

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Generator Verification Reliability
Standards

Docket No. RM13-16-000

**COMMENTS OF THE
ELECTRICITY CONSUMERS RESOURCE COUNCIL
(ELCON)**

The Electricity Consumers Resource Council (ELCON) appreciates the opportunity to comment on the Notice of Proposed Rulemaking (“NOPR”) issued by the Federal Energy Regulatory Commission (the “Commission”) on September 19, 2013. The NOPR proposes to approve Reliability Standards MOD-025-2 (Verification and Data Reporting of Generator Real and Reactive Power Capability and Synchronous Condenser Reactive Power Capability), MOD-026-1 (Verification of Models and Data for Generator Excitation Control System or Plant Volt/Var Control Functions), MOD-027-1 (Verification of Models and Data for Turbine/Governor and Load Control or Active Power/Frequency Control Functions), PRC-019-1 (Coordination of Generating Unit or Plant Capabilities, Voltage Regulating Controls, and Protection), PRC-024-1 (Generator Frequency and Voltage Protective Relay Settings), and proposes to approve the retirement of existing Reliability Standards MOD-024-1 and MOD-025-1; as submitted by the North American Electric Reliability Corporation (“NERC”). The NOPR also proposes to approve, with modifications, the associated implementation plans, violation risk factors and violation severity levels.

ELCON supports the majority of the proposed Reliability Standards, as they represent an improvement over the previous versions satisfying many concerns expressed by the Commission in Order 693. MOD-025-2 (Verification and Data Reporting of Generator Real and Reactive Power Capability and Synchronous

Condenser Reactive Power Capability), however, would establish a needlessly prescriptive approach to verifying unit reactive capability, and at many of the industrial facilities of ELCON members with “behind the meter” generation, its implementation would raise significant economic and safety concerns and be technically and economically infeasible. ELCON therefore respectfully requests that the Commission remand MOD-025-2 to NERC for modification.

ELCON is the national association representing large industrial consumers of electricity. ELCON member companies produce a wide range of products from virtually every segment of the manufacturing community. ELCON members operate hundreds of major facilities and are consumers of electricity in the footprints of all organized markets and other regions throughout the United States. Many of ELCON’s members operation “behind the meter” generation facilities in support of their industrial operations that would be subject to the proposed Reliability Standards and most notably would be severely and adversely impacted by MOD-025-2 as drafted. ELCON and certain of its members participated on NERC’s Standards Drafting Team.

I. EXCEPT FOR MOD-025-2, ELCON SUPPORTS THE NOPR

Other than MOD-025-2, ELCON supports the NOPR. The proposed Reliability Standards would be a significant improvement over the current ones, as they will support bulk power system reliability through appropriate and enforceable requirements. In particular, in response to the questions raised in the NOPR: (i) the higher MVA applicability thresholds used in MOD-026-1 and MOD-027-1 would not diminish the effectiveness of the Standards or possibly adversely impact transmission planners’ ability to reduce risk to the Bulk Power System (BPS); (ii) MOD-026-1 is written with sufficient clarity regarding whether a generator owner’s unit is “technically justified”; and (iii) it is not necessary to also include the technical justification provision in proposed Reliability Standard MOD-027-1 to provide an opportunity for transmission planners to address discrepancies between unit

simulations and generator owners' measured unit data, as the proposed language is sufficient to ensure an adequate level of reliability.

II. MOD-025-2 SHOULD BE REMANDED TO NERC

Proposed MOD-025-2, however, by requiring operating a generating unit in real time in order to determine physical performance limits, would inappropriately constrain the ability of Generator Owners to cost effectively verify unit reactive power capability through all available methods. There are other equally effective methods for verifying unit reactive capability, including for example modeling solutions that make use of operational or test data to better predict unit performance.

This issue is especially of concern for so-called "behind the meter generation" at industrial facilities. For example, any attempt to operate an industrial cogeneration unit in real-time independent of operating requirements of the host manufacturing process for whatever purpose may require protracted shutdown of the entire manufacturing process at great cost to the company. It may also create safety and environmental risks out of all proportion to the ability of the generator to deliver real or reactive power to the BES. In sum, as required by MOD-025-2, conducting a real-time, on-line test to demonstrate a generation unit's theoretical capabilities (*i.e.*, what the machine can do in isolation of the steam host) can place the host process at risk and does not represent the generator's actual capability, which may be restricted due to the needs of the host processes.¹

This issue illustrates a pitfall of the consensus driven standard setting process at NERC, where it is challenging to focus adequate attention on issues that impact a minority of the affected facilities, even where the impact is highly significant. Behind-the-meter generation is not comparable to utility or merchant generation in which the primary function is to deliver electric energy to the bulk electric system, and any

¹ For example, on-line testing of the leading capability of a unit buried in a reactive load zone (*i.e.*, host process utilizes highly inductive loads) to the limits of the machine's d-curve can result in localized voltage instability or collapse within the process facility, and the data would misrepresent a unit's ability to consume VARs during an actual event.

changes to the operation of the unit does not risk harmful impacts customer loads. The primary function of behind-the-meter generation that employs cogeneration or combined heat and power (CHP) systems is to deliver thermal energy (usually in the form of steam) in support of the load's process technology. In the case of industrial loads, the capabilities or operating characteristics of that process are a function of the load's production schedule associated with its products (*e.g.*, chemicals, petroleum, paper, etc.) and independent of conditions on the BES. Any electric power delivered to the BES is a residual by-product of the industrial process and generally a small fraction of the name-plate rating of the generator.

In considering approval of MOD-025-2, ELCON cautions against the Commission suggesting specific solutions; instead, we believe the industry should be allowed the flexibility to select the method which best meets the individual needs as long as that method can be demonstrated to be effective.

Accordingly, ELCON requests that the Commission remand the proposed MOD-025-2 Reliability Standard and direct NERC to reconsider it and establish more cost effective and safe solutions for addressing the requirements by industrial behind-the-meter generation. In addition to the remand, the Commission should establish a deadline and reporting requirement. Given the issues, ELCON believes this modification could be done expeditiously and resubmitted within six months of the date of the Commission's initial order in this docket.

III. CONCLUSION

For these reasons, ELCON requests that the Commission approve and remand the proposed Reliability Standards as set out herein.

NOTICES AND COMMUNICATIONS

Notices and communications with regard to these proceedings should be addressed to:

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Respectfully submitted,

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Dated: November 25, 2013

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary of this proceeding.

Dated at Washington, D.C.: November 25, 2013

/s/ W. RICHARD BIDSTRUP
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