

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Mandatory Reliability Standard for) Docket No. RM08-3-000
Nuclear Plant Interface Coordination)

COMMENTS OF THE ISO/RTO COUNCIL

Pursuant to the Notice of Proposed Rulemaking (“NOPR”) issued by the Federal Energy Regulatory Commission in this docket on March 20, 2008,¹ the ISO/RTO Council (“IRC”)² respectfully submits the following comments on proposed Reliability Standard NUC-001-1—Nuclear Plant Interface Coordination—which would mandate coordination between Nuclear Plant Generator Operators and Transmission Entities, and on the definitions proposed by the North American Electric Reliability Corporation (“NERC”) to supplement NUC-001-1.³

¹ *Mandatory Reliability Standard for Nuclear Plant Interface Coordination*, 73 Fed. Reg. 16586 (March 28, 2008) (“NOPR”).

² The IRC is composed of the following organizations: the Independent System Operator operating as the Alberta Electric System Operator (“AESO”), the California Independent System Operator Corporation (“CAISO”), Electric Reliability Council of Texas (“ERCOT”), the Independent Electricity System Operator of Ontario (“IESO”), ISO New England, Inc. (“ISO-NE”), the Midwest Independent Transmission System Operator, Inc. (“Midwest ISO”), New York Independent System Operator, Inc. (“NYISO”), PJM Interconnection, L.L.C. (“PJM”), Southwest Power Pool, Inc. (“SPP”), and New Brunswick System Operator (“NBSO”). The IESO, AESO and NBSO are not subject to the Commission’s jurisdiction and their endorsement of these comments does not constitute agreement or acknowledgement that these entities can be subject to the Commission’s jurisdiction. The IRC’s mission is to work collaboratively to develop effective processes, tools, and standard methods for improving competitive electricity markets across North America. In fulfilling this mission, it is the IRC’s goal to provide a perspective that balances reliability standards with market practices so that each complements the other, thereby resulting in efficient, robust markets that provide competitive and reliable service to customers.

³ See NERC Petition, Docket No. RM08-3-00 (filed November 19, 2007) (“NERC Petition”). Specifically, NERC proposed the addition of the following terms to the NERC Glossary of Terms Used in Reliability Standards: (1) Nuclear Plant Generator Operator; (2) Nuclear Plant Off-Site Power Supply or Offsite Power; (3) Nuclear Plant Licensing Requirements (“NPLRs”); and (4) Nuclear Plant Interface Requirements (“NPIRs”).

I. COMMENTS

The IRC is committed to the reliable and safe operation of nuclear generating facilities, and for many years, its members have provided transmission and related services to Nuclear Plant Generator Operators necessary for their compliance with applicable reliability and safety requirements. NUC-001-1 is the first reliability standard addressing the interface between nuclear power plants and the bulk power system.⁴ The purpose of NUC-001-1 is to ensure “safe nuclear plant operation and shutdown.”⁵ It requires “a nuclear power plant operator and its suppliers of back-up power and transmission and distribution services to coordinate concerning nuclear licensing requirements for safe nuclear plant operation and shutdown and system operating limits.”⁶ The IRC supports the core objective of strengthening nuclear power plant safety and reliability.

The Commission can promote the reliability and safety of nuclear plants by ensuring that existing arrangements between Regional Transmission Organizations (“RTOs”) and Independent System Operators (“ISOs”) and Nuclear Plant Generator Operators are allowed to continue without unnecessary interference or duplication of effort. The transmission arrangements that are needed to support nuclear plant licensing requirements, and that are within the authority of RTOs and ISOs to provide, are already being provided by RTOs and ISOs pursuant to existing tariffs and agreements that have been approved by FERC, or appropriate regulators. The NOPR itself appears to

⁴ NERC Petition at 6.

⁵ *Id.* at Exhibit A at 1.

⁶ NOPR at P 1.

recognize this in its references to existing arrangements between transmission providers and Nuclear Plant Generator Operators.⁷ For IRC members, the requirements set forth in NUC-001-1 largely reflect existing practices rather than new obligations. Thus, as explained in more detail below, the IRC asks the Commission to clarify that any entity designated as a Transmission Entity under the rule will be allowed to rely on existing tariffs and contracts to satisfy the mandates of R2 and R9, and will not be required to execute entirely new agreements that merely duplicate tariff and contractual arrangements that already are in place, allowing nuclear plants to maintain compliance with existing Nuclear Regulatory Commission (“NRC”) requirements. Although this may seem obvious, some of the language of the Commission’s order and the underlying standard could be read as requiring the execution of entirely new agreements even if existing tariff provisions or agreements cover the nuclear plant’s requirements. To the extent additional requirements are needed by nuclear plant owners, they should be developed in open, transparent stakeholder processes and become part of the ISO/RTO’s tariffs. This will avoid a series of “one off” agreements, and ensures nondiscriminatory application of the tariff provisions to meet the Nuclear Plant Generator Operator’s needs.

The IRC also asks that the Commission define a clear process, and establish definitive criteria, for resolving disputes between Nuclear Plant Generator Operators and Transmission Entities over the scope of the NPIRs for which specific Transmission Entities will be responsible. Without such a dispute resolution process, with clear criteria, the IRC is particularly concerned that attempts by Nuclear Plant Generator

⁷ See NOPR at P 45 (discussing practices adopted in existing interface agreements between nuclear plant operators and Transmission Entities).

Operators to execute interface agreements with Transmission Entities could turn into finger-pointing exercises between different categories of putative Transmission Entities over their responsibilities to Nuclear Plant Generator Operators.

Finally, the IRC provides comments on NUC-001-1's applicability to Transmission Entities and the negotiation and amendment of interface agreements for emerging transmission and generator system limits and revised NPLRs. The IRC also provides comments on the Commission's potential changes to NERC's proposed violation risk factors for certain Requirements.

A. The Commission Should Clarify that to the Extent that Existing Tariffs and Agreements Satisfy NUC-001-1 Requirements, Transmission Operators May Rely on Those Existing Tariffs and Agreements.

RTOs and ISOs control and operate high-voltage transmission systems, and provide transmission and related reliability services to generators supplying power over those systems. As a general rule, these services include the essential elements of NPIRs that are within the capacity of RTOs and ISOs to provide. For example, most RTOs and ISOs play an integral role in determining and communicating to generators applicable Interconnection Reliability Operating Limits ("IROLs") and System Operating Limits ("SOLs"). Most RTOs also play an integral role in coordinating and scheduling generator outages.

To the extent that an RTO or ISO—or indeed any other transmission operator—provides these services to generators, the services generally are reflected in existing tariffs and agreements between specific transmission operators and generators. For example, in New York, generators and the New York Independent System Operator, Inc. ("NYISO") execute a service agreement under the NYISO's Market Administration and

Control Area Services Tariff (“Services Tariff”), which governs, among other things, the NYISO’s “provision of Control Area Services . . . including services related to ensuring the reliable operation of the NYS Power System.”⁸ The service agreement requires the NYISO and its counterparties, including generators, to follow NYISO tariffs and procedures. The Services Tariff requires the NYISO to “develop, and modify as appropriate, procedures for the . . . reliable operation of the NYCA in accordance with the terms and conditions of the Tariff.”⁹ These procedures are set forth in detail in the NYISO manuals, and already cover the core elements of the agreements mandated pursuant to R9 of NUC-001-1. The technical requirements outlined in R9.2, including identification of system parameters and configurations and applicable limits, largely are reflected in the NYISO’s Transmission and Dispatch Manual.¹⁰ The requirements outlined in R9.3 with respect to operations and maintenance coordination largely are reflected in the NYISO’s Outage Scheduling manual.¹¹ These manuals define the NYISO’s obligations to specific generators, including nuclear generators, pursuant to the terms of the Services Tariff.

⁸ New York Independent System Operator, Inc., FERC Electric Tariff Original Volume No. 2, at Original Sheet No. 21.

⁹ New York Independent System Operator, Inc., FERC Electric Tariff Original Volume No. 2, at Original Sheet No. 83.

¹⁰ New York Independent System Operator, Inc., Transmission and Dispatching Operation Manual, at pp. 2-7 to 2-12 (Nov. 21, 2007), *available at* <http://www.nyiso.com/public/documents/manuals/operations.jsp?maxDisplay=20>.

¹¹ New York Independent System Operator, Inc., Outage Scheduling Manual Revision 2.0, at pp. 2-1 to 2-8 (Nov. 2, 2004), *available at* <http://www.nyiso.com/public/documents/manuals/operations.jsp?maxDisplay=20>.

In circumstances such as these, an RTO or ISO designated as a Transmission Entity by a Nuclear Plant Generator Operator should be permitted to rely on its existing agreements to comply with its obligations under NUC-001-1. As long as all of the required elements set forth in NUC-001-1 are covered by those existing arrangements, reliance on such arrangements not only saves limited resources and prevents unnecessary duplication of effort, but also ensures that there will be no conflicting requirements imposed on either RTOs/ISOs or Nuclear Plant Generator Operators. Furthermore, it is possible that the drafting of entirely new contracts to govern the provision of NPIR-related transmission service will result in terms that vary from the terms of existing, and otherwise valid, tariffs and contracts. Such conflicting terms are a prescription for unnecessary confusion on the part of both RTOs/ISOs and Nuclear Plant Generator Operators regarding their obligations..

To reduce unnecessary duplication of effort and eliminate confusion, the IRC respectfully requests that the Commission allow RTOs and ISOs (or any other transmission provider) to rely on existing tariffs and contractual arrangements with Nuclear Plant Generator Operators in circumstances where existing arrangements cover the requirements of the proposed reliability rule. To the extent that the Commission (or an appropriate Canadian entity) determines that a separate interface agreement between a transmission provider and a Nuclear Plant Generator Operator will be required under NUC-001-1, the reliance on existing agreements can take the form of cross-references in the interface agreement to the existing tariffs, manuals, or existing contractual arrangements.

B. Arrangements for New Services Between Transmission Operators and Nuclear Plant Generator Operators Under NUC-001-1 Should be Incorporated Into the Applicable Transmission Operator Tariffs or Manuals.

As outlined above, the IRC believes that most transmission services necessary to support a Nuclear Plant Generator Operator's compliance with applicable licensing requirements and NPIRs are already provided to such facilities under existing tariffs and agreements. However, to the extent that NUC-001-1 requires that an RTO or ISO provide new services to a Nuclear Plant Generator Operator the arrangements governing the provision of those services should be incorporated into existing transmission operator tariffs or manuals.

Any new NPIR-related services to be provided by RTOs and ISOs generally will be transmission service, or service necessary to support transmission service, and will supplement the existing NPIR-related services that RTOs and ISOs already are providing to Nuclear Plant Generator Operators pursuant to their existing tariffs. Such transmission services should be provided on a non-discriminatory basis. Where a requirement to provide a new service is not already met by an existing tariff or manual, the Commission should allow for the provision of those transmission services through modifications to tariffs instead of through the negotiation of individual agreements. Meeting the NUC-001-1 requirements to provide a new service through a tariff ensures a public, open process, and encourages uniformity and consistency in the provision of the required services. It also ensures that the tariffs and manuals will be updated to reflect the requirements of NUC-001-1 as they may evolve over time.¹² Further, negotiation of

¹² In the NOPR, the Commission asks whether it is possible to draft interface agreements that provide for negotiation and amendments to address emerging transmission and generating system limits and revised

individual agreements for the provision of new services would be inefficient and waste resources, since it is likely that a new service required pursuant to NUC-001-1 by one Nuclear Plant Generator Operator would be required by other Nuclear Plant Generator Operators. Therefore, for the sake of clarity and consistency, any new services required pursuant to NUC-001-1 requirements should be incorporated into applicable tariffs or manuals.

C. The Commission Should Adopt a Clear Dispute Resolution Process to Govern Disagreements Over NPIR-Related Obligations.

The IRC is concerned that the process under which Nuclear Plant Generator Operators approach and negotiate with putative Transmission Entities over the implementation of specific NPIRs carries the potential for significant disagreements over the scope of NPIR-related obligations, particularly over which entities are responsible for providing which services to a Nuclear Plant Generator Operator. Currently, there are no definitive criteria that can be used to determine the scope of a putative Transmission Entity's NPIR-related responsibilities under NUC-001-1, and there is no process to resolve disputes over such issues. The IRC recommends that the Commission define clearly the scope of NPIR-related obligations, and establish clear procedures for the expeditious resolution of disputes over NPIR-related responsibilities.

The proposed Nuclear Plant Generator Operator's specific license requirements provides an appropriate anchor to define the scope of such obligations and avoid disputes as to whether the services being provided to the nuclear plant are truly unique when compared to the requirements of other generators. However, the language containing the

Nuclear Plant Licensing Requirements. The continuous evolution of transmission operator tariffs to reflect evolving requirements under NUC-001-1 is one way to address this issue.

definition of NPIRs goes further and states that they are “based on [Nuclear Plant Licensing Requirements] and Bulk Electric System requirements.” (emphasis added). The ambiguity of this phrase, when coupled with the creation of special arrangements for nuclear plants, could allow for requested NPIRs that go beyond the specific requirements under a Nuclear Plant Generator Operator’s NRC license. Given that the purpose of the rule is to mandate “coordinat[ion] concerning nuclear licensing requirements for safe nuclear plant operation and shutdown and system operating limits,”¹³ limiting the scope of the agreements to specific NRC licensing requirements would fulfill the purpose of NUC-001-1 while also streamlining the negotiation process and reducing the number of disputes over NPIR-related responsibilities.

Whatever method the Commission uses to define the scope of NPIR related obligations, the IRC respectfully requests that the Commission provide a dispute resolution process through the Commission to govern disputes arising where disagreements occur over the determination of which potential Transmission Entities are responsible for providing NPIR-related services to Nuclear Plant Generator Operators. The IRC is particularly concerned that certain potential Transmission Entities may view the negotiation of interface agreements as an opportunity to try to shift responsibilities for certain NPIR services to other potential Transmission Entities for reasons unrelated to meeting the licensing requirements of nuclear plants. To avoid prolonged disagreements, there should be a well-defined process in place for the Commission to resolve all such disputes over applicable responsibilities. This, along with a clearly defined scope for

¹³ NOPR at P 1.

NPIR related obligations, will reduce uncertainty, and facilitate the execution of necessary interface agreements under NUC-001-1.

D. The Commission Should Adopt the NOPR’s Understanding that NUC-001-1 Is Not Enforceable Against a “Transmission Entity” Until an Interface Agreement Is Executed.

NUC-001-1 defines “Transmission Entities” as “all entities that are responsible for providing services related to NPIRs.”¹⁴ The Commission indicates its understanding that NUC-001-1 “is not enforceable against an entity ... until it executes an interface agreement. Upon execution such an entity becomes a “Transmission Entity” subject to [NUC-001-1].”¹⁵ The Commission requests comment on its understanding.¹⁶

The IRC believes the Commission’s understanding is correct and recommends that the Commission adopt the NOPR’s interpretation regarding when a service providing entity becomes a “Transmission Entity.” A “Transmission Entity” as defined in the NOPR should not be confused with any of the Registered Entities defined in the NERC Functional Model, as NUC-001-1 clearly contemplates that its applicability to Transmission Entities begins only after an interface agreement is executed. The IRC submits that the Commission should clarify that the proposed rule only requires that the entity become a “Transmission Entity” with regard to the contractual agreement or tariff requirement governing the relationship of the Nuclear Plant Generator Operator and Transmission Entity. As the NOPR indicates, NERC has explained that Transmission

¹⁴ NERC Petition at Exhibit A at 1.

¹⁵ NOPR at P 29.

¹⁶ *Id.*

Entities will be categorized as such “by virtue of their involvement with a nuclear plant, by agreeing to meet a NPIR through an interface agreement.”¹⁷

E. As Recommended by NERC, NUC-001-1 Should Be Assigned Medium or Lower Violation Risk Factors.

NERC proposed to assign a lower violation risk factor for Requirements R1, R2, and R9 and a medium violation risk factor for Requirements R3, R4, R5, R6, R7, and R8.¹⁸ The Commission proposes to direct that NERC raise Requirements R4.2, R4.3, R5, R7, and R8 from medium to high, and Requirements R2 and R9 from lower to medium.¹⁹ The Commission views a Reliability Standard that has the objective to ensure safe and reliable nuclear power plant operation and shutdown as meriting medium or high violation risk factor assignments to its Requirements, because of “the reliability benefits of nuclear power and the impact of separating a plant from the grid.”²⁰ The Commission seeks comment on its proposal to raise the violation risk factors proposed by NERC for these Requirements.²¹

The Commission has held that a high violation risk factor should be assigned where a violation of the Requirement:

could directly cause or contribute to Bulk-Power System instability, separation, or cascading failures; or ... is a requirement in a planning time frame, that if violated, could, under emergency or abnormal, or restorative conditions anticipated by the preparations directly cause or contribute to

¹⁷ *Id.* at P 22.

¹⁸ NERC Petition at Exhibit A at 1-2.

¹⁹ NOPR at P 51.

²⁰ *Id.*, citing *North American Electric Reliability Corp.*, 119 FERC ¶ 61,145 at P 9 (2007).

²¹ *Id.*

Bulk-Power System instability, separation, or a cascading sequence or failures, or could hinder restoration to a normal condition.²²

NUC-001-1's primary objective is to ensure facilities are planned and operated to ensure *backup power supply* is provided to the nuclear power plant for safe operation and shutdown and to meet NPLRs. NUC-001-1 requires Transmission Entities and Nuclear Plant Generator Operators to enter into interface agreements solely to meet NPIRs.

The IRC respectfully submits that the Commission should direct NERC to keep the violation risk factors as medium for sub-requirements R4.2 and R4.3 and Requirements R5, R7, and R8, as NERC proposed in its petition. The system is planned and operated for, at a minimum, N-1 contingencies. The loss of any single unit, regardless of its fuel source, will not "directly cause or contribute to Bulk-Power System instability, separation, or a cascading sequence of failures, or could place the Bulk-Power System at an unacceptable risk of instability, separation, or cascading failures" As such, these requirements warrant only a medium violation risk factor because a violation of NUC-001-1 would not adversely affect the reliability or control of the bulk power system.

The IRC, however, agrees with the Commission that R9 warrants a medium violation risk factor. As the Commission noted, "a violation of R9 may mean that the necessary operational or emergency planning elements are not in place, resulting in an inability to resolve system conditions in an emergency."²³ The IRC, therefore, supports

²² *Id.* at P 48.

²³ NOPR at P 59.

the Commission's proposal to raise the violation risk factor for Requirement R9 from lower to medium.²⁴

II. CONCLUSION

For the reasons set forth above the IRC respectfully requests that the Commission adopt the IRC recommendations set forth above.

Respectfully submitted,

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²⁴ *Id.*

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