for the purpose of defining any such gaps, and recommending potential appropriate actions.

Gas-electric reliability issues

As natural gas continues to rapidly increase its overall proportion as the fuel of choice for electricity generation, replacing the historical role for coal, questions have surfaced regarding whether or to what extent the gas delivery infrastructure can support the growing trend. The polar vortex event in January 2014 offered a strong test for both gas delivery and power plant readiness. The experience delivered some strong lessons for policymakers, gas delivery and electric companies, and customers. NERC in its Long Term Reliability Assessment issued late last year raised some questions that need continuous assessment and analysis.

EEI recommends that the Commission seek to ensure that a) NERC continues to analyze the reliability-related issues involving natural gas dependence, and b) the Commission maintains focused inquiries of gas delivery infrastructure constraints.

NERC reliability assessment program

The NERC reliability assessment program provides the Commission and all of North America a disciplined set of regular in-depth reports, and special reports on critical and emerging issues. EEI continues to support the program products as offering an important barometer on the issues. Recent reports on the potential

reliability effects of the Clean Power Plan demonstrate the importance for maintaining a strong and independent assessment program.

EEI envisions that the program will continue to maintain a high level of technical accuracy and credibility and a sharp focus on reliability. The examination of the potential effects of renewable generation will continue to require careful analysis, including the need for accurate modeling for planning and operations. As the program continues to evolve, EEI seeks to have the broad range of NERC assessment activities remain carefully planned and coordinated, and for NERC to continue to coordinate with its technical committees.

EEI looks forward to continuing its engagement with the Commission and Commission staff on the issues.