NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

December 2, 2009

VIA ELECTRONIC FILING

Ms. Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, D.C. 20426

Re: *North American Electric Reliability Corporation,*
Docket No. RM06-16-000

Dear Ms. Bose:

The North American Electric Reliability Corporation ("NERC") hereby submits this petition in accordance with Section 215(d)(1) of the Federal Power Act ("FPA") and Part 39.5 of the Federal Energy Regulatory Commission's ("FERC") regulations seeking approval for interpretations of Requirements R2 and R8 in FERC-approved NERC Reliability Standard MOD-001-1 — Available Transmission System Capability, and Requirements R5 and R6 in FERC-approved Reliability Standard MOD-029-1 — Rated System Path Methodology. The standards that include the appended interpretations are designated as MOD-001-1a and MOD-029-1a and are set forth in **Exhibit A** to this petition.

The interpretations were approved by the NERC Board of Trustees on November 5, 2009. NERC requests the interpretations be made effective immediately upon approval by FERC.

NERC's petition consists of the following:

- This transmittal letter;
- A table of contents for the filing;
- A narrative description explaining how the interpretation meets the reliability goal of the standard involved;
- Interpretation of MOD-001-1, Requirements R2 and R8, submitted for approval (**Exhibit A**);
- Interpretation of MOD-029-1, Requirements R5 and R6, submitted for approval (**Exhibit A**);
- Reliability Standard MOD-001-1a that includes the appended interpretation (**Exhibit B**);
- Reliability Standard MOD-029-1a that includes the appended interpretation (**Exhibit B);**
- The complete development record of the interpretation (**Exhibit C**); and
- The interpretation development team roster (**Exhibit D**).

Please contact the undersigned if you have any questions.

Respectfully submitted,

/s/ Holly A. Hawkins
Holly A. Hawkins
Attorney for North American Electric Reliability Corporation

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION	**) Docket No. RM06-16-000)**

PETITION OF THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION FOR APPROVAL OF INTERPRETATIONS TO RELIABILITY STANDARDS MOD-001-1 — AVAILABLE TRANSMISSION SYSTEM CAPABILITY AND MOD-029-1 — RATED SYSTEM PATH METHODOLOGY

Rick Sergel
President and Chief Executive Officer
David N. Cook
Vice President and General Counsel
North American Electric Reliability Corporation
116-390 Village Boulevard
Princeton, NJ 08540-5721
(609) 452-8060
(609) 452-9550 – facsimile
david.cook@nerc.net

Rebecca J. Michael
Assistant General Counsel
Holly A. Hawkins
Attorney
North American Electric Reliability Corporation
1120 G Street, N.W.
Suite 990
Washington, D.C. 20005-3801
(202) 393-3998
(202) 393-3955 – facsimile
rebecca.michael@nerc.net
holly.hawkins@nerc.net

December 2, 2009

TABLE OF CONTENTS

I. INTRODUCTION

The North American Electric Reliability Corporation ("NERC")[1] hereby requests the Federal Energy Regulatory Commission ("FERC") to approve, in accordance with Section 215(d)(1) of the Federal Power Act ("FPA")[2] and Section 39.5 of FERC's regulations, 18 C.F.R. § 39.5, interpretations to multiple requirements of two FERC-approved NERC Reliability Standards:

- Reliability Standard MOD-001-1 — Available Transmission System Capability, Requirements R2 and R8, and
- Reliability Standard MOD-029-1 — Rated System Path, Requirements R5 and R6.

No modifications to the language contained in these specific requirements are being proposed through the interpretations.

The NERC Board of Trustees approved the interpretations to Reliability Standard MOD-001-1 — Available Transmission System Capability, Requirements R2 and R8, and Reliability Standard MOD-029-1 — Rated System Path, Requirements R5 and R6 on November 5, 2009. NERC requests that FERC approve these interpretations and make them effective immediately after approval in accordance with FERC's procedures. **Exhibit A** to this filing sets forth the interpretations. **Exhibit B** contains the affected Reliability Standards containing the appended interpretations. **Exhibit C** contains the complete development record of the interpretations to these Reliability Standard requirements. **Exhibit D** contains the interpretation development team roster.

[1] NERC was certified by FERC as the electric reliability organization ("ERO") authorized by Section 215 of the Federal Power Act. FERC certified NERC as the ERO in its order issued July 20, 2006 in Docket No. RR06-1-000. *Order Certifying North American Electric Reliability Corporation as the Electric Reliability Organization and Ordering Compliance Filing*, 116 FERC ¶ 61,062 (2006) ("ERO Certification Order").

[2] 16 U.S.C. 824o.

NERC is also filing this interpretation with applicable governmental authorities in Canada.

II. NOTICES AND COMMUNICATIONS

Notices and communications with respect to this filing may be addressed to the following:

Rick Sergel President and Chief Executive Officer David N. Cook* Vice President and General Counsel North American Electric Reliability Corporation 116-390 Village Boulevard Princeton, NJ 08540-5721 (609) 452-8060 (609) 452-9550 – facsimile david.cook@nerc.net *Persons to be included on FERC's service list are indicated with an asterisk. NERC requests waiver of FERC's rules and regulations to permit the inclusion of more than two people on the service list.	Rebecca J. Michael* Assistant General Counsel Holly A. Hawkins* Attorney North American Electric Reliability Corporation 1120 G Street, N.W. Suite 990 Washington, D.C. 20005-3801 (202) 393-3998 (202) 393-3955 – facsimile rebecca.michael@nerc.net holly.hawkins@nerc.net

III. BACKGROUND

a. Regulatory Framework

By enacting the Energy Policy Act of 2005,[3] Congress entrusted FERC with the duties of approving and enforcing rules to ensure the reliability of the Nation's bulk power system, and with the duties of certifying an electric reliability organization ("ERO") that would be charged with developing and enforcing mandatory Reliability Standards, subject to FERC approval. Section 215 states that all users, owners and

[3] Energy Policy Act of 2005, Pub. L. No. 109-58, Title XII, Subtitle A, 119 Stat. 594, 941 (2005) (codified at 16 U.S.C. § 824o).

operators of the bulk power system in the United States are subject to FERC-approved Reliability Standards.

b. Basis for Approval of Proposed Interpretations

While these interpretations do not represent new or modified Reliability Standard requirements, they do provide instruction with regard to the intent and, in some cases, application of the requirement that will guide compliance to them. In this regard, NERC requests FERC approval of these interpretations.

c. Reliability Standards Development Procedure and Interpretations

All persons who are directly or materially affected by the reliability of the North American bulk power system are permitted to request an interpretation of a Reliability Standard, as discussed in NERC's *Reliability Standards Development Procedure*, which is incorporated into the Rules of Procedure as Appendix 3A.[4] Upon request, NERC will assemble a team with the relevant expertise to address the interpretation request and, within 45 days, present an interpretation for industry ballot. If approved by the ballot pool and the NERC Board of Trustees, the interpretation is appended to the Reliability Standard and filed for approval by FERC and applicable governmental authorities in Canada to be made effective when approved. When the affected Reliability Standard is next revised using the *Reliability Standards Development Procedure*, the interpretation will then be incorporated into the Reliability Standard.

[4] *See* NERC's *Reliability Standards Development Procedure,* Approved by the NERC Board of Trustees on March 12, 2007, and Effective June 7, 2007 ("Reliability Standards Development Procedure"), available at http://www.nerc.com/files/Appendix3A_StandardsDevelopmentProcess.pdf.

The interpretations set out in **Exhibit A** have been developed and approved by industry stakeholders using NERC's *Reliability Standards Development Procedure.*[5] They were approved by the NERC Board of Trustees on November 5, 2009.

During its November 5, 2009 meeting, the NERC Board of Trustees offered guidance regarding interpretations and the interpretations process. As part of this guidance, the NERC Board of Trustees adopted the following resolution:

> WHEREAS, the NERC Board of Trustees has considered the record of development of a number of proposed interpretations of Reliability Standards, the discussion and recommendations from the November 4, 2009 conference on interpretations, and the recommendation of NERC management,
>
> RESOLVED, that the NERC Board of Trustees approves the following proposed interpretations of Reliability Standards:
>
> 1. Interpretation of Requirement R1 of PRC-005-1;
> 2. Interpretations of Requirement R3 of TOP-005-1 and Requirement R12 of IRO-005-1;
> 3. Interpretation of Requirement R2 of CIP-007-1;
> 4. Interpretation of Requirement R1.3.10 of TPL-002-0; and
> 5. Interpretation of Requirements R2 and R8 of MOD-001-1 and Requirements R5 and R6 of MOD-029-1.
>
> FURTHER RESOLVED, that the NERC Board of Trustees provides the following guidance regarding interpretations and the interpretations process:
>
> a. In deciding whether or not to approve a proposed interpretation, the board will use a standard of strict construction and not seek to expand the reach of the standard to correct a perceived gap or deficiency in the standard;
>
> b. It is the expectation of the board that when work on an interpretation reveals a gap or deficiency in a Reliability Standard, stakeholders will take prompt action to address the gap or

[5] NERC notes the concern highlighted in FERC's July 21, 2008 Order, *Modification of Interchange and Transmission Loading Relief Reliability Standards; and Electric Reliability Organization Interpretation of Specific Requirements of Four Reliability Standards*, 124 FERC ¶ 61,071 (2008), in which FERC approved five modified Reliability Standards and interpretations to five requirements of prior FERC-approved Reliability Standards. In footnote 8 of the July 21 Order, FERC expressed concern that NERC's Rules of Procedure are silent with regard to NERC Board of Trustees approval of interpretations of Reliability Standards. While NERC believes its *Reliability Standards Development Procedure, Version 6.1* addresses the issue, NERC will propose an amendment to its Rules of Procedure to make more explicit the Board of Trustees' expectations to approve interpretations that will thereby address FERC's concern.

deficiency in the standard and that the time and effort expended on the interpretation should be a relatively small proportion of the time and effort expended on addressing the gap or deficiency;

c. Priority should be given to addressing deficiencies or gaps in standards that pose a significant risk to the reliability of the bulk power system — addressing the gaps and deficiencies identified in Reliability Standard PRC-005-1 should be given such priority, and the Standards Committee should report on its plans and progress in that regard at the board's February 2010 meeting;

d. The Standards Committee should ensure that the comments by NERC staff and other stakeholders on the proposed interpretations are considered by the standard drafting team in addressing any identified gaps and deficiencies, with a report back to the board on the disposition of those comments;

e. The number of registrants that might end up in non-compliance or the difficulty of compliance are not appropriate inputs to an interpretation process, although those inputs may well be appropriate considerations in a standard development process and development of an implementation plan; and

f. Requests for a decision on how a reliability standard applies to a registered entity's particular facts and circumstances should not be addressed through the interpretations process.

The NERC Board of Trustees, in approving these interpretations, did so using a standard of strict construction that does not expand the reach of the standard or correct a perceived gap or deficiency in the standard. However, the NERC Board of Trustees recommended that any gaps or deficiencies in a Reliability Standard that are evident through the interpretation process be addressed promptly by the standard drafting team. NERC Staff has been so advised, and will further examine any gaps or deficiencies in Reliability Standards MOD-001-1 and MOD-029-1 in its consideration of the next versions of these standards through the *Reliability Standards Development Procedure*.

On February 17, 2009, the New York Independent System Operator ("NYISO") requested an interpretation of MOD-001-1 — Available Transmission System Capability,

Requirements R2 and R8, and MOD-029-1 — Rated System Path Methodology, Requirements R5 and R6. Because the NYISO raised individual questions relating to each standard, each is presented separately in this section. In each case, the Available Transfer Capability ("ATC") standard drafting team provided the response to the interpretation request.

These interpretations are an example of the application of a Reliability Standard to a registered entity's particular facts and circumstances, as described in subparagraph f. of the board's guidance resolution. As such, NERC would not expect to see further interpretations of this sort coming through the interpretations process.

IV. JUSTIFICATION FOR APPROVAL OF INTERPRETATIONS

a. Reliability Standard MOD-001-1 — Available Transmission System Capability, Requirements R2 and R8

FERC approved Reliability Standard MOD-001-1 on November 24, 2009. In this filing, NERC is submitting a proposed interpretation to Requirements R2 and R8, which is labeled as MOD-001-1a and is included in **Exhibit B**. In this section, NERC discusses the interpretation, explains the need for, and discusses the development of, the interpretation to Requirements R2 and R8 of MOD-001-1 — Available Transmission System Capacity. Additionally, NERC demonstrates that the interpretation is consistent with the stated reliability goal of the FERC-approved Reliability Standards and the requirements thereunder. Set forth in Section V below are the stakeholder ballot results and an explanation of how stakeholder comments were considered and addressed by the standard drafting team assembled to provide the interpretation.

The complete development record for the interpretation is set forth in **Exhibit C**. **Exhibit C** includes the request for the interpretation, the response to the request for the interpretation, the ballot pool and the final ballot results by registered ballot body members, stakeholder comments received during the balloting and an explanation of how those comments were considered. **Exhibit D** contains the interpretation development team roster.

The stated purpose of Reliability Standard MOD-001-1 is: "[t]o ensure that calculations are performed by Transmission Service Providers to maintain awareness of available transmission system capability and future flows on their own systems as well as those of their neighbors." The specific language of Requirements R2 and R8 of this reliability standard is:

> **R2.** Each Transmission Service Provider shall calculate ATC or AFC values as listed below using the methodology or methodologies selected by its Transmission Operator(s):
>
> > **R2.1** Hourly values for at least the next 48 hours.
> >
> > **R2.2** Daily values for at least the next 31 calendar days.
> >
> > **R2.3** Monthly values for at least the next 12 months (months 2-13).
>
> **R8.** Each Transmission Service Provider that calculates ATC shall recalculate ATC at a minimum on the following frequency, unless none of the calculated values identified in the ATC equation have changed:
>
> > **R8.1** Hourly values, once per hour. Transmission Service Providers are allowed up to 175 hours per calendar year during which calculations are not required to be performed, despite a change in a calculated value identified in the ATC equation.
> >
> > **R8.2** Daily values, once per day.
> >
> > **R8.3** Monthly values, once per week.

NYISO requested clarification whether the "advisory ATC" used under the NYISO tariff is subject to the ATC calculation and recalculation requirements in MOD-001-1, Requirements R2 and R8, and if not, whether it is necessary to document the

frequency of "advisory" calculations in the responsible entity's Available Transfer Capability Implementation Document ("ATCID").

The response developed by the interpretation development team, approved by ballot of the NERC stakeholders, and approved by the NERC Board of Trustees, is:

> *Requirements R2 and R8 of MOD-001-1 are both related to Requirement R1, which defines that ATC methodologies are to be applied to specific "ATC Paths." The NERC definition of ATC Path is "Any combination of Point of Receipt and Point of Delivery for which ATC is calculated; and any Posted Path." Based on a review of the language included in this request, the NYISO Open Access Transmission Tariff, and other information posted on the NYISO Web site, it appears that the NYISO does indeed have multiple ATC Paths, which are subject to the calculation and recalculation requirements in Requirements R2 and R8. It appears from reviewing this information that ATC is defined in the NYISO tariff in the same manner in which NERC defines it, making it difficult to conclude that NYISO's "advisory ATC" is not the same as ATC. In addition, it appears that pre-scheduling is permitted on certain external paths, making the calculation of ATC prior to day ahead necessary on those paths. The second part of NYISO's question is only applicable if the first part was answered in the negative and therefore will not be addressed.*

b. Reliability Standard MOD-029-1 — Rated System Path Methodology, Requirements R5 and R6

FERC approved Reliability Standard MOD-029-1 on November 24, 2009. In this filing, NERC is submitting a proposed interpretation to Requirements R5 and R6, which is labeled as MOD-029-1a and is included in **Exhibit B**. In this section, NERC discusses the interpretation, explains the need for, and discusses the development of, the interpretation to Requirements R5 and R6 of MOD-029-1 — Rated System Path. Additionally, NERC demonstrates that the interpretation is consistent with the stated reliability goal of FERC-approved Reliability Standards and the requirements thereunder. Set forth below in Section V are the stakeholder ballot results and an explanation of how

stakeholder comments were considered and addressed by the standard drafting team assembled to provide the interpretation.

The complete development record for the interpretation is set forth in **Exhibit C**. **Exhibit C** includes the request for the interpretation, the response to the request for the interpretation, the ballot pool and the final ballot results by registered ballot body members, stakeholder comments received during the balloting and an explanation of how those comments were considered. **Exhibit D** contains the interpretation development team roster.

The purpose of the MOD-029-1 standard is "[t]o increase consistency and reliability in the development and documentation of transfer capability calculations for short-term use performed by entities using the Rated System Path Methodology to support analysis and system operations." Specifically, Requirements R5 and R6 state:

> **R5**. When calculating [Existing Transmission Commitments ("ETC")] for firm Existing Transmission Commitments (ETC_F) for a specified period for an ATC Path, the Transmission Service Provider shall use the algorithm below:
>
> $ETC_F = NL_F + NITS_F + GF_F + PTP_F + ROR_F + OS_F$
>
> **Where:**
>
> **NL_F** is the firm capacity set aside to serve peak Native Load forecast commitments for the time period being calculated, to include losses, and Native Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.
>
> **$NITS_F$** is the firm capacity reserved for Network Integration Transmission Service serving Load, to include losses, and Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.
>
> **GF_F** is the firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

PTP_F is the firm capacity reserved for confirmed Point-to-Point Transmission Service.

ROR_F is the firm capacity reserved for Roll-over rights for contracts granting Transmission Customers the right of first refusal to take or continue to take Transmission Service when the Transmission Customer's Transmission Service contract expires or is eligible for renewal.

OS_F is the firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using Firm Transmission Service as specified in the ATCID.

R6. When calculating ETC for non-firm Existing Transmission Commitments (ETC_{NF}) for all time horizons for an ATC Path the Transmission Service Provider shall use the following algorithm:

$$ETC_{NF} = NITS_{NF} + GF_{NF} + PTP_{NF} + OS_{NF}$$

Where:

$NITS_{NF}$ is the non-firm capacity set aside for Network Integration Transmission Service serving Load (i.e., secondary service), to include losses, and load growth not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

GF_{NF} is the non-firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

PTP_{NF} is non-firm capacity reserved for confirmed Point-to-Point Transmission Service.

OS_{NF} is the non-firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using non-firm transmission service as specified in the ATCID.

NYISO asked whether OS_F in MOD-029-1, Requirement R5 and OS_{NF} in MOD-029-1, Requirement R6 could be calculated using Transmission Flow Utilization in the determination of ATC. The standard drafting team proposed the following response,

which was also approved by NERC stakeholder ballot body and by the NERC Board of Trustees:

> *This request for interpretation and the NYISO Open Access Transmission Tariff describe the NYISO's concept of "Transmission Flow Utilization;" however, it is unclear whether or not Native Load, Point-to-Point Transmission Service, Network Integration Transmission Service, or any of the other components explicitly defined in Requirements R5 and R6 are incorporated into "Transmission Flow Utilization." Provided that "Transmission Flow Utilization" does not include Native Load, Point-to-Point Transmission Service, Network Integration Transmission Service, or any of the other components explicitly defined in Requirements R5 and R6, it is appropriate to be included within the "Other Services" term. However, if "Transmission Flow Utilization" does incorporate those components, then simply including "Transmission Flow Utilization" in "Other Service(s)" would be inappropriate.*

V. SUMMARY OF THE RELIABILITY STANDARD DEVELOPMENT PROCEEDINGS

On February 17, 2009, the NYISO requested interpretations of MOD-001-1 — Available Transmission System Capability, Requirements R2 and R8, and MOD-029-1 — Rated System Path Methodology, Requirements R5 and R6. In each case, the ATC standard drafting team provided the response to the interpretation request. In accordance with its *Reliability Standard Development Procedure*, NERC presented the response for pre-ballot review on April 23, 2009 and conducted a ten-day initial ballot that began on May 25, 2009. The ballot achieved 85.13 percent quorum and 82.10 percent weighted segment approval. There were 22 negative ballots submitted for the initial ballot and 11 of those ballots included a comment. Some balloters listed more than one reason for their negative ballot. The reasons cited for the negative ballots included the following:

- All 11 balloters who submitted a negative vote with an associated comment suggested the issue should be addressed using a method or process other than the interpretation process.

- Six balloters indicated no opposition to the content of the interpretation but did not believe it was appropriate to append the interpretation to a continent-wide standard, since it is narrowly applied to a specific region.
- Four balloters stated the interpretation process is being used to verify whether a responsible entity process is compliant, not to clarify or correct issues with a standard.
- Six balloters stated it would be more appropriate to deal with this type of request through a regional variance or a waiver.
- Four balloters indicated NYISO should ask for a letter of no action from FERC on this issue. The balloters stated that FERC, as the entity that allowed the market design, should determine whether the "advisory" ATC calculations are actual ATC calculations, and, if not, FERC should advise the NYISO if it should perform ATC calculations.
- Three balloters indicated the interpretation of MOD-029-1 appears to be in conflict with the NYISO's tariff.

The interpretation development team responded to all comments, and those responses are included in **Exhibit C** of this filing. The team opined that it believes that the interpretation clarifies for both NYISO and others the NERC definition of "ATC Path" and the appropriate use of the "Other Service(s)" variable within the standards. On this basis, the team indicated its belief that this is an appropriate interpretation of the standard and should be appended to the continent-wide standard. NERC held a recirculation ballot of the interpretation response from July 8, 2009 through July 17, 2009 and achieved a quorum of 90.26 percent, with a weighted affirmative approval of 82.25 percent.

The proposed interpretations do not change the requirements or standards. They review the definitions in the standards, in the FERC pro-forma Open Access Transmission Tariff, and the NYISO tariff, and explain the manner in which the standards apply to NYISO's transmission system. NERC believes the interpretations are

clear and unambiguous, and they address the intent of the requirements and support reliability without adversely affecting market operations.

VI. CONCLUSION

NERC requests that FERC approve the interpretations to Requirements R2 and R8 in FERC-approved NERC Reliability Standard MOD-001-1 — Available Transmission System Capability, and Requirements R5 and R6 in FERC-approved Reliability Standard MOD-029-1 — Rated System Path Methodology as set out in **Exhibit A**, in accordance with Section 215(d)(1) of the FPA and Part 39.5 of FERC's regulations. NERC requests that these interpretations be made effective immediately upon issuance of FERC's order in this proceeding.

Respectfully submitted,

/s/ Holly A. Hawkins

Rick Sergel
President and Chief Executive Officer
David N. Cook
Vice President and General Counsel
North American Electric Reliability Corporation
116-390 Village Boulevard
Princeton, NJ 08540-5721
(609) 452-8060
(609) 452-9550 – facsimile
david.cook@nerc.net

Rebecca J. Michael
Assistant General Counsel
Holly A. Hawkins
Attorney
North American Electric Reliability Corporation
1120 G Street, N.W.
Suite 990
Washington, D.C. 20005-3801
(202) 393-3998
(202) 393-3955 – facsimile
rebecca.michael@nerc.net
holly.hawkins@nerc.net

CERTIFICATE OF SERVICE

I hereby certify that I have served a copy of the foregoing document upon all parties listed on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C. this 2nd day of December, 2009.

/s/ Holly A. Hawkins
Holly A. Hawkins
Attorney for North American Electric Reliability Corporation

Exhibit A

Proposed Interpretation of Reliability Standard MOD 001-1 — Available Transmission System Capability, Requirements R2 and R8

Proposed Interpretation of Reliability Standard MOD-029-1 — Rated System Path Methodology, Requirements R5 and R6

NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Note: an Interpretation cannot be used to change a standard.

Request for an Interpretation of a Reliability Standard

Date submitted: February 17, 2009

Contact information for person requesting the interpretation:

Name: Rick Gonzales

Organization: NYISO

Telephone: (518) 356-6116

E-mail: rgonzales@nyiso.com

Identify the standard that needs clarification:

Standard Number and Title:

MOD-001-01 – Available Transmission System Capability

MOD-029-01 – Rated System Path Methodology

Identify specifically what needs clarification:

Requirement Number and Text of Requirement:

MOD-001-01 Requirement R2:

R2. Each Transmission Service Provider shall calculate ATC or AFC values as listed below using the methodology or methodologies selected by its Transmission Operator(s):

R2.1. Hourly values for at least the next 48 hours.

R2.2. Daily values for at least the next 31 calendar days.

R2.3. Monthly values for at least the next 12 months (months 2-13).

MOD-001-01 Requirement R8:

R8. Each Transmission Service Provider that calculates ATC shall recalculate ATC at a minimum on the following frequency, unless none of the calculated values identified in the ATC equation have changed:

R8.1. Hourly values, once per hour. Transmission Service Providers are allowed up to 175 hours per calendar year during which calculations are not required to be performed, despite a change in a calculated value identified in the ATC equation.

R8.2. Daily values, once per day.

R8.3. Monthly values, once per week.

Clarification Needed:
Is the "advisory ATC" used under the NYISO tariff subject to the ATC calculation and recalculation requirements in MOD-001-1 Requirements R2 and R8? If not, is it necessary to document the frequency of "advisory" calculations in the responsible entity's Available Transfer Capability Implementation Document?

Background Information: Available Transfer Capability (ATC) is defined as a measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses. It is defined as Total Transfer Capability less existing transmission commitments (including retail customer service), less a Capacity Benefit Margin, less a Transmission Reliability Margin, plus Postbacks, plus counterflows.

A customer's ability to schedule transactions in the NYISO system is, with the exception of certain external interfaces, not limited by a pre-defined amount of ATC. Therefore, for NYISO, ATC is **not** "a measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses" in New York. Instead, as FERC has recognized, ATC postings in New York are "advisory" projections that are, with the exception of certain postings for external interfaces, calculated after the NYISO markets close, and transactions are scheduled, based on calculations performed by the NYISO's day-ahead and real-time market software. The fact that a posted ATC is zero does not mean that further commercial activity is precluded because the NYISO may redispatch its system to support additional transactions. A posted ATC value of zero simply indicates that there is congestion at a particular NYISO interface. FERC has granted the NYISO a number of waivers from its OASIS posting regulations that reflect these differences.

R2 and R8 under MOD-001 seem to presume that all Transmission Service Providers calculate ATC values for various time intervals further in the future than one-day ahead. This presumption is generally not applicable to NYISO because its FERC-approved market design does not allow customers to schedule transactions, or reserve transmission service, more than one-day ahead (except for certain external interfaces where "pre-scheduling" is allowed.) The NYISO therefore does not calculate ATC for periods further than one day ahead, except to the extent necessary to support "pre-scheduling." In its June 18, 2008 "Consideration of Comments," the ATC SDT noted that the "advisory" form of ATC posted by the NYISO might not actually be "ATC" and that the NYISO may therefore not have any "ATC Paths" for purposes of the ATC MOD standards. The SDT recognized that advance transmission reservations were generally not supported under the NYISO market design and suggested that the NYISO could comply with R2 and R8 by describing its "process, and which components of the ATC equation are zero" in its ATCID.

Requirement Number and Text of Requirement:

MOD-029-01 Requirements R5 and R6:

R5. When calculating ETC for firm Existing Transmission Commitments (ETC_F) for a specified period for an ATC Path, the Transmission Service Provider shall use the algorithm below:

$ETC_F = NL_F + NITS_F + GF_F + PTP_F + ROR_F + OS_F$

Where:

NL_F is the firm capacity set aside to serve peak Native Load forecast commitments for the time period being calculated, to include losses, and Native Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

$NITS_F$ is the firm capacity reserved for Network Integration Transmission Service serving Load, to include losses, and Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

GF_F is the firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

PTP_F is the firm capacity reserved for confirmed Point-to-Point Transmission Service.

ROR_F is the firm capacity reserved for Roll-over rights for contracts granting Transmission Customers the right of first refusal to take or continue to take Transmission Service when the Transmission Customer's Transmission Service contract expires or is eligible for renewal.

OS_F is the firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using Firm Transmission Service as specified in the ATCID.

R6. When calculating ETC for non-firm Existing Transmission Commitments (ETC_{NF}) for all time horizons for an ATC Path the Transmission Service Provider shall use the following algorithm:

$ETC_{NF} = NITS_{NF} + GF_{NF} + PTP_{NF} + OS_{NF}$

Where:

$NITS_{NF}$ is the non-firm capacity set aside for Network Integration Transmission Service serving Load (i.e., secondary service), to include losses, and load growth not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

GF_{NF} is the non-firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

PTP_{NF} is non-firm capacity reserved for confirmed Point-to-Point Transmission Service.

OS_{NF} is the non-firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using non-firm transmission service as specified in the ATCID.

Clarification Needed:
Could OS_F in MOD-029-1 Requirement R5 and OS_{NF} in MOD-029-1 Requirement R6 be

calculated using Transmission Flow Utilization in the determination of ATC?

Transmission Flow Utilization represents the security constrained network powerflow solutions of the NYISO's Security Constrained Unit Commitment software, with respect to the NYISO Day-Ahead Market, or its Real-Time Commitment and Real-Time Dispatch software with respect to the NYISO's Real-Time Market. The NYISO's existing FERC-approved ATC equation, which reflects the nature of the "financial reservation" based form of open access transmission service that it provides, calculates firm and non-firm ATC as follows (the NYISO does not utilize CBM.).

ATC (Firm) = TTC — Transmission Flow Utilization (Firm) — TRM

ATC (Non-Firm) = ATC (Firm) — Transmission Flow Utilization (Non-Firm)

The ATC SDT has indicated that it believes that the OS definitions are broad enough to encompass the NYISO's Transmission Flow Utilization information.

Identify the material impact associated with this interpretation:

The material impact to the NYISO is the risk that an auditor might conclude that its current approach to calculating ATC/TTC was not consistent with NERC's requirements. If an auditor were to reach such a conclusion, the NYISO could be exposed to serious consequences, including sanctions or a requirement to modify its market design and transmission model in ways that would not be desired by its stakeholders, required by FERC, or necessary for any reliability-related purpose.

Project 2009-15: Response to Request for an Interpretation of MOD-001-1 Requirements R2 & R8 and MOD-029-1 Requirements R5 & R6 for New York Independent System Operator

The following interpretation of MOD-001-1 Requirements R2 & R8 and MOD-029-1 Requirements R5 & R6 was developed by the ATC/TTC/CBM/TRM Standards Drafting Team.

Requirement Number and Text of Requirement

MOD-001-01 Requirement R2:

R2. Each Transmission Service Provider shall calculate ATC or AFC values as listed below using the methodology or methodologies selected by its Transmission Operator(s):

R2.1. Hourly values for at least the next 48 hours.

R2.2. Daily values for at least the next 31 calendar days.

R2.3. Monthly values for at least the next 12 months (months 2-13).

MOD-001-01 Requirement R8:

R8. Each Transmission Service Provider that calculates ATC shall recalculate ATC at a minimum on the following frequency, unless none of the calculated values identified in the ATC equation have changed:

R8.1. Hourly values, once per hour. Transmission Service Providers are allowed up to 175 hours per calendar year during which calculations are not required to be performed, despite a change in a calculated value identified in the ATC equation.

R8.2. Daily values, once per day.

R8.3. Monthly values, once per week.

Question #1

Is the "advisory ATC" used under the NYISO tariff subject to the ATC calculation and recalculation requirements in MOD-001-1 Requirements R2 and R8? If not, is it necessary to document the frequency of "advisory" calculations in the responsible entity's Available Transfer Capability Implementation Document?

Response to Question #1

Requirements R2 and R8 of MOD-001-1 are both related to Requirement R1, which defines that ATC methodologies are to be applied to specific "ATC Paths." The NERC definition of ATC Path is "Any combination of Point of Receipt and Point of Delivery for which ATC is calculated; and any Posted Path." Based on a review of the language included in this request, the NYISO Open Access Transmission Tariff, and other information posted on the NYISO Web site, it appears that the NYISO does indeed have multiple ATC Paths, which are subject to the calculation and recalculation requirements in Requirements R2 and R8. It appears from reviewing this information that ATC is defined in the NYISO tariff in the same manner in which NERC defines it, making it difficult to conclude that NYISO's "advisory ATC" is not the same as ATC. In addition, it appears that pre-scheduling is permitted on certain external paths, making the calculation of ATC prior to day ahead necessary on those paths.

The second part of NYISO's question is only applicable if the first part was answered in the negative and therefore will not be addressed.

Requirement Number and Text of Requirement

MOD-029-01 Requirements R5 and R6:

R5. When calculating ETC for firm Existing Transmission Commitments (ETC_F) for a specified period for an ATC Path, the Transmission Service Provider shall use the algorithm below:

$$ETC_F = NL_F + NITS_F + GF_F + PTP_F + ROR_F + OS_F$$

Where:

NL_F is the firm capacity set aside to serve peak Native Load forecast commitments for the time period being calculated, to include losses, and Native Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

$NITS_F$ is the firm capacity reserved for Network Integration Transmission Service serving Load, to include losses, and Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

GF_F is the firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission

Tariff or "safe harbor tariff."

PTP_F is the firm capacity reserved for confirmed Point-to-Point Transmission Service.

ROR_F is the firm capacity reserved for Roll-over rights for contracts granting Transmission Customers the right of first refusal to take or continue to take Transmission Service when the Transmission Customer's Transmission Service contract expires or is eligible for renewal.

OS_F is the firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using Firm Transmission Service as specified in the ATCID.

R6. When calculating ETC for non-firm Existing Transmission Commitments (ETC_{NF}) for all time horizons for an ATC Path the Transmission Service Provider shall use the following algorithm:

$$ETC_{NF} = NITS_{NF} + GF_{NF} + PTP_{NF} + OS_{NF}$$

Where:

$NITS_{NF}$ is the non-firm capacity set aside for Network Integration Transmission Service serving Load (i.e., secondary service), to include losses, and load growth not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

GF_{NF} is the non-firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

PTP_{NF} is non-firm capacity reserved for confirmed Point-to-Point Transmission Service.

OS_{NF} is the non-firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using non-firm transmission service as specified in the ATCID.

Question #2

Could OS_F in MOD-029-1 Requirement R5 and OS_{NF} in MOD-029-1 Requirement R6 be calculated using Transmission Flow Utilization in the determination of ATC?

Response to Question #2

This request for interpretation and the NYISO Open Access Transmission Tariff describe the NYISO's concept of "Transmission Flow Utilization;" however, it is unclear whether or not Native Load, Point-to-Point Transmission Service, Network Integration Transmission Service, or any of the other components explicitly defined in Requirements R5 and R6 are incorporated into "Transmission Flow Utilization." Provided that "Transmission Flow Utilization" does not include Native Load, Point-to-Point Transmission Service, Network Integration Transmission Service, or any of the other components explicitly defined in Requirements R5 and R6, it is appropriate to be included within the "Other Services" term. However, if "Transmission Flow Utilization" does incorporate those components, then simply including "Transmission Flow Utilization" in "Other Service" would be inappropriate.

Exhibit B

Reliability Standard MOD 001-1a that includes the appended interpretation

Reliability Standard MOD 029-1a that includes the appended interpretation

A. Introduction

1. **Title:** **Available Transmission System Capability**

2. **Number:** **MOD-001-1a**

3. **Purpose:** To ensure that calculations are performed by Transmission Service Providers to maintain awareness of available transmission system capability and future flows on their own systems as well as those of their neighbors

4. **Applicability:**

   4.1. Transmission Service Provider.

   4.2. Transmission Operator.

5. **Proposed Effective Date:** Immediately after approval of applicable regulatory authorities.

B. Requirements

R1. Each Transmission Operator shall select one of the methodologies[1] listed below for calculating Available Transfer Capability (ATC) or Available Flowgate Capability (AFC) for each ATC Path per time period identified in R2 for those Facilities within its Transmission operating area: [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]

- The Area Interchange Methodology, as described in MOD-028
- The Rated System Path Methodology, as described in MOD-029
- The Flowgate Methodology, as described in MOD-030

R2. Each Transmission Service Provider shall calculate ATC or AFC values as listed below using the methodology or methodologies selected by its Transmission Operator(s): [*Violation Risk Factor: Lower* [*Time Horizon: Operations Planning*]

R2.1. Hourly values for at least the next 48 hours.

R2.2. Daily values for at least the next 31 calendar days.

R2.3. Monthly values for at least the next 12 months (months 2-13).

R3. Each Transmission Service Provider shall prepare and keep current an Available Transfer Capability Implementation Document (ATCID) that includes, at a minimum, the following information: [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]

R3.1. Information describing how the selected methodology (or methodologies) has been implemented, in such detail that, given the same information used by the Transmission Service Provider, the results of the ATC or AFC calculations can be validated.

R3.2. A description of the manner in which the Transmission Service Provider will account for counterflows including:

[1] All ATC Paths do not have to use the same methodology and no particular ATC Path must use the same methodology for all time periods.

R3.2.1. How confirmed Transmission reservations, expected Interchange and internal counterflow are addressed in firm and non-firm ATC or AFC calculations.

R3.2.2. A rationale for that accounting specified in R3.2.

R3.3. The identity of the Transmission Operators and Transmission Service Providers from which the Transmission Service Provider receives data for use in calculating ATC or AFC.

R3.4. The identity of the Transmission Service Providers and Transmission Operators to which it provides data for use in calculating transfer or Flowgate capability.

R3.5. A description of the allocation processes listed below that are applicable to the Transmission Service Provider:

- Processes used to allocate transfer or Flowgate capability among multiple lines or sub-paths within a larger ATC Path or Flowgate.
- Processes used to allocate transfer or Flowgate capabilities among multiple owners or users of an ATC Path or Flowgate.
- Processes used to allocate transfer or Flowgate capabilities between Transmission Service Providers to address issues such as forward looking congestion management and seams coordination.

R3.6. A description of how generation and transmission outages are considered in transfer or Flowgate capability calculations, including:

R3.6.1. The criteria used to determine when an outage that is in effect part of a day impacts a daily calculation.

R3.6.2. The criteria used to determine when an outage that is in effect part of a month impacts a monthly calculation.

R3.6.3. How outages from other Transmission Service Providers that can not be mapped to the Transmission model used to calculate transfer or Flowgate capability are addressed.

R4. The Transmission Service Provider shall notify the following entities before implementing a new or revised ATCID: [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]

R4.1. Each Planning Coordinator associated with the Transmission Service Provider's area.

R4.2. Each Reliability Coordinator associated with the Transmission Service Provider's area.

R4.3. Each Transmission Operator associated with the Transmission Service Provider's area.

R4.4. Each Planning Coordinator adjacent to the Transmission Service Provider's area.

R4.5. Each Reliability Coordinator adjacent to the Transmission Service Provider's area.

R4.6. Each Transmission Service Provider whose area is adjacent to the Transmission Service Provider's area.

R5. The Transmission Service Provider shall make available the current ATCID to all of the entities specified in R4. *[Violation Risk Factor: Lower] [Time Horizon: Operations Planning]*

R6. When calculating Total Transfer Capability (TTC) or Total Flowgate Capability (TFC) the Transmission Operator shall use assumptions no more limiting than those used in the planning of operations for the corresponding time period studied, providing such planning of operations has been performed for that time period. *[Violation Risk Factor: Lower] [Time Horizon: Operations Planning]*

R7. When calculating ATC or AFC the Transmission Service Provider shall use assumptions no more limiting than those used in the planning of operations for the corresponding time period studied, providing such planning of operations has been performed for that time period. *[Violation Risk Factor: Lower] [Time Horizon: Operations Planning]*

R8. Each Transmission Service Provider that calculates ATC shall recalculate ATC at a minimum on the following frequency, unless none of the calculated values identified in the ATC equation have changed: [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]

R8.1. Hourly values, once per hour. Transmission Service Providers are allowed up to 175 hours per calendar year during which calculations are not required to be performed, despite a change in a calculated value identified in the ATC equation.

R8.2. Daily values, once per day.

R8.3. Monthly values, once per week.

R9. Within thirty calendar days of receiving a request by any Transmission Service Provider, Planning Coordinator, Reliability Coordinator, or Transmission Operator for data from the list below solely for use in the requestor's ATC or AFC calculations, each Transmission Service Provider receiving said request shall begin to make the requested data available to the requestor, subject to the conditions specified in R9.1 and R9.2: *[Violation Risk Factor: Lower] [Time Horizon: Operations Planning]*

- Expected generation and Transmission outages, additions, and retirements.
- Load forecasts.
- Unit commitments and order of dispatch, to include all designated network resources and other resources that are committed or have the legal obligation to run, as they are expected to run, in one of the following formats chosen by the data provider:

Note that the North American Energy Standards Board (NAESB) is developing the companion standards that address the posting of ATC information, including supporting information such as that described in R9.

  - Dispatch Order
  - Participation Factors
  - Block Dispatch
- Aggregated firm capacity set-aside for Network Integration Transmission Service and aggregated non-firm capacity set aside for Network Integration Transmission Service (i.e. Secondary Service).
- Firm and non-firm Transmission reservations.
- Aggregated capacity set-aside for Grandfathered obligations
- Firm roll-over rights.
- Any firm and non-firm adjustments applied by the Transmission Service Provider to reflect parallel path impacts.
- Power flow models and underlying assumptions.
- Contingencies, provided in one or more of the following formats:
  - A list of Elements
  - A list of Flowgates
  - A set of selection criteria that can be applied to the Transmission model used by the Transmission Operator and/or Transmission Service Provider
- Facility Ratings.
- Any other services that impact Existing Transmission Commitments (ETCs).
- Values of Capacity Benefit Margin (CBM) and Transmission Reliability Margin (TRM) for all ATC Paths or Flowgates.
- Values of Total Flowgate Capability (TFC) and AFC for any Flowgates considered by the Transmission Service Provider receiving the request when selling Transmission service.
- Values of TTC and ATC for all ATC Paths for those Transmission Service Providers receiving the request that do not consider Flowgates when selling Transmission Service.
- Source and sink identification and mapping to the model.

R9.1. The Transmission Service Provider shall make its own current data available, in the format maintained by the Transmission Service Provider, for up to 13 months into the future (subject to confidentiality and security requirements).

R9.1.1. If the Transmission Service Provider uses the data requested in its transfer or Flowgate capability calculations, it shall make the data used available

R9.1.2. If the Transmission Service Provider does not use the data requested in its transfer or Flowgate capability calculations, but maintains that data, it shall make that data available

R9.1.3. If the Transmission Service Provider does not use the data requested in its transfer or Flowgate capability calculations, and does not maintain that data, it shall not be required to make that data available

R9.2. This data shall be made available by the Transmission Provider on the schedule specified by the requestor (but no more frequently than once per hour, unless mutually agreed to by the requester and the provider).

C. Measures

M1. The Transmission Operator shall provide evidence (such as a calculation, inclusion of the information in the ATCID, or other written documentation) that it has selected one of the specified methodologies per time period in R2 for use in determining Transfer Capabilities of those Facilities for each ATC Path within the Transmission Operator's operating area. (R1).

M2. The Transmission Service Provider shall provide ATC or AFC values and identification of the selected methodologies along with other evidence (such as written documentation, processes, or data) to show it calculated ATC or AFC for the following using the selected methodology or methodologies chosen as part of R1 (R2):

- There has been at least 48 hours of hourly values calculated at all times. (R2.1)
- There has been at least 31 consecutive calendar days of daily values calculated at all times. (R2.2)
- There has been at least the next 12 months of monthly values calculated at all times (Months 2-13). (R2.3)

M3. The Transmission Service Provider shall provide its current ATCID that contains all the information specified in R3. (R3)

M4. The Transmission Service Provider shall provide evidence (such as dated electronic mail messages, mail receipts, or voice recordings) that it has notified the entities specified in R4 before a new or revised ATCID was implemented. (R4)

M5. The Transmission Service Provider shall provide evidence (such as a demonstration) that the current ATCID is available to all of the entities specified in R4, as required by R5. (R5)

M6. The Transmission Operator shall provide a copy of the assumptions (such as contingencies, loop flow, generation re-dispatch, switching operating guides or data sources for load forecast and facility outages) used to calculate TTC or TFC as well as other evidence (such as copies of operations planning studies, models, supporting information, or data) to show that the assumptions used in determining TTC or TFC are no more limiting than those used in planning of operations for the corresponding time period studied. Alternatively the Transmission Operator may demonstrate that the same load flow cases are used for both TTC or TFC and Operations Planning.

When different inputs to the calculations are used because the calculations are performed at different times, such that the most recent information is used in any calculation, a difference in that input data shall not be considered to be a difference in assumptions. (R6)

M7. The Transmission Service Provider shall provide a copy of the assumptions (such as contingencies, loop flow, generation re-dispatch, switching operating guides or data sources for load forecast and facility outages) used to calculate ATC or AFC as well as other evidence (such as copies of operations planning studies, models, supporting information, or data) to show that the assumptions used in determining ATC or AFC are no more limiting than those used in planning of operations for the corresponding time period studied. Alternatively the Transmission Service Provider may demonstrate that the same load flow cases are used for both AFC and Operations Planning. When different inputs to the calculations are used because the calculations are performed at different times, such that the most recent information is used in any calculation, a difference in that input data shall not be considered to be a difference in assumptions. (R7)

M8. The Transmission Service Provider calculating ATC shall provide evidence (such as logs or data) that it has calculated the hourly, daily, and monthly values on at least the minimum frequencies specified in R8 or provide evidence (such as data, procedures, or software documentation) that the calculated values identified in the ATC equation have not changed. (R8)

M9. The Transmission Service Provider shall provide a copy of the dated request, if any, for ATC or AFC data as well as evidence to show it responded to that request (such as logs or data) within thirty calendar days of receiving the request, and the requested data items were made available in accordance with R9. (R9)

D. Compliance

1. Compliance Monitoring Process

1.1. Compliance Enforcement Authority

Regional Entity.

1.2. Compliance Monitoring Period and Reset Time Frame

Not applicable.

1.3. Data Retention

The Transmission Operator and Transmission Service Provider shall keep data or evidence to show compliance as identified below unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation:

- The Transmission Operator shall maintain its current selected method(s) for calculating ATC or AFC and any methods in force since last compliance audit period to show compliance with R1.

- The Transmission Service Provider shall maintain evidence to show compliance with R2, R4, R6, R7, and R8 for the most recent calendar year plus the current year.
- The Transmission Service Provider shall maintain its current, in force ATCID and any prior versions of the ATCID that were in force since the last compliance audit to show compliance with R3.
- The Transmission Service Provider shall maintain evidence to show compliance with R5 for the most recent three calendar years plus the current year.
- The Transmission Operator shall maintain evidence to show compliance with R6 for the most recent calendar year plus the current year.
- If a Transmission Service Provider or Transmission Operator is found non-compliant, it shall keep information related to the non-compliance until found compliant.

The Compliance Enforcement Authority shall keep the last audit records and all requested and submitted subsequent audit records.

1.4. Compliance Monitoring and Enforcement Processes:

The following processes may be used:

- Compliance Audits
- Self-Certifications
- Spot Checking
- Compliance Violation Investigations
- Self-Reporting
- Complaints

1.5. Additional Compliance Information

None.

2. Violation Severity Levels

R #	Lower VSL	Moderate VSL	High VSL	Severe VSL
R1.	N/A	N/A	N/A	The Transmission Operator did not select one of the specified methodologies for each ATC Path per time period identified in R2 for those Facilities within its Transmission operating area.
R2.	One or more of the following: ▪ The Transmission Service Provider has calculated hourly ATC or AFC values for more than the next 30 hours but less than the next 48 hours. ▪ Has calculated daily ATC or AFC values for more than the next 21 calendar days but less than the next 31 calendar days. ▪ Has calculated monthly ATC or AFC values for more than the next 9 months but less than the next 12 months.	One or more of the following: ▪ The Transmission Service Provider has calculated hourly ATC or AFC values for more than the next 20 hours but less than the next 31 hours. ▪ Has calculated daily ATC or AFC values for more than the next 14 calendar days but less than the next 22 calendar days. ▪ Has calculated monthly ATC or AFC values for more than the next 6 months but less than the next 10 months.	One or more of the following: ▪ The Transmission Service Provider has calculated hourly ATC or AFC values for more than the next 10 hours but less than the next 21 hours. ▪ Has calculated daily ATC or AFC values for more than the next 7 calendar days but less than the next 15 calendar days. ▪ Has calculated monthly ATC or AFC values for more than the next 3 months but less than the next 7 months.	One or more of the following: ▪ The Transmission Service Provider has calculated hourly ATC or AFC values for less than the next 11 hours. ▪ Has calculated daily ATC or AFC values for less than the next 8 calendar days. ▪ Has calculated monthly ATC or AFC values for less than the next 4 months. ▪ Did not use the selected methodology(ies) to calculate ATC.
R3.	The Transmission Service Provider has an ATCID that does not incorporate changes made up to three months ago.	The Transmission Service Provider has an ATCID that does not incorporate changes made more than three months but not more than six months ago.	The Transmission Service Provider has an ATCID that does not incorporate changes made more than six months but not more than one year ago. **OR** The Transmission Service Provider has an ATCID, but it does not include one or two of the information items described in R3.	The Transmission Service Provider has an ATCID that does not incorporate changes made a year or more ago. **OR** The Transmission Service Provider does not have an ATCID, or its ATCID does not include three or more of the information items described in R3.

R #	Lower VSL	Moderate VSL	High VSL	Severe VSL
R4.	The Transmission Service Provider notified one or more of the parties specified in R4 of a new or modified ATCID after, but not more than 30 calendar days after, its implementation.	The Transmission Service Provider notified one or more of the parties specified in R4 of a new or modified ATCID more than 30, but not more than 60, calendar days after its implementation.	The Transmission Service Provider notified one or more of the parties specified in R4 of a new or modified ATCID more than 60, but not more than 90, calendar days after its implementation.	The Transmission Service Provider notified one or more of the parties specified in R4 of a new or modified ATCID more than 90 calendar days after its implementation. **OR** The Transmission Service Provider did not notify one or more of the parties specified in R4 of a new or modified ATCID for more than 90 calendar days after its implementation.
R5.	N/A	N/A	N/A	The Transmission Service Provider did not make the ATCID available to the parties described in R4.
R6.	The Transmission Operator determined TTC or TFC using assumptions more limiting than those used in planning of operations for the studied time period for more than zero ATC Paths or Flowgates, but not more than 5% of all ATC Paths or Flowgates or 1 ATC Path or Flowgate (whichever is greater).	The Transmission Operator determined TTC or TFC using assumptions more limiting than those used in planning of operations for the studied time period for more than 5% of all ATC Paths or Flowgates or 1 ATC Path or Flowgate (whichever is greater), but not more than 10% of all ATC Paths or Flowgates or 2 ATC Paths or Flowgates (whichever is greater).	The Transmission Operator determined TTC or TFC using assumptions more limiting than those used in planning of operations for the studied time period for more than 10% of all ATC Paths or Flowgates or 2 ATC Path or Flowgate (whichever is greater), but not more than 15% of all ATC Paths or Flowgates or 3 ATC Paths or Flowgates (whichever is greater).	The Transmission Operator determined TTC or TFC using assumptions more limiting than those used in planning of operations for the studied time period for more than 15% of all ATC Paths or Flowgates or more than 3 ATC Paths or Flowgates (whichever is greater).
R7	The Transmission Service Provider determined ATC or AFC using assumptions more limiting than those used in planning of operations for the studied time period for more than zero ATC Paths or Flowgates, but not more	The Transmission Service Provider determined ATC or AFC using assumptions more limiting than those used in planning of operations for the studied time period for more than 5% of all ATC Paths or Flowgates or 1 ATC Path	The Transmission Service Provider determined ATC or AFC using assumptions more limiting than those used in planning of operations for the studied time period for more than 10%, of all ATC Paths or Flowgates or 2 ATC	The Transmission Service Provider determined ATC or AFC using assumptions more limiting than those used in planning of operations for the studied time period for more than 15% of all ATC Paths or Flowgates or more

R #	Lower VSL	Moderate VSL	High VSL	Severe VSL
	than 5% of all ATC Paths or Flowgates or 1 ATC Path or Flowgate (whichever is greater).	or Flowgate (whichever is greater), but not more than 10% of all ATC Paths or Flowgates or 2 ATC Paths or Flowgates (whichever is greater).	Path or Flowgate (whichever is greater), but not more than 15% of all ATC Paths or Flowgates or 3 ATC Paths or Flowgates (whichever is greater).	than 3 ATC Paths or Flowgates (whichever is greater).
R8.	One or more of the following: ▪ For Hourly, the values described in the ATC equation changed and the Transmission Service provider did not calculate for one or more hours but not more than 15 hours, and was in excess of the 175-hour per year requirement. ▪ For Daily, the values described in the ATC equation changed and the Transmission Service provider did not calculate for one or more calendar days but not more than 3 calendar days. ▪ For Monthly, the values described in the ATC equation changed and the Transmission Service provider did not calculate for seven or more calendar days, but less than 14 calendar days.	One or more of the following: ▪ For Hourly, the values described in the ATC equation changed and the Transmission Service provider did not calculate for more than 15 hours but not more than 20 hours, and was in excess of the 175-hour per year requirement. ▪ For Daily, the values described in the ATC equation changed and the Transmission Service provider did not calculate for more than 3 calendar days but not more than 4 calendar days. ▪ For Monthly, the values described in the ATC equation changed and the Transmission Service provider did not calculate for 14 or more calendar days, but less than 21 calendar days.	One or more of the following: ▪ For Hourly, the values described in the ATC equation changed and the Transmission Service provider did not calculate for more than 20 hours but not more than 25 hours, and was in excess of the 175-hour per year requirement. For Daily, the values described in the ATC equation changed and the Transmission Service provider did not calculate for more than 4 calendar days but not more than 5 calendar days. ▪ For Monthly, the values described in the ATC equation changed and the Transmission Service provider did not calculate for 21 or more calendar days, but less than 28 calendar days.	One or more of the following: ▪ For Hourly, the values described in the ATC equation changed and the Transmission Service provider did not calculate for more than 25 hours, and was in excess of the 175-hour per year requirement. ▪ For Daily, the values described in the ATC equation changed and the Transmission Service provider did not calculate for more than 5 calendar days. ▪ For Monthly, the values described in the ATC equation changed and the Transmission Service provider did not calculate for 28 or more calendar days.

R #	Lower VSL	Moderate VSL	High VSL	Severe VSL
R9	N/A	The Transmission Service Provider made the requested data items specified in R9 available to the requesting entities specified within the requirement, per the schedule specified in the request, subject to the limitations specified in R9, available more than 30 calendar days but less than 45 calendar days after receiving a request.	The Transmission Service Provider made the requested data items specified in R9 available to the requesting entities specified within the requirement, per the schedule specified in the request, subject to the limitations specified in R9, available 45 calendar days or more but less than 60 calendar days after receiving a request.	The Transmission Service Provider did not make the requested data items specified in R9 available to the requesting entities specified within the requirement, per the schedule specified in the request, subject to the limitations specified in R9, available for 60 calendar days or more after receiving a request.

Version History

Version	Date	Action	Change Tracking
1a	November 5, 2009	Added Appendix 1 – Interpretation of R2, R8, approved by BOT on November 5, 2009	Addition

Appendix 1

Requirement Number and Text of Requirement
MOD-001-01 Requirement R2: **R2.** Each Transmission Service Provider shall calculate ATC or AFC values as listed below using the methodology or methodologies selected by its Transmission Operator(s): **R2.1.** Hourly values for at least the next 48 hours. **R2.2.** Daily values for at least the next 31 calendar days. **R2.3.** Monthly values for at least the next 12 months (months 2-13). **MOD-001-01 Requirement R8:** **R8.** Each Transmission Service Provider that calculates ATC shall recalculate ATC at a minimum on the following frequency, unless none of the calculated values identified in the ATC equation have changed: **R8.1.** Hourly values, once per hour. Transmission Service Providers are allowed up to 175 hours per calendar year during which calculations are not required to be performed, despite a change in a calculated value identified in the ATC equation. **R8.2.** Daily values, once per day. **R8.3.** Monthly values, once per week.
Question #1
Is the "advisory ATC" used under the NYISO tariff subject to the ATC calculation and recalculation requirements in MOD-001-1 Requirements R2 and R8? If not, is it necessary to document the frequency of "advisory" calculations in the responsible entity's Available Transfer Capability Implementation Document?
Response to Question #1
Requirements R2 and R8 of MOD-001-1 are both related to Requirement R1, which defines that ATC methodologies are to be applied to specific "ATC Paths." The NERC definition of ATC Path is "Any combination of Point of Receipt and Point of Delivery for which ATC is calculated; and any Posted Path." Based on a review of the language included in this request, the NYISO Open Access Transmission Tariff, and other information posted on the NYISO Web site, it appears that the NYISO does indeed have multiple ATC Paths, which are subject to the calculation and recalculation requirements in Requirements R2 and R8. It appears from reviewing this information that ATC is defined in the NYISO tariff in the same manner in which NERC defines it, making it difficult to conclude that NYISO's "advisory ATC" is not the same as ATC. In addition, it appears that pre-scheduling is permitted on certain external paths, making the calculation of ATC prior to day ahead necessary on those paths. The second part of NYISO's question is only applicable if the first part was answered in the

negative and therefore will not be addressed.

Requirement Number and Text of Requirement

MOD-029-01 Requirements R5 and R6:

R5. When calculating ETC for firm Existing Transmission Commitments (ETC_F) for a specified period for an ATC Path, the Transmission Service Provider shall use the algorithm below:

$$ETC_F = NL_F + NITS_F + GF_F + PTP_F + ROR_F + OS_F$$

Where:

NL_F is the firm capacity set aside to serve peak Native Load forecast commitments for the time period being calculated, to include losses, and Native Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

$NITS_F$ is the firm capacity reserved for Network Integration Transmission Service serving Load, to include losses, and Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

GF_F is the firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

PTP_F is the firm capacity reserved for confirmed Point-to-Point Transmission Service.

ROR_F is the firm capacity reserved for Roll-over rights for contracts granting Transmission Customers the right of first refusal to take or continue to take Transmission Service when the Transmission Customer's Transmission Service contract expires or is eligible for renewal.

OS_F is the firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using Firm Transmission Service as specified in the ATCID.

R6. When calculating ETC for non-firm Existing Transmission Commitments (ETC_{NF}) for all time horizons for an ATC Path the Transmission Service Provider shall use the following algorithm:

$$ETC_{NF} = NITS_{NF} + GF_{NF} + PTP_{NF} + OS_{NF}$$

Where:

$NITS_{NF}$ is the non-firm capacity set aside for Network Integration Transmission Service serving Load (i.e., secondary service), to include losses, and load growth not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

GF_{NF} is the non-firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the

effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

PTP_{NF} is non-firm capacity reserved for confirmed Point-to-Point Transmission Service.

OS_{NF} is the non-firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using non-firm transmission service as specified in the ATCID.

Question #2

Could OS_F in MOD-029-1 Requirement R5 and OS_{NF} in MOD-029-1 Requirement R6 be calculated using Transmission Flow Utilization in the determination of ATC?

Response to Question #2

This request for interpretation and the NYISO Open Access Transmission Tariff describe the NYISO's concept of "Transmission Flow Utilization;" however, it is unclear whether or not Native Load, Point-to-Point Transmission Service, Network Integration Transmission Service, or any of the other components explicitly defined in Requirements R5 and R6 are incorporated into "Transmission Flow Utilization." Provided that "Transmission Flow Utilization" does not include Native Load, Point-to-Point Transmission Service, Network Integration Transmission Service, or any of the other components explicitly defined in Requirements R5 and R6, it is appropriate to be included within the "Other Services" term. However, if "Transmission Flow Utilization" does incorporate those components, then simply including "Transmission Flow Utilization" in "Other Service" would be inappropriate.

A. Introduction

1. Title: **Rated System Path Methodology**

2. Number: **MOD-029-1a**

3. Purpose: To increase consistency and reliability in the development and documentation of transfer capability calculations for short-term use performed by entities using the Rated System Path Methodology to support analysis and system operations.

4. Applicability:

4.1. Each Transmission Operator that uses the Rated System Path Methodology to calculate Total Transfer Capabilities (TTCs) for ATC Paths.

4.2. Each Transmission Service Provider that uses the Rated System Path Methodology to calculate Available Transfer Capabilities (ATCs) for ATC Paths.

5. Proposed Effective Date: Immediately after approval of applicable regulatory authorities.

B. Requirements

R1. When calculating TTCs for ATC Paths, the Transmission Operator shall use a Transmission model which satisfies the following requirements: [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]

R1.1. The model utilizes data and assumptions consistent with the time period being studied and that meets the following criteria:

R1.1.1. Includes at least:

R1.1.1.1. The Transmission Operator area. Equivalent representation of radial lines and facilities 161kV or below is allowed.

R1.1.1.2. All Transmission Operator areas contiguous with its own Transmission Operator area. (Equivalent representation is allowed.)

R1.1.1.3. Any other Transmission Operator area linked to the Transmission Operator's area by joint operating agreement. (Equivalent representation is allowed.)

R1.1.2. Models all system Elements as in-service for the assumed initial conditions.

R1.1.3. Models all generation (may be either a single generator or multiple generators) that is greater than 20 MVA at the point of interconnection in the studied area.

R1.1.4. Models phase shifters in non-regulating mode, unless otherwise specified in the Available Transfer Capability Implementation Document (ATCID).

R1.1.5. Uses Load forecast by Balancing Authority.

R1.1.6. Uses Transmission Facility additions and retirements.

R1.1.7. Uses Generation Facility additions and retirements.

R1.1.8. Uses Special Protection System (SPS) models where currently existing or projected for implementation within the studied time horizon.

R1.1.9. Models series compensation for each line at the expected operating level unless specified otherwise in the ATCID.

R1.1.10. Includes any other modeling requirements or criteria specified in the ATCID.

R1.2. Uses Facility Ratings as provided by the Transmission Owner and Generator Owner

R2. The Transmission Operator shall use the following process to determine TTC: [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]

R2.1. Except where otherwise specified within MOD-029-1, adjust base case generation and Load levels within the updated power flow model to determine the TTC (maximum flow or reliability limit) that can be simulated on the ATC Path while at the same time satisfying all planning criteria contingencies as follows:

R2.1.1. When modeling normal conditions, all Transmission Elements will be modeled at or below 100% of their continuous rating.

R2.1.2. When modeling contingencies the system shall demonstrate transient, dynamic and voltage stability, with no Transmission Element modeled above its Emergency Rating.

R2.1.3. Uncontrolled separation shall not occur.

R2.2. Where it is impossible to actually simulate a reliability-limited flow in a direction counter to prevailing flows (on an alternating current Transmission line), set the TTC for the non-prevailing direction equal to the TTC in the prevailing direction. If the TTC in the prevailing flow direction is dependant on a Special Protection System (SPS), set the TTC for the non-prevailing flow direction equal to the greater of the maximum flow that can be simulated in the non-prevailing flow direction or the maximum TTC that can be achieved in the prevailing flow direction without use of a SPS.

R2.3. For an ATC Path whose capacity is limited by contract, set TTC on the ATC Path at the lesser of the maximum allowable contract capacity or the reliability limit as determined by R2.1.

R2.4. For an ATC Path whose TTC varies due to simultaneous interaction with one or more other paths, develop a nomogram describing the interaction of the paths and the resulting TTC under specified conditions.

R2.5. The Transmission Operator shall identify when the TTC for the ATC Path being studied has an adverse impact on the TTC value of any existing path. Do this by modeling the flow on the path being studied at its proposed new TTC level simultaneous with the flow on the existing path at its TTC level

while at the same time honoring the reliability criteria outlined in R2.1. The Transmission Operator shall include the resolution of this adverse impact in its study report for the ATC Path.

R2.6. Where multiple ownership of Transmission rights exists on an ATC Path, allocate TTC of that ATC Path in accordance with the contractual agreement made by the multiple owners of that ATC Path.

R2.7. For ATC Paths whose path rating, adjusted for seasonal variance, was established, known and used in operation since January 1, 1994, and no action has been taken to have the path rated using a different method, set the TTC at that previously established amount.

R2.8. Create a study report that describes the steps above that were undertaken (R2.1 – R2.7), including the contingencies and assumptions used, when determining the TTC and the results of the study. Where three phase fault damping is used to determine stability limits, that report shall also identify the percent used and include justification for use unless specified otherwise in the ATCID.

R3. Each Transmission Operator shall establish the TTC at the lesser of the value calculated in R2 or any System Operating Limit (SOL) for that ATC Path. [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]

R4. Within seven calendar days of the finalization of the study report, the Transmission Operator shall make available to the Transmission Service Provider of the ATC Path, the most current value for TTC and the TTC study report documenting the assumptions used and steps taken in determining the current value for TTC for that ATC Path. [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]

R5. When calculating ETC for firm Existing Transmission Commitments (ETC_F) for a specified period for an ATC Path, the Transmission Service Provider shall use the algorithm below: [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]

$$ETC_F = NL_F + NITS_F + GF_F + PTP_F + ROR_F + OS_F$$

Where:

NL_F is the firm capacity set aside to serve peak Native Load forecast commitments for the time period being calculated, to include losses, and Native Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

$NITS_F$ is the firm capacity reserved for Network Integration Transmission Service serving Load, to include losses, and Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

GF_F is the firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

PTP_F is the firm capacity reserved for confirmed Point-to-Point Transmission Service.

ROR_F is the firm capacity reserved for Roll-over rights for contracts granting Transmission Customers the right of first refusal to take or continue to take Transmission Service when the Transmission Customer's Transmission Service contract expires or is eligible for renewal.

OS_F is the firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using Firm Transmission Service as specified in the ATCID.

R6. When calculating ETC for non-firm Existing Transmission Commitments (ETC_{NF}) for all time horizons for an ATC Path the Transmission Service Provider shall use the following algorithm: [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]

$$ETC_{NF} = NITS_{NF} + GF_{NF} + PTP_{NF} + OS_{NF}$$

Where:

$NITS_{NF}$ is the non-firm capacity set aside for Network Integration Transmission Service serving Load (i.e., secondary service), to include losses, and load growth not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

GF_{NF} is the non-firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

PTP_{NF} is non-firm capacity reserved for confirmed Point-to-Point Transmission Service.

OS_{NF} is the non-firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using non-firm transmission service as specified in the ATCID.

R7. When calculating firm ATC for an ATC Path for a specified period, the Transmission Service Provider shall use the following algorithm: [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]

$$ATC_F = TTC – ETC_F – CBM – TRM + Postbacks_F + counterflows_F$$

Where

ATC_F is the firm Available Transfer Capability for the ATC Path for that period.

TTC is the Total Transfer Capability of the ATC Path for that period.

ETC_F is the sum of existing firm commitments for the ATC Path during that period.

CBM is the Capacity Benefit Margin for the ATC Path during that period.

TRM is the Transmission Reliability Margin for the ATC Path during that period.

$Postbacks_F$ are changes to firm Available Transfer Capability due to a change in the use of Transmission Service for that period, as defined in Business Practices.

counterflows$_F$ are adjustments to firm Available Transfer Capability as determined by the Transmission Service Provider and specified in their ATCID.

R8. When calculating non-firm ATC for an ATC Path for a specified period, the Transmission Service Provider shall use the following algorithm: [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]

$$ATC_{NF} = TTC - ETC_F - ETC_{NF} - CBM_S - TRM_U + Postbacks_{NF} + counterflows_{NF}$$

Where:

ATC$_{NF}$ is the non-firm Available Transfer Capability for the ATC Path for that period.

TTC is the Total Transfer Capability of the ATC Path for that period.

ETC$_F$ is the sum of existing firm commitments for the ATC Path during that period.

ETC$_{NF}$ is the sum of existing non-firm commitments for the ATC Path during that period.

CBM$_S$ is the Capacity Benefit Margin for the ATC Path that has been scheduled during that period.

TRM$_U$ is the Transmission Reliability Margin for the ATC Path that has not been released for sale (unreleased) as non-firm capacity by the Transmission Service Provider during that period.

Postbacks$_{NF}$ are changes to non-firm Available Transfer Capability due to a change in the use of Transmission Service for that period, as defined in Business Practices.

counterflows$_{NF}$ are adjustments to non-firm Available Transfer Capability as determined by the Transmission Service Provider and specified in its ATCID.

C. Measures

M1. Each Transmission Operator that uses the Rated System Path Methodology shall produce any Transmission model it used to calculate TTC for purposes of calculating ATC for each ATC Path, as required in R1, for the time horizon(s) to be examined. (R1)

M1.1. Production shall be in the same form and format used by the Transmission Operator to calculate the TTC, as required in R1. (R1)

M1.2. The Transmission model produced must include the areas listed in R1.1.1 (or an equivalent representation, as described in the requirement) (R1.1)

M1.3. The Transmission model produced must show the use of the modeling parameters stated in R1.1.2 through R1.1.10; except that, no evidence shall be required to prove: 1) utilization of a Special Protection System where none was included in the model or 2) that no additions or retirements to the generation or Transmission system occurred. (R1.1.2 through R1.1.10)

M1.4. The Transmission Operator must provide evidence that the models used to determine TTC included Facility Ratings as provided by the Transmission Owner and Generator Owner. (R1.2)

M2. Each Transmission Operator that uses the Rated System Path Methodology shall produce the ATCID it uses to show where it has described and used additional modeling criteria in its ACTID that are not otherwise included in MOD-29 (R1.1.4, R.1.1.9, and R1.1.10).

M3. Each Transmission Operator that uses the Rated System Path Methodology with paths with ratings established prior to January 1, 1994 shall provide evidence the path and its rating were established prior to January 1, 1994. (R2.7)

M4. Each Transmission Operator that uses the Rated System Path Methodology shall produce as evidence the study reports, as required in R.2.8, for each path for which it determined TTC for the period examined. (R2)

M5. Each Transmission Operator shall provide evidence that it used the lesser of the calculated TTC or the SOL as the TTC, by producing: 1) all values calculated pursuant to R2 for each ATC Path, 2) Any corresponding SOLs for those ATC Paths, and 3) the TTC set by the Transmission Operator and given to the Transmission Service Provider for use in R7and R8 for each ATC Path. (R3)

M6. Each Transmission Operator shall provide evidence (such as logs or data) that it provided the TTC and its study report to the Transmission Service Provider within seven calendar days of the finalization of the study report. (R4)

M7. The Transmission Service Provider shall demonstrate compliance with R5 by recalculating firm ETC for any specific time period as described in (MOD-001 R2), using the algorithm defined in R5 and with data used to calculate the specified value for the designated time period. The data used must meet the requirements specified in MOD-029-1 and the ATCID. To account for differences that may occur when recalculating the value (due to mixing automated and manual processes), any recalculated value that is within +/- 15% or 15 MW, whichever is greater, of the

originally calculated value, is evidence that the Transmission Service Provider used the algorithm in R5 to calculate its firm ETC. (R5)

M8. The Transmission Service Provider shall demonstrate compliance with R5 by recalculating non-firm ETC for any specific time period as described in (MOD-001 R2), using the algorithm defined in R6 and with data used to calculate this specified value for the designated time period. The data used must meet the requirements specified in the MOD-029 and the ATCID. To account for differences that may occur when recalculating the value (due to mixing automated and manual processes), any recalculated value that is within +/- 15% or 15 MW, whichever is greater, of the originally calculated value, is evidence that the Transmission Service Provider used the algorithm in R6 to calculate its non-firm ETC. (R6)

M9. Each Transmission Service Provider shall produce the supporting documentation for the processes used to implement the algorithm that calculates firm ATCs, as required in R7. Such documentation must show that only the variables allowed in R7 were used to calculate firm ATCs, and that the processes use the current values for the variables as determined in the requirements or definitions. Note that any variable may legitimately be zero if the value is not applicable or calculated to be zero (such as counterflows, TRM, CBM, etc…). The supporting documentation may be provided in the same form and format as stored by the Transmission Service Provider. (R7)

M10. Each Transmission Service Provider shall produce the supporting documentation for the processes used to implement the algorithm that calculates non-firm ATCs, as required in R8. Such documentation must show that only the variables allowed in R8 were used to calculate non-firm ATCs, and that the processes use the current values for the variables as determined in the requirements or definitions. Note that any variable may legitimately be zero if the value is not applicable or calculated to be zero (such as counterflows, TRM, CBM, etc…). The supporting documentation may be provided in the same form and format as stored by the Transmission Service Provider. (R8)

D. Compliance

1. Compliance Monitoring Process

1.1. Compliance Enforcement Authority

Regional Entity.

1.2. Compliance Monitoring Period and Reset Time Frame

Not applicable.

1.3. Data Retention

- The Transmission Operator and Transmission Service Provider shall keep data or evidence to show compliance as identified below unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation:
- The Transmission Operator shall have its latest models used to determine TTC for R1. (M1)

- The Transmission Operator shall have the current, in force ATCID(s) provided by its Transmission Service Provider(s) and any prior versions of the ATCID that were in force since the last compliance audit to show compliance with R1. (M2)
- The Transmission Operator shall retain evidence of any path and its rating that was established prior to January 1, 1994. (M3)
- The Transmission Operator shall retain the latest version and prior version of the TTC study reports to show compliance with R2. (M4)
- The Transmission Operator shall retain evidence for the most recent three calendar years plus the current year to show compliance with R3 and R4. (M5 and M6)
- The Transmission Service Provider shall retain evidence to show compliance in calculating hourly values required in R5 and R6 for the most recent 14 days; evidence to show compliance in calculating daily values required in R5 and R6 for the most recent 30 days; and evidence to show compliance in calculating daily values required in R5 and R6 for the most recent sixty days. (M7 and M8)
- The Transmission Service Provider shall retain evidence for the most recent three calendar years plus the current year to show compliance with R7 and R8. (M9 and M10)
- If a Transmission Service Provider or Transmission Operator is found non-compliant, it shall keep information related to the non-compliance until found compliant.

  The Compliance Enforcement Authority shall keep the last audit records and all requested and submitted subsequent audit records.

1.4. Compliance Monitoring and Enforcement Processes:

The following processes may be used:

- Compliance Audits
- Self-Certifications
- Spot Checking
- Compliance Violation Investigations
- Self-Reporting
- Complaints

1.5. Additional Compliance Information

None.

2. Violation Severity Levels

R #	Lower VSL	Moderate VSL	High VSL	Severe VSL
R1.	The Transmission Operator used a model that met all but one of the modeling requirements specified in R1.1. **OR** The Transmission Operator utilized one to ten Facility Ratings that were different from those specified by a Transmission Owner or Generation Owner in their Transmission model. (R1.2)	The Transmission Operator used a model that met all but two of the modeling requirements specified in R1.1. **OR** The Transmission Operator utilized eleven to twenty Facility Ratings that were different from those specified by a Transmission Owner or Generation Owner in their Transmission model. (R1.2)	The Transmission Operator used a model that met all but three of the modeling requirements specified in R1.1. **OR** The Transmission Operator utilized twenty-one to thirty Facility Ratings that were different from those specified by a Transmission Owner or Generation Owner in their Transmission model. (R1.2)	The Transmission Operator used a model that did not meet four or more of the modeling requirements specified in R1.1. **OR** The Transmission Operator utilized more than thirty Facility Ratings that were different from those specified by a Transmission Owner or Generation Owner in their Transmission model. (R1.2)
R2	One or both of the following: • The Transmission Operator did not calculate TTC using one of the items in sub-requirements R2.1-R2.6. • The Transmission Operator does not include one required item in the study report required in R2.8.	One or both of the following: • The Transmission Operator did not calculate TTC using two of the items in sub-requirements R2.1-R2.6. • The Transmission Operator does not include two required items in the study report required in R2.8.	One or both of the following: • The Transmission Operator did not calculate TTC using three of the items in sub-requirements R2.1-R2.6. • The Transmission Operator does not include three required items in the study report required in R2.8.	One or more of the following: • The Transmission Operator did not calculate TTC using four or more of the items in sub-requirements R2.1-R2.6. • The Transmission Operator did not apply R2.7. • The Transmission Operator does not include four or more required items in the study report required in R2.8

R #	Lower VSL	Moderate VSL	High VSL	Severe VSL
R3.	The Transmission Operator did not specify the TTC as the lesser of the TTC calculated using the process described in R2 or any associated SOL for more than zero ATC Paths, BUT, not more than 1% of all ATC Paths or 1 ATC Path (whichever is greater).	The Transmission Operator did not specify the TTC as the lesser of the TTC calculated using the process described in R2 or any associated SOL for more than 1% of all ATC Paths or 1 ATC Path (whichever is greater), BUT not more than 2% of all ATC Paths or 2 ATC Paths (whichever is greater).	The Transmission Operator did not specify the TTC as the lesser of the TTC calculated using the process described in R2 or any associated SOL for more than 2% of all ATC Paths or 2 ATC Paths (whichever is greater), BUT not more than 5% of all ATC Paths or 3 ATC Paths (whichever is greater).	The Transmission Operator did not specify the TTC as the lesser of the TTC calculated using the process described in R2 or any associated SOL, for more than 5% of all ATC Paths or 3 ATC Paths (whichever is greater).
R4.	The Transmission Operator provided the TTC and study report to the Transmission Service Provider more than seven, but not more than 14 calendar days after the report was finalized.	The Transmission Operator provided the TTC and study report to the Transmission Service Provider more than 14, but not more than 21 calendar days after the report was finalized.	The Transmission Operator provided the TTC and study report to the Transmission Service Provider more than 21, but not more than 28 calendar days after the report was finalized.	The Transmission Operator provided the TTC and study report to the Transmission Service Provider more than 28 calendar days after the report was finalized.
R5.	For a specified period, the Transmission Service Provider calculated a firm ETC with an absolute value different than that calculated in M7 for the same period, and the absolute value difference was more than 15% of the value calculated in the measure or 15MW, whichever is greater, but not more than 25% of the value calculated in the measure or 25MW, whichever is greater.	For a specified period, the Transmission Service Provider calculated a firm ETC with an absolute value different than that calculated in M7 for the same period, and the absolute value difference was more than 25% of the value calculated in the measure or 25MW, whichever is greater, but not more than 35% of the value calculated in the measure or 35MW, whichever is greater.	For a specified period, the Transmission Service Provider calculated a firm ETC with an absolute value different than that calculated in M7 for the same period, and the absolute value difference was more than 35% of the value calculated in the measure or 35MW, whichever is greater, but not more than 45% of the value calculated in the measure or 45MW, whichever is greater.	For a specified period, the Transmission Service Provider calculated a firm ETC with an absolute value different than that calculated in M7 for the same period, and the absolute value difference was more than 45% of the value calculated in the measure or 45MW, whichever is greater.
R6.	For a specified period, the Transmission Service Provider calculated a non-firm ETC with an absolute value different than that calculated in M8 for the same period, and the absolute	For a specified period, the Transmission Service Provider calculated a non-firm ETC with an absolute value different than that calculated in M8 for the same period, and the absolute	For a specified period, the Transmission Service Provider calculated a non-firm ETC with an absolute value different than that calculated in M8 for the same period, and the absolute	For a specified period, the Transmission Service Provider calculated a non-firm ETC with an absolute value different than that calculated in M8 for the same period, and the

R #	Lower VSL	Moderate VSL	High VSL	Severe VSL
	value difference was more than 15% of the value calculated in the measure or 15MW, whichever is greater, but not more than 25% of the value calculated in the measure or 25MW, whichever is greater.	value difference was more than 25% of the value calculated in the measure or 25MW, whichever is greater, but not more than 35% of the value calculated in the measure or 35MW, whichever is greater.	value difference was more than 35% of the value calculated in the measure or 35MW, whichever is greater, but not more than 45% of the value calculated in the measure or 45MW, whichever is greater.	absolute value difference was more than 45% of the value calculated in the measure or 45MW, whichever is greater.
R7.	The Transmission Service Provider did not use all the elements defined in R7 when determining firm ATC, or used additional elements, for more than zero ATC Paths, but not more than 5% of all ATC Paths or 1 ATC Path (whichever is greater).	The Transmission Service Provider did not use all the elements defined in R7 when determining firm ATC, or used additional elements, for more than 5% of all ATC Paths or 1 ATC Path (whichever is greater), but not more than 10% of all ATC Paths or 2 ATC Paths (whichever is greater).	The Transmission Service Provider did not use all the elements defined in R7 when determining firm ATC, or used additional elements, for more than 10% of all ATC Paths or 2 ATC Paths (whichever is greater), but not more than 15% of all ATC Paths or 3 ATC Paths (whichever is greater).	The Transmission Service Provider did not use all the elements defined in R7 when determining firm ATC, or used additional elements, for more than 15% of all ATC Paths or more than 3 ATC Paths (whichever is greater).
R8.	The Transmission Service Provider did not use all the elements defined in R8 when determining non-firm ATC, or used additional elements, for more than zero ATC Paths, but not more than 5% of all ATC Paths or 1 ATC Path (whichever is greater).	The Transmission Service Provider did not use all the elements defined in R8 when determining non-firm ATC, or used additional elements, for more than 5% of all ATC Paths or 1 ATC Path (whichever is greater), but not more than 10% of all ATC Paths or 2 ATC Paths (whichever is greater).	The Transmission Service Provider did not use all the elements defined in R8 when determining non-firm ATC, or used additional elements, for more than 10% of all ATC Paths or 2 ATC Paths (whichever is greater), but not more than 15% of all ATC Paths or 3 ATC Paths (whichever is greater).	The Transmission Service Provider did not use all the elements defined in R8 when determining non-firm ATC, or used additional elements, for more than 15% of all ATC Paths or more than 3 ATC Paths (whichever is greater).

Version History

Version	Date	Action	Change Tracking
1a	November 5, 2009	Added Appendix 1 – Interpretation of R5, R6, approved by BOT on November 5, 2009	Addition

Appendix 1

Requirement Number and Text of Requirement
MOD-001-01 Requirement R2: **R2.** Each Transmission Service Provider shall calculate ATC or AFC values as listed below using the methodology or methodologies selected by its Transmission Operator(s): **R2.1.** Hourly values for at least the next 48 hours. **R2.2.** Daily values for at least the next 31 calendar days. **R2.3.** Monthly values for at least the next 12 months (months 2-13). **MOD-001-01 Requirement R8:** **R8.** Each Transmission Service Provider that calculates ATC shall recalculate ATC at a minimum on the following frequency, unless none of the calculated values identified in the ATC equation have changed: **R8.1.** Hourly values, once per hour. Transmission Service Providers are allowed up to 175 hours per calendar year during which calculations are not required to be performed, despite a change in a calculated value identified in the ATC equation. **R8.2.** Daily values, once per day. **R8.3.** Monthly values, once per week.
Question #1
Is the "advisory ATC" used under the NYISO tariff subject to the ATC calculation and recalculation requirements in MOD-001-1 Requirements R2 and R8? If not, is it necessary to document the frequency of "advisory" calculations in the responsible entity's Available Transfer Capability Implementation Document?
Response to Question #1
Requirements R2 and R8 of MOD-001-1 are both related to Requirement R1, which defines that ATC methodologies are to be applied to specific "ATC Paths." The NERC definition of ATC Path is "Any combination of Point of Receipt and Point of Delivery for which ATC is calculated; and any Posted Path." Based on a review of the language included in this request, the NYISO Open Access Transmission Tariff, and other information posted on the NYISO Web site, it appears that the NYISO does indeed have multiple ATC Paths, which are subject to the calculation and recalculation requirements in Requirements R2 and R8. It appears from reviewing this information that ATC is defined in the NYISO tariff in the same manner in which NERC defines it, making it difficult to conclude that NYISO's "advisory ATC" is not the same as ATC. In addition, it appears that pre-scheduling is permitted on certain external paths, making the calculation of ATC prior to day ahead necessary on those paths. The second part of NYISO's question is only applicable if the first part was answered in the

negative and therefore will not be addressed.

Requirement Number and Text of Requirement

MOD-029-01 Requirements R5 and R6:

R5. When calculating ETC for firm Existing Transmission Commitments (ETC_F) for a specified period for an ATC Path, the Transmission Service Provider shall use the algorithm below:

$$ETC_F = NL_F + NITS_F + GF_F + PTP_F + ROR_F + OS_F$$

Where:

NL_F is the firm capacity set aside to serve peak Native Load forecast commitments for the time period being calculated, to include losses, and Native Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

$NITS_F$ is the firm capacity reserved for Network Integration Transmission Service serving Load, to include losses, and Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

GF_F is the firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

PTP_F is the firm capacity reserved for confirmed Point-to-Point Transmission Service.

ROR_F is the firm capacity reserved for Roll-over rights for contracts granting Transmission Customers the right of first refusal to take or continue to take Transmission Service when the Transmission Customer's Transmission Service contract expires or is eligible for renewal.

OS_F is the firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using Firm Transmission Service as specified in the ATCID.

R6. When calculating ETC for non-firm Existing Transmission Commitments (ETC_{NF}) for all time horizons for an ATC Path the Transmission Service Provider shall use the following algorithm:

$$ETC_{NF} = NITS_{NF} + GF_{NF} + PTP_{NF} + OS_{NF}$$

Where:

$NITS_{NF}$ is the non-firm capacity set aside for Network Integration Transmission Service serving Load (i.e., secondary service), to include losses, and load growth not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

GF_{NF} is the non-firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the

effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

PTP_{NF} is non-firm capacity reserved for confirmed Point-to-Point Transmission Service.

OS_{NF} is the non-firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using non-firm transmission service as specified in the ATCID.

Question #2

Could OS_F in MOD-029-1 Requirement R5 and OS_{NF} in MOD-029-1 Requirement R6 be calculated using Transmission Flow Utilization in the determination of ATC?

Response to Question #2

This request for interpretation and the NYISO Open Access Transmission Tariff describe the NYISO's concept of "Transmission Flow Utilization;" however, it is unclear whether or not Native Load, Point-to-Point Transmission Service, Network Integration Transmission Service, or any of the other components explicitly defined in Requirements R5 and R6 are incorporated into "Transmission Flow Utilization." Provided that "Transmission Flow Utilization" does not include Native Load, Point-to-Point Transmission Service, Network Integration Transmission Service, or any of the other components explicitly defined in Requirements R5 and R6, it is appropriate to be included within the "Other Services" term. However, if "Transmission Flow Utilization" does incorporate those components, then simply including "Transmission Flow Utilization" in "Other Service" would be inappropriate.

Exhibit C

Complete Record of Development of the Interpretations for Reliability Standards MOD 001-1 Requirements R2 and R8 and MOD-029-1 Requirements R5 and R6

Project 2009-15

Interpretation – MOD-001-1 – Available Transmission System Capability and MOD-029-1 – Rated System Path Methodology by NYISO

Status:
The interpretation of MOD-001-1 — Available Transmission System Capability, Requirements R2 and R8, and MOD-029-1 — Rated System Path Methodology, Requirements R5 and R6, for the New York Independent System Operator was approved by the NERC Board of Trustees on November 5, 2009 and will be submitted to FERC for approval.

Background:
The request asks the following questions: Is the "advisory ATC" used under the NYISO tariff subject to the ATC calculation and recalculation requirements in MOD-001-1 Requirements R2 and R8? If not, is it necessary to document the frequency of "advisory" calculations in the responsible entity's Available Transfer Capability Implementation Document?

Could OSF in MOD-029-1 Requirement R5 and OSNF in MOD-029-1 Requirement R6 be calculated using Transmission Flow Utilization in the determination of ATC?

Interpretation Process:
In accordance with the Reliability Standards Development Procedure, the interpretation must be posted for a 30-day pre-ballot review, and then balloted. There is no public comment period for an interpretation. Balloting will be conducted following the same method used for balloting standards. If the interpretation is approved by its ballot pool, then the interpretation will be appended to the standard and will become effective when adopted by the NERC Board of Trustees and approved by the applicable regulatory authorities. The interpretation will remain appended to the standard until the standard is revised through the normal standards development process. When the standard is revised, the clarifications provided by the interpretation will be incorporated into the revised standard.

Draft	Action	Dates	Results	Consideration of Comments
NYISO Interpretation of MOD-001-1, Requirement R2 and R8 and MOD-029-1, Requirement R5 and R6 Interpretation **(2)** Request for Interpretation **(3)**	Recirculation Ballot Info>> **(8)** | Vote>>	07/08/09 - 07/17/09 (closed)	Summary>> **(9)** Full Record>> **(10)**	
	Initial Ballot Info>> **(4)** | Vote>>	05/25/09 - 06/04/09 (closed)	Summary>> **(5)** Full Record>> **(6)**	Consideration of Comments>> **(7)**
	Pre-ballot Window Info>> **(1)** | Join>>	04/23/09 - 05/25/09 (closed)		

NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Standards Announcement

Ballot Pool and Pre-ballot Window
April 23–May 25, 2009

Now available at: https://standards.nerc.net/BallotPool.aspx

Interpretation of MOD-001-1 and MOD-029-1 for the New York Independent System Operator (Project 2009-15)

An interpretation of MOD-001-01 — Available Transmission System Capability, Requirements R2 and R8, and MOD-029-01 — Rated System Path Methodology, Requirements R5 and R6, for the New York Independent System Operator (NYISO) is posted for a 30-day pre-ballot review. Registered Ballot Body members may join the ballot pool to be eligible to vote on this interpretation **until 8 a.m. EDT on May 25, 2009**.

During the pre-ballot window, members of the ballot pool may communicate with one another by using their "ballot pool list server." (Once the balloting begins, ballot pool members are prohibited from using the ballot pool list servers.) The list server for this ballot pool is: bp-2009-15_RFI_NYISO_in.

Project Background

The request asks the following questions:

1. Is the "advisory ATC" used under the NYISO tariff subject to the ATC calculation and recalculation requirements in MOD-001-1 Requirements R2 and R8? If not, is it necessary to document the frequency of "advisory" calculations in the responsible entity's Available Transfer Capability Implementation Document?

2. Could OS_F in MOD-029-1 Requirement R5 and OS_{NF} in MOD-029-1 Requirement R6 be calculated using Transmission Flow Utilization in the determination of ATC?

The request and interpretation can be found on the project page:
http://www.nerc.com/filez/standards/Project2009-15_Interpretation_MOD_NYISO.html

Standards Development Process

The Reliability Standards Development Procedure contains all the procedures governing the standards development process. The success of the NERC standards development process depends on stakeholder participation. We extend our thanks to all those who participate.

For more information or assistance,
please contact Shaun Streeter at shaun.streeter@nerc.net or at 609.452.8060.

NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Note: an Interpretation cannot be used to change a standard.

Request for an Interpretation of a Reliability Standard

Date submitted: February 17, 2009

Contact information for person requesting the interpretation:

Name: Rick Gonzales

Organization: NYISO

Telephone: (518) 356-6116

E-mail: rgonzales@nyiso.com

Identify the standard that needs clarification:

Standard Number and Title:

MOD-001-01 – Available Transmission System Capability

MOD-029-01 – Rated System Path Methodology

Identify specifically what needs clarification:

Requirement Number and Text of Requirement:

MOD-001-01 Requirement R2:

R2. Each Transmission Service Provider shall calculate ATC or AFC values as listed below using the methodology or methodologies selected by its Transmission Operator(s):

R2.1. Hourly values for at least the next 48 hours.

R2.2. Daily values for at least the next 31 calendar days.

R2.3. Monthly values for at least the next 12 months (months 2-13).

MOD-001-01 Requirement R8:

R8. Each Transmission Service Provider that calculates ATC shall recalculate ATC at a minimum on the following frequency, unless none of the calculated values identified in the ATC equation have changed:

R8.1. Hourly values, once per hour. Transmission Service Providers are allowed up to 175 hours per calendar year during which calculations are not required to be performed, despite a change in a calculated value identified in the ATC equation.

R8.2. Daily values, once per day.

R8.3. Monthly values, once per week.

Clarification Needed:
Is the "advisory ATC" used under the NYISO tariff subject to the ATC calculation and recalculation requirements in MOD-001-1 Requirements R2 and R8? If not, is it necessary to document the frequency of "advisory" calculations in the responsible entity's Available Transfer Capability Implementation Document?

Background Information: Available Transfer Capability (ATC) is defined as a measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses. It is defined as Total Transfer Capability less existing transmission commitments (including retail customer service), less a Capacity Benefit Margin, less a Transmission Reliability Margin, plus Postbacks, plus counterflows.

A customer's ability to schedule transactions in the NYISO system is, with the exception of certain external interfaces, not limited by a pre-defined amount of ATC. Therefore, for NYISO, ATC is **not** "a measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses" in New York. Instead, as FERC has recognized, ATC postings in New York are "advisory" projections that are, with the exception of certain postings for external interfaces, calculated after the NYISO markets close, and transactions are scheduled, based on calculations performed by the NYISO's day-ahead and real-time market software. The fact that a posted ATC is zero does not mean that further commercial activity is precluded because the NYISO may redispatch its system to support additional transactions. A posted ATC value of zero simply indicates that there is congestion at a particular NYISO interface. FERC has granted the NYISO a number of waivers from its OASIS posting regulations that reflect these differences.

R2 and R8 under MOD-001 seem to presume that all Transmission Service Providers calculate ATC values for various time intervals further in the future than one-day ahead. This presumption is generally not applicable to NYISO because its FERC-approved market design does not allow customers to schedule transactions, or reserve transmission service, more than one-day ahead (except for certain external interfaces where "pre-scheduling" is allowed.) The NYISO therefore does not calculate ATC for periods further than one day ahead, except to the extent necessary to support "pre-scheduling." In its June 18, 2008 "Consideration of Comments," the ATC SDT noted that the "advisory" form of ATC posted by the NYISO might not actually be "ATC" and that the NYISO may therefore not have any "ATC Paths" for purposes of the ATC MOD standards. The SDT recognized that advance transmission reservations were generally not supported under the NYISO market design and suggested that the NYISO could comply with R2 and R8 by describing its "process, and which components of the ATC equation are zero" in its ATCID.

Requirement Number and Text of Requirement:

MOD-029-01 Requirements R5 and R6:

R5. When calculating ETC for firm Existing Transmission Commitments (ETC_F) for a specified period for an ATC Path, the Transmission Service Provider shall use the algorithm below:

$$ETC_F = NL_F + NITS_F + GF_F + PTP_F + ROR_F + OS_F$$

Where:

NL_F is the firm capacity set aside to serve peak Native Load forecast commitments for the time period being calculated, to include losses, and Native Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

$NITS_F$ is the firm capacity reserved for Network Integration Transmission Service serving Load, to include losses, and Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

GF_F is the firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

PTP_F is the firm capacity reserved for confirmed Point-to-Point Transmission Service.

ROR_F is the firm capacity reserved for Roll-over rights for contracts granting Transmission Customers the right of first refusal to take or continue to take Transmission Service when the Transmission Customer's Transmission Service contract expires or is eligible for renewal.

OS_F is the firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using Firm Transmission Service as specified in the ATCID.

R6. When calculating ETC for non-firm Existing Transmission Commitments (ETC_{NF}) for all time horizons for an ATC Path the Transmission Service Provider shall use the following algorithm:

$$ETC_{NF} = NITS_{NF} + GF_{NF} + PTP_{NF} + OS_{NF}$$

Where:

$NITS_{NF}$ is the non-firm capacity set aside for Network Integration Transmission Service serving Load (i.e., secondary service), to include losses, and load growth not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

GF_{NF} is the non-firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

PTP_{NF} is non-firm capacity reserved for confirmed Point-to-Point Transmission Service.

OS_{NF} is the non-firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using non-firm transmission service as specified in the ATCID.

Clarification Needed:
Could OS_F in MOD-029-1 Requirement R5 and OS_{NF} in MOD-029-1 Requirement R6 be calculated using Transmission Flow Utilization in the determination of ATC?

Transmission Flow Utilization represents the security constrained network powerflow solutions of the NYISO's Security Constrained Unit Commitment software, with respect to the NYISO Day-Ahead Market, or its Real-Time Commitment and Real-Time Dispatch software with respect to the NYISO's Real-Time Market. The NYISO's existing FERC-approved ATC equation, which reflects the nature of the "financial reservation" based form of open access transmission service that it provides, calculates firm and non-firm ATC as follows (the NYISO does not utilize CBM.).

ATC (Firm) = TTC — Transmission Flow Utilization (Firm) — TRM

ATC (Non-Firm) = ATC (Firm) — Transmission Flow Utilization (Non-Firm)

The ATC SDT has indicated that it believes that the OS definitions are broad enough to encompass the NYISO's Transmission Flow Utilization information.

Identify the material impact associated with this interpretation:

The material impact to the NYISO is the risk that an auditor might conclude that its current approach to calculating ATC/TTC was not consistent with NERC's requirements. If an auditor were to reach such a conclusion, the NYISO could be exposed to serious consequences, including sanctions or a requirement to modify its market design and transmission model in ways that would not be desired by its stakeholders, required by FERC, or necessary for any reliability-related purpose.

Project 2009-15: Response to Request for an Interpretation of MOD-001-1 Requirements R2 & R8 and MOD-029-1 Requirements R5 & R6 for New York Independent System Operator

The following interpretation of MOD-001-1 Requirements R2 & R8 and MOD-029-1 Requirements R5 & R6 was developed by the ATC/TTC/CBM/TRM Standards Drafting Team.

Requirement Number and Text of Requirement

MOD-001-01 Requirement R2:

R2. Each Transmission Service Provider shall calculate ATC or AFC values as listed below using the methodology or methodologies selected by its Transmission Operator(s):

R2.1. Hourly values for at least the next 48 hours.

R2.2. Daily values for at least the next 31 calendar days.

R2.3. Monthly values for at least the next 12 months (months 2-13).

MOD-001-01 Requirement R8:

R8. Each Transmission Service Provider that calculates ATC shall recalculate ATC at a minimum on the following frequency, unless none of the calculated values identified in the ATC equation have changed:

R8.1. Hourly values, once per hour. Transmission Service Providers are allowed up to 175 hours per calendar year during which calculations are not required to be performed, despite a change in a calculated value identified in the ATC equation.

R8.2. Daily values, once per day.

R8.3. Monthly values, once per week.

Question #1

Is the "advisory ATC" used under the NYISO tariff subject to the ATC calculation and recalculation requirements in MOD-001-1 Requirements R2 and R8? If not, is it necessary to document the frequency of "advisory" calculations in the responsible entity's Available Transfer Capability Implementation Document?

Response to Question #1

Requirements R2 and R8 of MOD-001-1 are both related to Requirement R1, which defines that ATC methodologies are to be applied to specific "ATC Paths." The NERC definition of ATC Path is "Any combination of Point of Receipt and Point of Delivery for which ATC is calculated; and any Posted Path." Based on a review of the language included in this request, the NYISO Open Access Transmission Tariff, and other information posted on the NYISO Web site, it appears that the NYISO does indeed have multiple ATC Paths, which are subject to the calculation and recalculation requirements in Requirements R2 and R8. It appears from reviewing this information that ATC is defined in the NYISO tariff in the same manner in which NERC defines it, making it difficult to conclude that NYISO's "advisory ATC" is not the same as ATC. In addition, it appears that pre-scheduling is permitted on certain external paths, making the calculation of ATC prior to day ahead necessary on those paths.

The second part of NYISO's question is only applicable if the first part was answered in the negative and therefore will not be addressed.

Requirement Number and Text of Requirement

MOD-029-01 Requirements R5 and R6:

R5. When calculating ETC for firm Existing Transmission Commitments (ETC_F) for a specified period for an ATC Path, the Transmission Service Provider shall use the algorithm below:

$$ETC_F = NL_F + NITS_F + GF_F + PTP_F + ROR_F + OS_F$$

Where:

NL_F is the firm capacity set aside to serve peak Native Load forecast commitments for the time period being calculated, to include losses, and Native Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

$NITS_F$ is the firm capacity reserved for Network Integration Transmission Service serving Load, to include losses, and Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

GF_F is the firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission

Tariff or "safe harbor tariff."

PTP_F is the firm capacity reserved for confirmed Point-to-Point Transmission Service.

ROR_F is the firm capacity reserved for Roll-over rights for contracts granting Transmission Customers the right of first refusal to take or continue to take Transmission Service when the Transmission Customer's Transmission Service contract expires or is eligible for renewal.

OS_F is the firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using Firm Transmission Service as specified in the ATCID.

R6. When calculating ETC for non-firm Existing Transmission Commitments (ETC_{NF}) for all time horizons for an ATC Path the Transmission Service Provider shall use the following algorithm:

$$ETC_{NF} = NITS_{NF} + GF_{NF} + PTP_{NF} + OS_{NF}$$

Where:

$NITS_{NF}$ is the non-firm capacity set aside for Network Integration Transmission Service serving Load (i.e., secondary service), to include losses, and load growth not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

GF_{NF} is the non-firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

PTP_{NF} is non-firm capacity reserved for confirmed Point-to-Point Transmission Service.

OS_{NF} is the non-firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using non-firm transmission service as specified in the ATCID.

Question #2

Could OS_F in MOD-029-1 Requirement R5 and OS_{NF} in MOD-029-1 Requirement R6 be calculated using Transmission Flow Utilization in the determination of ATC?

Response to Question #2

This request for interpretation and the NYISO Open Access Transmission Tariff describe the NYISO's concept of "Transmission Flow Utilization;" however, it is unclear whether or not Native Load, Point-to-Point Transmission Service, Network Integration Transmission Service, or any of the other components explicitly defined in Requirements R5 and R6 are incorporated into "Transmission Flow Utilization." Provided that "Transmission Flow Utilization" does not include Native Load, Point-to-Point Transmission Service, Network Integration Transmission Service, or any of the other components explicitly defined in Requirements R5 and R6, it is appropriate to be included within the "Other Services" term. However, if "Transmission Flow Utilization" does incorporate those components, then simply including "Transmission Flow Utilization" in "Other Service" would be inappropriate.

NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

When completed, email this form to:
maureen.long@nerc.net
For questions about this form or for assistance in completing the form, call Maureen Long at 813-468-5998.

Request for an Interpretation of a Reliability Standard

Date submitted: February 17, 2009

Contact information for person requesting the interpretation:

Name: Rick Gonzales

Organization: NYISO

Telephone: (518) 356-6116

E-mail: rgonzales@nyiso.com

Identify the standard that needs clarification:

Standard Number and Title:

MOD-001-01 – Available Transmission System Capability

MOD-029-01 – Rated System Path Methodology

Identify specifically what needs clarification:

Requirement Number and Text of Requirement:

MOD-001-01 Requirement R2:

R2. Each Transmission Service Provider shall calculate ATC or AFC values as listed below using the methodology or methodologies selected by its Transmission Operator(s):

R2.1. Hourly values for at least the next 48 hours.

R2.2. Daily values for at least the next 31 calendar days.

R2.3. Monthly values for at least the next 12 months (months 2-13).

MOD-001-01 Requirement R8:

R8. Each Transmission Service Provider that calculates ATC shall recalculate ATC at a minimum on the following frequency, unless none of the calculated values identified in the ATC equation have changed:

R8.1. Hourly values, once per hour. Transmission Service Providers are allowed up to 175 hours per calendar year during which calculations are not required to be

performed, despite a change in a calculated value identified in the ATC equation.

R8.2. Daily values, once per day.

R8.3. Monthly values, once per week.

Clarification Needed:

Is the "advisory ATC" used under the NYISO tariff subject to the ATC calculation and recalculation requirements in MOD-001-1 Requirements R2 and R8? If not, is it necessary to document the frequency of "advisory" calculations in the responsible entity's Available Transfer Capability Implementation Document?

Background Information: Available Transfer Capability (ATC) is defined as a measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses. It is defined as Total Transfer Capability less existing transmission commitments (including retail customer service), less a Capacity Benefit Margin, less a Transmission Reliability Margin, plus Postbacks, plus counterflows.

A customer's ability to schedule transactions in the NYISO system is, with the exception of certain external interfaces, not limited by a pre-defined amount of ATC. Therefore, for NYISO, ATC is **not** "a measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses" in New York. Instead, as FERC has recognized, ATC postings in New York are "advisory" projections that are, with the exception of certain postings for external interfaces, calculated after the NYISO markets close, and transactions are scheduled, based on calculations performed by the NYISO's day-ahead and real-time market software. The fact that a posted ATC is zero does not mean that further commercial activity is precluded because the NYISO may redispatch its system to support additional transactions. A posted ATC value of zero simply indicates that there is congestion at a particular NYISO interface. FERC has granted the NYISO a number of waivers from its OASIS posting regulations that reflect these differences.

R2 and R8 under MOD-001 seem to presume that all Transmission Service Providers calculate ATC values for various time intervals further in the future than one-day ahead. This presumption is generally not applicable to NYISO because its FERC-approved market design does not allow customers to schedule transactions, or reserve transmission service, more than one-day ahead (except for certain external interfaces where "pre-scheduling" is allowed.) The NYISO therefore does not calculate ATC for periods further than one day ahead, except to the extent necessary to support "pre-scheduling." In its June 18, 2008 "Consideration of Comments," the ATC SDT noted that the "advisory" form of ATC posted by the NYISO might not actually be "ATC" and that the NYISO may therefore not have any "ATC Paths" for purposes of the ATC MOD standards. The SDT recognized that advance transmission reservations were generally not supported under the NYISO market design and suggested that the NYISO could comply with R2 and R8 by describing its "process, and which components of the ATC equation are zero" in its ATCID.

Requirement Number and Text of Requirement:

MOD-029-01 Requirements R5 and R6:

R5. When calculating ETC for firm Existing Transmission Commitments (ETC_F) for a specified period for an ATC Path, the Transmission Service Provider shall use the

algorithm below:

$ETC_F = NL_F + NITS_F + GF_F + PTP_F + ROR_F + OS_F$

Where:

NL_F is the firm capacity set aside to serve peak Native Load forecast commitments for the time period being calculated, to include losses, and Native Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

$NITS_F$ is the firm capacity reserved for Network Integration Transmission Service serving Load, to include losses, and Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

GF_F is the firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

PTP_F is the firm capacity reserved for confirmed Point-to-Point Transmission Service.

ROR_F is the firm capacity reserved for Roll-over rights for contracts granting Transmission Customers the right of first refusal to take or continue to take Transmission Service when the Transmission Customer's Transmission Service contract expires or is eligible for renewal.

OS_F is the firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using Firm Transmission Service as specified in the ATCID.

R6. When calculating ETC for non-firm Existing Transmission Commitments (ETC_{NF}) for all time horizons for an ATC Path the Transmission Service Provider shall use the following algorithm:

$ETC_{NF} = NITS_{NF} + GF_{NF} + PTP_{NF} + OS_{NF}$

Where:

$NITS_{NF}$ is the non-firm capacity set aside for Network Integration Transmission Service serving Load (i.e., secondary service), to include losses, and load growth not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

GF_{NF} is the non-firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

PTP_{NF} is non-firm capacity reserved for confirmed Point-to-Point Transmission Service.

OS_{NF} is the non-firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using non-firm transmission service as specified in the ATCID.

Clarification Needed:

Could OS_F in MOD-029-1 Requirement R5 and OS_{NF} in MOD-029-1 Requirement R6 be

calculated using Transmission Flow Utilization in the determination of ATC?

Transmission Flow Utilization represents the security constrained network powerflow solutions of the NYISO's Security Constrained Unit Commitment software, with respect to the NYISO Day-Ahead Market, or its Real-Time Commitment and Real-Time Dispatch software with respect to the NYISO's Real-Time Market. The NYISO's existing FERC-approved ATC equation, which reflects the nature of the "financial reservation" based form of open access transmission service that it provides, calculates firm and non-firm ATC as follows (the NYISO does not utilize CBM.).

ATC (Firm) = TTC — Transmission Flow Utilization (Firm) — TRM

ATC (Non-Firm) = ATC (Firm) — Transmission Flow Utilization (Non-Firm)

The ATC SDT has indicated that it believes that the OS definitions are broad enough to encompass the NYISO's Transmission Flow Utilization information.

Identify the material impact associated with this interpretation:

The material impact to the NYISO is the risk that an auditor might conclude that its current approach to calculating ATC/TTC was not consistent with NERC's requirements. If an auditor were to reach such a conclusion, the NYISO could be exposed to serious consequences, including sanctions or a requirement to modify its market design and transmission model in ways that would not be desired by its stakeholders, required by FERC, or necessary for any reliability-related purpose.

NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Standards Announcement

Initial Ballot Window Open

May 25–June 4, 2009

Now available at: https://standards.nerc.net/CurrentBallots.aspx

Interpretation of MOD-001-1 and MOD-029-1 for the New York Independent System Operator (Project 2009-15)

An initial ballot window for an interpretation of MOD-001-1 — Available Transmission System Capability, Requirements R2 and R8, and MOD-029-1 — Rated System Path Methodology, Requirements R5 and R6, for the New York Independent System Operator (NYISO) is now open **until 8 p.m. EDT on June 4, 2009**.

Project Background

The request asks the following questions:

1. Is the "advisory ATC" used under the NYISO tariff subject to the ATC calculation and recalculation requirements in MOD-001-1 Requirements R2 and R8? If not, is it necessary to document the frequency of "advisory" calculations in the responsible entity's Available Transfer Capability Implementation Document?

2. Could OS_F in MOD-029-1 Requirement R5 and OS_{NF} in MOD-029-1 Requirement R6 be calculated using Transmission Flow Utilization in the determination of ATC?

The request and interpretation can be found on the project page:
http://www.nerc.com/filez/standards/Project2009-15_Interpretation_MOD_NYISO.html

Standards Development Process

The Reliability Standards Development Procedure contains all the procedures governing the standards development process. The success of the NERC standards development process depends on stakeholder participation. We extend our thanks to all those who participate.

For more information or assistance,
please contact Shaun Streeter at shaun.streeter@nerc.net or at 609.452.8060.

NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Standards Announcement

Ballot Results

Now available at: https://standards.nerc.net/Ballots.aspx

Interpretation of MOD-001-1 and MOD-029-1 for the New York Independent System Operator (Project 2009-15)

Since at least one negative ballot was submitted with a comment, a recirculation ballot will be held. The recirculation ballot will be held after the drafting team responds to voter comments submitted during this ballot.

The initial ballot for an interpretation of MOD-001-1 and MOD-029-1 for the New York Independent System Operator ended June 4, 2009. The ballot results are shown below. The Ballot Results Web page provides a link to the detailed results.

Quorum:	85.13%
Approval:	82.10%

Ballot Criteria

Approval requires both:

- A quorum, which is established by at least 75% of the members of the ballot pool for submitting either an affirmative vote, a negative vote, or an abstention; and
- A two-thirds majority of the weighted segment votes cast must be affirmative. The number of votes cast is the sum of affirmative and negative votes, excluding abstentions and nonresponses.

Project Background

The request asks the following questions:

1. Is the "advisory ATC" used under the NYISO tariff subject to the ATC calculation and recalculation requirements in MOD-001-1 Requirements R2 and R8? If not, is it necessary to document the frequency of "advisory" calculations in the responsible entity's Available Transfer Capability Implementation Document?
2. Could OS_F in MOD-029-1 Requirement R5 and OS_{NF} in MOD-029-1 Requirement R6 be calculated using Transmission Flow Utilization in the determination of ATC?

The request and interpretation can be found on the project page:
http://www.nerc.com/filez/standards/Project2009-15_Interpretation_MOD_NYISO.html

Standards Development Process

The Reliability Standards Development Procedure contains all the procedures governing the standards development process. The success of the NERC standards development process depends on stakeholder participation. We extend our thanks to all those who participate.

For more information or assistance,
please contact Shaun Streeter at shaun.streeter@nerc.net or at 609.452.8060.

Ballot Results

Ballot Name:	Project 2009-15 Interpretation - NYISO - MOD-001-1, MOD-029-1_in
Ballot Period:	5/25/2009 - 6/4/2009
Ballot Type:	Initial
Total # Votes:	166
Total Ballot Pool:	195
Quorum:	**85.13 % The Quorum has been reached**
Weighted Segment Vote:	82.10 %
Ballot Results:	**The standard will proceed to recirculation ballot.**

Summary of Ballot Results

Segment	Ballot Pool	Segment Weight	Affirmative # Votes	Affirmative Fraction	Negative # Votes	Negative Fraction	Abstain # Votes	No Vote
1 - Segment 1.	54	1	23	0.742	8	0.258	15	8
2 - Segment 2.	10	0.7	7	0.7	0	0	3	0
3 - Segment 3.	47	1	24	0.828	5	0.172	10	8
4 - Segment 4.	10	0.4	3	0.3	1	0.1	3	3
5 - Segment 5.	34	1	15	0.833	3	0.167	9	7
6 - Segment 6.	23	1	10	0.769	3	0.231	7	3
7 - Segment 7.	0	0	0	0	0	0	0	0
8 - Segment 8.	3	0.3	2	0.2	1	0.1	0	0
9 - Segment 9.	6	0.4	4	0.4	0	0	2	0
10 - Segment 10.	8	0.5	4	0.4	1	0.1	3	0
Totals	**195**	**6.3**	**92**	**5.172**	**22**	**1.128**	**52**	**29**

Individual Ballot Pool Results

Segment	Organization	Member	Ballot	Comments
1	Ameren Services	Kirit S. Shah	Abstain	
1	American Electric Power	Paul B. Johnson	Affirmative	
1	Arizona Public Service Co.	Robert D Smith	Abstain	
1	Associated Electric Cooperative, Inc.	John Bussman	Abstain	
1	Avista Corp.	Scott Kinney	Abstain	
1	BC Transmission Corporation	Gordon Rawlings	Abstain	
1	Bonneville Power Administration	Donald S. Watkins	Abstain	View
1	Brazos Electric Power Cooperative, Inc.	Tony Kroskey		

1	CenterPoint Energy	Paul Rocha	Negative	
1	Central Maine Power Company	Brian Conroy		
1	Consolidated Edison Co. of New York	Christopher L de Graffenried	Affirmative	
1	Duke Energy Carolina	Douglas E. Hils	Affirmative	
1	E.ON U.S. LLC	Larry Monday	Abstain	
1	Entergy Corporation	George R. Bartlett	Affirmative	
1	Farmington Electric Utility System	Alan Glazner	Negative	
1	FirstEnergy Energy Delivery	Robert Martinko	Affirmative	
1	Florida Keys Electric Cooperative Assoc.	Dennis Minton	Negative	
1	Florida Power & Light Co.	C. Martin Mennes	Abstain	
1	Georgia Transmission Corporation	Harold Taylor, II	Affirmative	
1	Great River Energy	Gordon Pietsch	Negative	View
1	Hoosier Energy Rural Electric Cooperative, Inc.	Damon Holladay	Affirmative	
1	Hydro One Networks, Inc.	Ajay Garg	Affirmative	
1	Idaho Power Company	Ronald D. Schellberg		
1	ITC Transmission	Elizabeth Howell	Affirmative	
1	JEA	Ted E. Hobson	Affirmative	
1	Kansas City Power & Light Co.	Michael Gammon	Affirmative	
1	Kissimmee Utility Authority	Joe B Watson	Affirmative	
1	Lee County Electric Cooperative	Rodney Hawkins	Abstain	
1	Lincoln Electric System	Doug Bantam	Negative	
1	National Grid	Manuel Couto	Affirmative	
1	New York Power Authority	Ralph Rufrano	Affirmative	
1	Northeast Utilities	David H. Boguslawski	Affirmative	
1	Northern Indiana Public Service Co.	Kevin M Largura	Negative	
1	Ohio Valley Electric Corp.	Robert Mattey	Affirmative	
1	Omaha Public Power District	lorees Tadros		
1	Oncor Electric Delivery	Charles W. Jenkins		
1	Orlando Utilities Commission	Brad Chase	Abstain	
1	Otter Tail Power Company	Lawrence R. Larson	Affirmative	
1	Pacific Gas and Electric Company	Chifong L. Thomas	Abstain	
1	PacifiCorp	Mark Sampson		
1	Potomac Electric Power Co.	Richard J. Kafka	Affirmative	
1	PowerSouth Energy Cooperative	Larry D Avery	Affirmative	
1	PP&L, Inc.	Ray Mammarella	Abstain	
1	Progress Energy Carolinas	Sammy Roberts		
1	Public Service Electric and Gas Co.	Kenneth D. Brown	Affirmative	
1	Salt River Project	Robert Kondziolka	Abstain	
1	SaskPower	Wayne Guttormson	Negative	View
1	Seattle City Light	Pawel Krupa		
1	Southern California Edison Co.	Dana Cabbell	Abstain	
1	Southern Company Services, Inc.	Horace Stephen Williamson	Affirmative	
1	Southwest Transmission Cooperative, Inc.	James L. Jones	Affirmative	
1	Tucson Electric Power Co.	John Tolo	Abstain	
1	Western Area Power Administration	Brandy A Dunn	Affirmative	
1	Xcel Energy, Inc.	Gregory L. Pieper	Negative	View
2	Alberta Electric System Operator	Anita Lee	Abstain	View
2	British Columbia Transmission Corporation	Phil Park	Abstain	
2	California ISO	Greg Tillitson	Abstain	
2	Independent Electricity System Operator	Kim Warren	Affirmative	
2	ISO New England, Inc.	Kathleen Goodman	Affirmative	
2	Midwest ISO, Inc.	Terry Bilke	Affirmative	
2	New Brunswick System Operator	Alden Briggs	Affirmative	
2	New York Independent System Operator	Gregory Campoli	Affirmative	View
2	PJM Interconnection, L.L.C.	Tom Bowe	Affirmative	
2	Southwest Power Pool	Charles H Yeung	Affirmative	
3	Alabama Power Company	Robin Hurst		
3	Ameren Services	Mark Peters	Abstain	
3	American Electric Power	Raj Rana	Affirmative	
3	Arizona Public Service Co.	Thomas R. Glock	Affirmative	
3	Atlantic City Electric Company	James V. Petrella	Affirmative	
3	BC Hydro and Power Authority	Pat G. Harrington	Abstain	
3	Bonneville Power Administration	Rebecca Berdahl	Abstain	View
3	City Public Service of San Antonio	Edwin Les Barrow	Affirmative	
3	Consolidated Edison Co. of New York	Peter T Yost	Affirmative	
3	Consumers Energy	David A. Lapinski	Affirmative	

3	Cowlitz County PUD	Russell A Noble	Affirmative	
3	Delmarva Power & Light Co.	Michael R. Mayer	Affirmative	
3	Detroit Edison Company	Kent Kujala	Affirmative	
3	Dominion Resources, Inc.	Jalal (John) Babik	Affirmative	
3	Duke Energy Carolina	Henry Ernst-Jr	Affirmative	
3	Entergy Services, Inc.	Matt Wolf	Affirmative	
3	FirstEnergy Solutions	Joanne Kathleen Borrell	Affirmative	
3	Florida Power & Light Co.	W. R. Schoneck	Abstain	
3	Florida Power Corporation	Lee Schuster	Abstain	
3	Georgia Power Company	Leslie Sibert	Affirmative	
3	Georgia System Operations Corporation	Edward W Pourciau	Abstain	
3	Grays Harbor PUD	Wesley W Gray	Affirmative	
3	Great River Energy	Sam Kokkinen	Negative	
3	Gulf Power Company	Gwen S Frazier	Affirmative	
3	Hydro One Networks, Inc.	Michael D. Penstone	Affirmative	
3	JEA	Garry Baker		
3	Kansas City Power & Light Co.	Charles Locke	Affirmative	
3	Lakeland Electric	Mace Hunter	Affirmative	
3	Lincoln Electric System	Bruce Merrill	Negative	View
3	Louisville Gas and Electric Co.	Charles A. Freibert	Abstain	
3	MidAmerican Energy Co.	Thomas C. Mielnik	Negative	View
3	Mississippi Power	Don Horsley	Affirmative	
3	New York Power Authority	Michael Lupo	Affirmative	
3	Niagara Mohawk (National Grid Company)	Michael Schiavone	Affirmative	
3	Northern Indiana Public Service Co.	William SeDoris	Negative	
3	Orlando Utilities Commission	Ballard Keith Mutters	Abstain	
3	Platte River Power Authority	Terry L Baker	Affirmative	
3	Potomac Electric Power Co.	Robert Reuter	Affirmative	
3	Progress Energy Carolinas	Sam Waters	Abstain	
3	Public Service Electric and Gas Co.	Jeffrey Mueller		
3	Public Utility District No. 2 of Grant County	Greg Lange		
3	Salt River Project	John T. Underhill	Abstain	
3	Seattle City Light	Dana Wheelock		
3	South Carolina Electric & Gas Co.	Hubert C. Young		
3	Southern California Edison Co.	David Schiada		
3	Tampa Electric Co.	Ronald L. Donahey	Negative	
3	Xcel Energy, Inc.	Michael Ibold		
4	Alliant Energy Corp. Services, Inc.	Kenneth Goldsmith	Negative	View
4	American Municipal Power - Ohio	Kevin L Holt	Abstain	
4	Consumers Energy	David Frank Ronk	Affirmative	
4	Detroit Edison Company	Daniel Herring	Affirmative	
4	Georgia System Operations Corporation	Guy Andrews	Abstain	
4	Ohio Edison Company	Douglas Hohlbaugh	Affirmative	
4	Sacramento Municipal Utility District	Dilip Mahendra		
4	Seattle City Light	Hao Li		
4	Seminole Electric Cooperative, Inc.	Steven R. Wallace		
4	Wisconsin Energy Corp.	Anthony Jankowski	Abstain	
5	AEP Service Corp.	Brock Ondayko	Affirmative	
5	Amerenue	Sam Dwyer	Abstain	
5	Avista Corp.	Edward F. Groce	Abstain	
5	Bonneville Power Administration	Francis J. Halpin	Abstain	View
5	City of Tallahassee	Alan Gale	Affirmative	
5	Colmac Clarion/Piney Creek LP	Harvie D. Beavers	Affirmative	
5	Consumers Energy	James B Lewis	Affirmative	
5	Dairyland Power Coop.	Warren Schaefer	Abstain	
5	Detroit Edison Company	Ronald W. Bauer	Affirmative	
5	Dominion Resources, Inc.	Mike Garton	Affirmative	
5	Entergy Corporation	Stanley M Jaskot	Affirmative	
5	FirstEnergy Solutions	Kenneth Dresner	Affirmative	
5	FPL Energy	Benjamin Church		
5	Great River Energy	Cynthia E Sulzer	Negative	
5	JEA	Donald Gilbert		
5	Kansas City Power & Light Co.	Scott Heidtbrink	Affirmative	
5	Lincoln Electric System	Dennis Florom	Negative	View
5	Louisville Gas and Electric Co.	Charlie Martin	Abstain	
5	New York Power Authority	Gerald Mannarino	Affirmative	
5	Northern Indiana Public Service Co.	Michael K Wilkerson	Negative	View

5	Northern States Power Co.	Liam Noailles		
5	Orlando Utilities Commission	Richard Kinas		
5	Portland General Electric Co.	Gary L Tingley		
5	PPL Generation LLC	Mark A. Heimbach	Affirmative	
5	Progress Energy Carolinas	Wayne Lewis	Abstain	
5	PSEG Power LLC	Thomas Piascik	Affirmative	
5	Salt River Project	Glen Reeves	Abstain	
5	Seattle City Light	Michael J. Haynes	Affirmative	
5	Seminole Electric Cooperative, Inc.	Brenda K. Atkins	Affirmative	
5	Southeastern Power Administration	Douglas Spencer	Abstain	
5	Tenaska, Inc.	Scott M. Helyer	Abstain	
5	U.S. Army Corps of Engineers Northwestern Division	Karl Bryan	Affirmative	
5	U.S. Bureau of Reclamation	Martin Bauer		
5	Wisconsin Public Service Corp.	Leonard Rentmeester		
6	AEP Marketing	Edward P. Cox	Affirmative	
6	Ameren Energy Marketing Co.	Jennifer Richardson	Abstain	
6	Bonneville Power Administration	Brenda S. Anderson	Abstain	View
6	Consolidated Edison Co. of New York	Nickesha P Carrol	Affirmative	
6	Dominion Resources, Inc.	Louis S Slade	Affirmative	
6	Duke Energy Carolina	Walter Yeager	Affirmative	
6	Entergy Services, Inc.	Terri F Benoit	Affirmative	
6	FirstEnergy Solutions	Mark S Travaglianti	Affirmative	
6	Great River Energy	Donna Stephenson	Negative	
6	Kansas City Power & Light Co.	Thomas Saitta	Affirmative	
6	Lincoln Electric System	Eric Ruskamp	Negative	View
6	Louisville Gas and Electric Co.	Daryn Barker	Abstain	
6	New York Power Authority	Thomas Papadopoulos	Affirmative	
6	Northern Indiana Public Service Co.	Joseph O'Brien	Negative	
6	PacifiCorp	Gregory D Maxfield	Abstain	
6	Progress Energy	James Eckelkamp	Abstain	
6	PSEG Energy Resources & Trade LLC	James D. Hebson		
6	Public Utility District No. 1 of Chelan County	Hugh A. Owen	Abstain	
6	Salt River Project	Mike Hummel	Abstain	
6	Seminole Electric Cooperative, Inc.	Trudy S. Novak	Affirmative	
6	Southern California Edison Co.	Marcus V Lotto		
6	Western Area Power Administration - UGP Marketing	John Stonebarger	Affirmative	
6	Xcel Energy, Inc.	David F. Lemmons		
8	Edward C Stein	Edward C Stein	Affirmative	
8	JDRJC Associates	Jim D. Cyrulewski	Negative	View
8	Volkmann Consulting, Inc.	Terry Volkmann	Affirmative	
9	California Energy Commission	William Mitchell Chamberlain	Abstain	
9	Commonwealth of Massachusetts Department of Public Utilities	Donald E. Nelson	Affirmative	
9	Maine Public Utilities Commission	Jacob A McDermott	Affirmative	
9	National Association of Regulatory Utility Commissioners	Diane J. Barney	Affirmative	
9	New York State Department of Public Service	Thomas G Dvorsky	Affirmative	
9	Oregon Public Utility Commission	Jerome Murray	Abstain	
10	Electric Reliability Council of Texas, Inc.	Kent Saathoff	Affirmative	
10	Florida Reliability Coordinating Council	Linda Campbell	Abstain	
10	Midwest Reliability Organization	Dan R Schoenecker	Negative	View
10	New York State Reliability Council	Alan Adamson	Affirmative	
10	Northeast Power Coordinating Council, Inc.	Guy V. Zito	Affirmative	
10	ReliabilityFirst Corporation	Jacquie Smith	Affirmative	
10	SERC Reliability Corporation	Carter B. Edge	Abstain	
10	Western Electricity Coordinating Council	Louise McCarren	Abstain	

Account Log-In/Register

Copyright © 2008 by the North American Electric Reliability Corporation. : All rights reserved.
A New Jersey Nonprofit Corporation

Consideration of Comments on Initial Ballot — Interpretation of MOD-001-1 and MOD-029-1 for NYISO (Project 2009-15)

Summary Consideration: Most commenters either supported the interpretation or had concerns with the use of the interpretation process.

The SDT believes that the interpretation clarifies for both NYISO and others the NERC definition of "ATC Path" and the appropriate use of the "Other Service" variable within the standards. As such, the SDT believe this is an appropriate interpretation of the standard and should be appended to the continent-wide standard.

If you feel that the drafting team overlooked your comments, please let us know immediately. Our goal is to give every comment serious consideration in this process. If you feel there has been an error or omission, you can contact the Vice President and Director of Standards, Gerry Adamski, at 609-452-8060 or at gerry.adamski@nerc.net. In addition, there is a NERC Reliability Standards Appeals Process.[1]

Voter	Entity	Segment	Vote	Comment
Donald S. Watkins Rebecca Berdahl Francis J. Halpin Brenda S. Anderson	Bonneville Power Administration	1 3 5 6	Abstain	BPA has reviewed the NERC response for the New York ISO Interpretation request. We believe that while the response from the NERC drafting team is technically correct, it appears that there may be conflict between the NERC MOD reliability standard requirements discussed in the interpretation and the NYISO's current approved practices based upon it's FERC approved OATT.
Response: Thank you for your comments.				
Gregory L. Pieper	Xcel Energy, Inc.	1	Negative	In general, Xcel Energy does not have any substantive issues with the proposed interpretation, as narrowly applied to a specific region. However, we do not feel this is appropriate for application/amendment to a continent-wide standard.
Response: The SDT believes that the interpretation clarifies for both NYISO and others the NERC definition of "ATC Path" and the appropriate use of the "Other Service" variable within the standards. As such, the SDT believes this is an appropriate interpretation of the standard and should be appended to the continent-wide standard.				

[1] The appeals process is in the Reliability Standards Development Procedure: http://www.nerc.com/files/RSDP_V6_1_12Mar07.pdf.

Voter	Entity	Segment	Vote	Comment
Thomas C. Mielnik	MidAmerican Energy Co.	3	Negative	In this case the interpretation process is being used to verify if a responsible entity process is compliant, not to clarify or correct issues with a standard. It is inappropriate to use the interpretation process and a waste of valuable resources in this way.
Response: The SDT believes that the interpretation clarifies for both NYISO and others the NERC definition of "ATC Path" and the appropriate use of the "Other Service" variable within the standards. As such, the SDT believes this is an appropriate interpretation of the standard and should be appended to the continent-wide standard.				
Jim D. Cyrulewski	JDRJC Associates	8	Negative	Inappropriate use of the Standards process
Response: The SDT believes that the interpretation clarifies for both NYISO and others the NERC definition of "ATC Path" and the appropriate use of the "Other Service" variable within the standards. As such, the SDT believes this is an appropriate interpretation of the standard and should be appended to the continent-wide standard.				
Kenneth Goldsmith	Alliant Energy Corp. Services, Inc.	4	Negative	It is our opinion this is an inappropriate use of the Interpretation process. NYISO should seek a waiver not an interpretation that would be incorporated into future revisions of the standard.
Response: The SDT believes that the interpretation clarifies for both NYISO and others the NERC definition of "ATC Path" and the appropriate use of the "Other Service" variable within the standards. As such, the SDT believes this is an appropriate interpretation of the standard and should be appended to the continent-wide standard. NYISO may request a variance, if desired, regardless of this interpretation.				
Anita Lee	Alberta Electric System Operator	2	Abstain	Not applicable in Alberta.
Response: Thank you for your comments.				

Voter	Entity	Segment	Vote	Comment
Gregory Campoli	New York Independent System Operator	2	Affirmative	The NYISO is voting in favor of the proposed interpretation. The NYISO agrees with the Standards Drafting Team's ("SDT") "Response to Question #2." Specifically, the NYISO agrees that its "Transmission Flow Utilization" value can appropriately be included within the OSF and OSNF variables under R5 and R6 of MOD-029-1. The NYISO's position is that neither "Native Load," "Point-to-Point Transmission Service," "Network Integration Transmission Service" nor "any of the other components explicitly defined" under R5 or R6 would be included as part of Transmission Flow Utilization under the NYISO system. With respect to the SDT's "Response to Question #1", the NYISO wishes to clarify that under its FERC-approved market design, its internal interfaces are not "ATC Paths" and therefore it reads the interpretation as not requiring it to calculate ATCwith respect to internal interfaces because there are no time periods when its customers may not schedule transactions so long as such customers are willing to pay for congestion costs. Ultimately these standards would not be applicable to the NYISO internal interfaces.
Response: Thank you for your comments.				
Gordon Pietsch	Great River Energy	1	Negative	The NYISO request for interpretation is unique to the NYISO system and their reliability region. It would be more appropriate to deal with a request of this nature through a regional variance.
Response: The SDT believes that the interpretation clarifies for both NYISO and others the NERC definition of "ATC Path" and the appropriate use of the "Other Service" variable within the standards. As such, the SDT believes this is an appropriate interpretation of the standard and should be appended to the continent-wide standard. NYISO may request a variance, if desired, regardless of this interpretation.				
Dan R Schoenecker	Midwest Reliability Organization	10	Negative	This interpretation is an inappropriate use of the standards development process; this interpretation should be a variance.
Response: The SDT believes that the interpretation clarifies for both NYISO and others the NERC definition of "ATC Path" and the appropriate use of the "Other Service" variable within the standards. As such, the SDT believes this is an appropriate interpretation of the standard and should be appended to the continent-wide standard. NYISO may request a variance, if desired, regardless of this interpretation.				
Michael K Wilkerson	Northern Indiana Public	5	Negative	This seems to be an inappropriate use of the intrepretation procedure.

Voter	Entity	Segment	Vote	Comment
	Service Co.			
Response: The SDT believes that the interpretation clarifies for both NYISO and others the NERC definition of "ATC Path" and the appropriate use of the "Other Service" variable within the standards. As such, the SDT believes this is an appropriate interpretation of the standards and should be appended to the continent-wide standard.				
Wayne Guttormson	SaskPower	1	Negative	What material reliability impacts are there that would require the NYISO to change its practices as it describes them? The language or the interpretation of the language in the standard seems overly restrictive for no reliability benefit. A variance is probably more appropriate and modification of the existing standard.
Response: The purpose of an interpretation is to clarify existing standard requirements, not to evaluate the reliability of a registered entity's current practices. The SDT believes that the interpretation clarifies for both NYISO and others the NERC definition of "ATC Path" and the appropriate use of the "Other Service" variable within the standards. As such, the SDT believes this is an appropriate interpretation of the standards and should be appended to the continent-wide standard. NYISO may request a variance, if desired, regardless of this interpretation.				
Bruce Merrill Dennis Florom Eric Ruskamp	Lincoln Electric System	3 5 6	Negative	While LES agrees with the Interpretation, we feel that this is an inappropriate use of the Interpretation process. The requesting entity has essentially submitted their procedures and asked the industry to determine if they are in compliance with the standard through the Interpretation process, in our opinion this is an inappropriate use of the Interpretation process. The Interpretation process is to be used to clarify an existing Requirement. Per the RSDP, an approved Interpretation will be incorporated into the standard the next time the standard is revised, this interpretation should not be incorporated into the next revision of this standard. The requesting entity should consider seeking a variance instead.
Response: The SDT believes that the interpretation clarifies for both NYISO and others the NERC definition of "ATC Path" and the appropriate use of the "Other Service" variable within the standards. As such, the SDT believes this is an appropriate interpretation of the standards and should be appended to the continent-wide standard. NYISO may request a variance, if desired, regardless of this interpretation.				

NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Standards Announcement

Recirculation Ballot Window Open
July 8–17, 2009

Now available at: https://standards.nerc.net/CurrentBallots.aspx

Interpretation of MOD-001-1 and MOD-029-1 for the New York Independent System Operator (Project 2009-15)
A recirculation ballot window for an interpretation of MOD-001-1 — Available Transmission System Capability, Requirements R2 and R8, and MOD-029-1 — Rated System Path Methodology, Requirements R5 and R6, for the New York Independent System Operator is now open **until 8 p.m. EDT on July 17, 2009**.

Instructions
Members of the ballot pool associated with this project may log in and submit their votes from the following page: https://standards.nerc.net/CurrentBallots.aspx

Recirculation Ballot Process
The Standards Committee encourages all members of the ballot pool to review the consideration of comments submitted with the initial ballots. In the recirculation ballot, votes are counted by exception only — if a ballot pool member does not submit a revision to that member's original vote, the vote remains the same as in the first ballot. Members of the ballot pool may:

- Reconsider and change their vote from the first ballot.
- Vote in the second ballot even if they did not vote on the first ballot.
- Take no action if they do not want to change their original vote.

Next Steps
Voting results will be posted and announced after the ballot window closes.

Project Background
The request asks the following questions:

1. Is the "advisory ATC" used under the NYISO tariff subject to the ATC calculation and recalculation requirements in MOD-001-1 Requirements R2 and R8? If not, is it necessary to document the frequency of "advisory" calculations in the responsible entity's Available Transfer Capability Implementation Document?
2. Could OS_F in MOD-029-1 Requirement R5 and OS_{NF} in MOD-029-1 Requirement R6 be calculated using Transmission Flow Utilization in the determination of ATC?

The request and interpretation can be found on the project page:

http://www.nerc.com/filez/standards/Project2009-15_Interpretation_MOD_NYISO.html

Standards Development Process

The Reliability Standards Development Procedure contains all the procedures governing the standards development process. The success of the NERC standards development process depends on stakeholder participation. We extend our thanks to all those who participate

For more information or assistance,
please contact Shaun Streeter at shaun.streeter@nerc.net or at 609.452.8060.

NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Standards Announcement
Final Ballot Results

Now available at: https://standards.nerc.net/Ballots.aspx

Interpretation of MOD-001-1 and MOD-029-1 for the New York Independent System Operator (Project 2009-15)
The recirculation ballot for an interpretation of MOD-001-1 — Available Transmission System Capability, Requirements R2 and R8, and MOD-029-1 — Rated System Path Methodology, Requirements R5 and R6, for the New York Independent System Operator ended July 17, 2009.

Ballot Results
Voting statistics are listed below, and the Ballot Results Web page provides a link to the detailed results:

Quorum: 90.26%
Approval: 82.25%

The ballot pool approved the interpretation. Ballot criteria details are listed at the end of the announcement.

Next Steps
The interpretation will be submitted to the NERC Board of Trustees for adoption.

Project Background
The request asks the following questions:

1. Is the "advisory ATC" used under the NYISO tariff subject to the ATC calculation and recalculation requirements in MOD-001-1 Requirements R2 and R8? If not, is it necessary to document the frequency of "advisory" calculations in the responsible entity's Available Transfer Capability Implementation Document?
2. Could OS_F in MOD-029-1 Requirement R5 and OS_{NF} in MOD-029-1 Requirement R6 be calculated using Transmission Flow Utilization in the determination of ATC?

The request and interpretation can be found on the project page:
http://www.nerc.com/filez/standards/Project2009-15_Interpretation_MOD_NYISO.html

Standards Development Process
The *Reliability Standards Development Procedure* contains all the procedures governing the standards development process. The success of the NERC standards development process depends on stakeholder participation. We extend our thanks to all those who participate.

Ballot Criteria: Approval requires both a (1) quorum, which is established by at least 75% of the members of the ballot pool for submitting either an affirmative vote, a negative vote, or an abstention, and (2) A two-thirds majority of the weighted segment votes cast must be affirmative; the number of votes cast is the sum of affirmative and negative votes, excluding abstentions and nonresponses. If there are no negative votes with reasons from the first ballot, the results of the first ballot shall stand. If, however, one or more members submit negative votes with reasons, a second ballot shall be conducted.

For more information or assistance,
please contact Shaun Streeter at shaun.streeter@nerc.net or at 609.452.8060.

Ballot Results

Ballot Name:	Project 2009-15 Interpretation - NYISO - MOD-001-1, MOD-029-1_rc
Ballot Period:	7/8/2009 - 7/17/2009
Ballot Type:	recirculation
Total # Votes:	176
Total Ballot Pool:	195
Quorum:	**90.26 % The Quorum has been reached**
Weighted Segment Vote:	82.25 %
Ballot Results:	**The Standard has Passed**

Summary of Ballot Results

Segment	Ballot Pool	Segment Weight	Affirmative # Votes	Affirmative Fraction	Negative # Votes	Negative Fraction	Abstain # Votes	No Vote
1 - Segment 1.	54	1	26	0.813	6	0.188	17	5
2 - Segment 2.	10	0.7	7	0.7	0	0	3	0
3 - Segment 3.	47	1	25	0.781	7	0.219	9	6
4 - Segment 4.	10	0.4	3	0.3	1	0.1	3	3
5 - Segment 5.	34	1	16	0.8	4	0.2	10	4
6 - Segment 6.	23	1	11	0.688	5	0.313	6	1
7 - Segment 7.	0	0	0	0	0	0	0	0
8 - Segment 8.	3	0.3	3	0.3	0	0	0	0
9 - Segment 9.	6	0.4	4	0.4	0	0	2	0
10 - Segment 10.	8	0.5	4	0.4	1	0.1	3	0
Totals	**195**	**6.3**	**99**	**5.182**	**24**	**1.12**	**53**	**19**

Individual Ballot Pool Results

Segment	Organization	Member	Ballot	Comments
1	Ameren Services	Kirit S. Shah	Abstain	
1	American Electric Power	Paul B. Johnson	Affirmative	
1	Arizona Public Service Co.	Robert D Smith	Abstain	
1	Associated Electric Cooperative, Inc.	John Bussman	Abstain	
1	Avista Corp.	Scott Kinney	Abstain	
1	BC Transmission Corporation	Gordon Rawlings	Abstain	
1	Bonneville Power Administration	Donald S. Watkins	Negative	View
1	Brazos Electric Power Cooperative, Inc.	Tony Kroskey		

1	CenterPoint Energy	Paul Rocha	Negative	
1	Central Maine Power Company	Brian Conroy	Affirmative	
1	Consolidated Edison Co. of New York	Christopher L de Graffenried	Affirmative	
1	Duke Energy Carolina	Douglas E. Hils	Affirmative	
1	E.ON U.S. LLC	Larry Monday	Abstain	
1	Entergy Corporation	George R. Bartlett	Affirmative	
1	Farmington Electric Utility System	Alan Glazner	Affirmative	
1	FirstEnergy Energy Delivery	Robert Martinko	Affirmative	
1	Florida Keys Electric Cooperative Assoc.	Dennis Minton	Affirmative	
1	Florida Power & Light Co.	C. Martin Mennes	Abstain	
1	Georgia Transmission Corporation	Harold Taylor, II	Affirmative	
1	Great River Energy	Gordon Pietsch	Negative	View
1	Hoosier Energy Rural Electric Cooperative, Inc.	Damon Holladay	Abstain	
1	Hydro One Networks, Inc.	Ajay Garg	Affirmative	
1	Idaho Power Company	Ronald D. Schellberg	Affirmative	
1	ITC Transmission	Elizabeth Howell	Affirmative	
1	JEA	Ted E. Hobson	Affirmative	
1	Kansas City Power & Light Co.	Michael Gammon	Affirmative	
1	Kissimmee Utility Authority	Joe B Watson	Affirmative	
1	Lee County Electric Cooperative	Rodney Hawkins	Abstain	
1	Lincoln Electric System	Doug Bantam	Negative	
1	National Grid	Manuel Couto	Affirmative	
1	New York Power Authority	Ralph Rufrano	Affirmative	
1	Northeast Utilities	David H. Boguslawski	Affirmative	
1	Northern Indiana Public Service Co.	Kevin M Largura	Negative	
1	Ohio Valley Electric Corp.	Robert Mattey	Affirmative	
1	Omaha Public Power District	lorees Tadros		
1	Oncor Electric Delivery	Charles W. Jenkins		
1	Orlando Utilities Commission	Brad Chase	Abstain	
1	Otter Tail Power Company	Lawrence R. Larson	Affirmative	
1	Pacific Gas and Electric Company	Chifong L. Thomas	Abstain	
1	PacifiCorp	Mark Sampson		
1	Potomac Electric Power Co.	Richard J. Kafka	Affirmative	
1	PowerSouth Energy Cooperative	Larry D. Avery	Affirmative	
1	PP&L, Inc.	Ray Mammarella	Abstain	
1	Progress Energy Carolinas	Sammy Roberts	Abstain	
1	Public Service Electric and Gas Co.	Kenneth D. Brown	Affirmative	
1	Salt River Project	Robert Kondziolka	Abstain	
1	SaskPower	Wayne Guttormson	Abstain	
1	Seattle City Light	Pawel Krupa		
1	Southern California Edison Co.	Dana Cabbell	Abstain	
1	Southern Company Services, Inc.	Horace Stephen Williamson	Affirmative	
1	Southwest Transmission Cooperative, Inc.	James L. Jones	Affirmative	
1	Tucson Electric Power Co.	John Tolo	Abstain	
1	Western Area Power Administration	Brandy A Dunn	Affirmative	
1	Xcel Energy, Inc.	Gregory L. Pieper	Negative	View
2	Alberta Electric System Operator	Anita Lee	Abstain	View
2	British Columbia Transmission Corporation	Phil Park	Abstain	
2	California ISO	Greg Tillitson	Abstain	
2	Independent Electricity System Operator	Kim Warren	Affirmative	
2	ISO New England, Inc.	Kathleen Goodman	Affirmative	
2	Midwest ISO, Inc.	Terry Bilke	Affirmative	
2	New Brunswick System Operator	Alden Briggs	Affirmative	
2	New York Independent System Operator	Gregory Campoli	Affirmative	View
2	PJM Interconnection, L.L.C.	Tom Bowe	Affirmative	
2	Southwest Power Pool	Charles H Yeung	Affirmative	
3	Alabama Power Company	Robin Hurst		
3	Ameren Services	Mark Peters	Abstain	
3	American Electric Power	Raj Rana	Affirmative	
3	Arizona Public Service Co.	Thomas R. Glock	Affirmative	
3	Atlantic City Electric Company	James V. Petrella	Affirmative	
3	BC Hydro and Power Authority	Pat G. Harrington	Abstain	
3	Bonneville Power Administration	Rebecca Berdahl	Negative	View
3	City Public Service of San Antonio	Edwin Les Barrow	Affirmative	
3	Consolidated Edison Co. of New York	Peter T Yost	Affirmative	
3	Consumers Energy	David A. Lapinski	Affirmative	

3	Cowlitz County PUD	Russell A Noble	Affirmative	
3	Delmarva Power & Light Co.	Michael R. Mayer	Affirmative	
3	Detroit Edison Company	Kent Kujala	Affirmative	
3	Dominion Resources, Inc.	Jalal (John) Babik	Affirmative	
3	Duke Energy Carolina	Henry Ernst-Jr	Affirmative	
3	Entergy Services, Inc.	Matt Wolf	Affirmative	
3	FirstEnergy Solutions	Joanne Kathleen Borrell	Affirmative	
3	Florida Power & Light Co.	W. R. Schoneck	Abstain	
3	Florida Power Corporation	Lee Schuster	Abstain	
3	Georgia Power Company	Leslie Sibert	Affirmative	
3	Georgia System Operations Corporation	Edward W Pourciau	Abstain	
3	Grays Harbor PUD	Wesley W Gray	Affirmative	
3	Great River Energy	Sam Kokkinen	Negative	
3	Gulf Power Company	Gwen S Frazier	Affirmative	
3	Hydro One Networks, Inc.	Michael D. Penstone	Affirmative	
3	JEA	Garry Baker		
3	Kansas City Power & Light Co.	Charles Locke	Affirmative	
3	Lakeland Electric	Mace Hunter	Abstain	
3	Lincoln Electric System	Bruce Merrill	Negative	View
3	Louisville Gas and Electric Co.	Charles A. Freibert	Abstain	
3	MidAmerican Energy Co.	Thomas C. Mielnik	Negative	View
3	Mississippi Power	Don Horsley	Affirmative	
3	New York Power Authority	Michael Lupo	Affirmative	
3	Niagara Mohawk (National Grid Company)	Michael Schiavone	Affirmative	
3	Northern Indiana Public Service Co.	William SeDoris	Negative	
3	Orlando Utilities Commission	Ballard Keith Mutters	Affirmative	
3	Platte River Power Authority	Terry L Baker	Affirmative	
3	Potomac Electric Power Co.	Robert Reuter	Affirmative	
3	Progress Energy Carolinas	Sam Waters	Abstain	
3	Public Service Electric and Gas Co.	Jeffrey Mueller	Affirmative	
3	Public Utility District No. 2 of Grant County	Greg Lange		
3	Salt River Project	John T. Underhill	Abstain	
3	Seattle City Light	Dana Wheelock		
3	South Carolina Electric & Gas Co.	Hubert C. Young		
3	Southern California Edison Co.	David Schiada		
3	Tampa Electric Co.	Ronald L. Donahey	Negative	
3	Xcel Energy, Inc.	Michael Ibold	Negative	View
4	Alliant Energy Corp. Services, Inc.	Kenneth Goldsmith	Negative	View
4	American Municipal Power - Ohio	Kevin L Holt	Abstain	
4	Consumers Energy	David Frank Ronk	Affirmative	
4	Detroit Edison Company	Daniel Herring	Affirmative	
4	Georgia System Operations Corporation	Guy Andrews	Abstain	
4	Ohio Edison Company	Douglas Hohlbaugh	Affirmative	
4	Sacramento Municipal Utility District	Dilip Mahendra		
4	Seattle City Light	Hao Li		
4	Seminole Electric Cooperative, Inc.	Steven R. Wallace		
4	Wisconsin Energy Corp.	Anthony Jankowski	Abstain	
5	AEP Service Corp.	Brock Ondayko	Affirmative	
5	Amerenue	Sam Dwyer	Abstain	
5	Avista Corp.	Edward F. Groce	Abstain	
5	Bonneville Power Administration	Francis J. Halpin	Abstain	View
5	City of Tallahassee	Alan Gale	Affirmative	
5	Colmac Clarion/Piney Creek LP	Harvie D. Beavers	Affirmative	
5	Consumers Energy	James B Lewis	Affirmative	
5	Dairyland Power Coop.	Warren Schaefer	Abstain	
5	Detroit Edison Company	Ronald W. Bauer	Affirmative	
5	Dominion Resources, Inc.	Mike Garton	Affirmative	
5	Entergy Corporation	Stanley M Jaskot	Affirmative	
5	FirstEnergy Solutions	Kenneth Dresner	Affirmative	
5	FPL Energy	Benjamin Church	Affirmative	
5	Great River Energy	Cynthia E Sulzer	Negative	
5	JEA	Donald Gilbert	Abstain	
5	Kansas City Power & Light Co.	Scott Heidtbrink	Affirmative	
5	Lincoln Electric System	Dennis Florom	Negative	View
5	Louisville Gas and Electric Co.	Charlie Martin	Abstain	
5	New York Power Authority	Gerald Mannarino	Affirmative	
5	Northern Indiana Public Service Co.	Michael K Wilkerson	Negative	View

5	Northern States Power Co.	Liam Noailles	Negative	View
5	Orlando Utilities Commission	Richard Kinas		
5	Portland General Electric Co.	Gary L Tingley		
5	PPL Generation LLC	Mark A. Heimbach	Affirmative	
5	Progress Energy Carolinas	Wayne Lewis	Abstain	
5	PSEG Power LLC	Thomas Piascik	Affirmative	
5	Salt River Project	Glen Reeves	Abstain	
5	Seattle City Light	Michael J. Haynes	Affirmative	
5	Seminole Electric Cooperative, Inc.	Brenda K. Atkins	Affirmative	
5	Southeastern Power Administration	Douglas Spencer	Abstain	
5	Tenaska, Inc.	Scott M. Helyer	Abstain	
5	U.S. Army Corps of Engineers Northwestern Division	Karl Bryan	Affirmative	
5	U.S. Bureau of Reclamation	Martin Bauer		
5	Wisconsin Public Service Corp.	Leonard Rentmeester		
6	AEP Marketing	Edward P. Cox	Affirmative	
6	Ameren Energy Marketing Co.	Jennifer Richardson	Abstain	
6	Bonneville Power Administration	Brenda S. Anderson	Negative	View
6	Consolidated Edison Co. of New York	Nickesha P Carrol	Affirmative	
6	Dominion Resources, Inc.	Louis S Slade	Affirmative	
6	Duke Energy Carolina	Walter Yeager	Affirmative	
6	Entergy Services, Inc.	Terri F Benoit	Affirmative	
6	FirstEnergy Solutions	Mark S Travaglianti	Affirmative	
6	Great River Energy	Donna Stephenson	Negative	
6	Kansas City Power & Light Co.	Thomas Saitta	Affirmative	
6	Lincoln Electric System	Eric Ruskamp	Negative	View
6	Louisville Gas and Electric Co.	Daryn Barker	Abstain	
6	New York Power Authority	Thomas Papadopoulos	Affirmative	
6	Northern Indiana Public Service Co.	Joseph O'Brien	Negative	
6	PacifiCorp	Gregory D Maxfield	Abstain	
6	Progress Energy	James Eckelkamp	Abstain	
6	PSEG Energy Resources & Trade LLC	James D. Hebson	Affirmative	
6	Public Utility District No. 1 of Chelan County	Hugh A. Owen	Abstain	
6	Salt River Project	Mike Hummel	Abstain	
6	Seminole Electric Cooperative, Inc.	Trudy S. Novak	Affirmative	
6	Southern California Edison Co.	Marcus V Lotto		
6	Western Area Power Administration - UGP Marketing	John Stonebarger	Affirmative	
6	Xcel Energy, Inc.	David F. Lemmons	Negative	View
8	Edward C Stein	Edward C Stein	Affirmative	
8	JDRJC Associates	Jim D. Cyrulewski	Affirmative	
8	Volkmann Consulting, Inc.	Terry Volkmann	Affirmative	
9	California Energy Commission	William Mitchell Chamberlain	Abstain	
9	Commonwealth of Massachusetts Department of Public Utilities	Donald E. Nelson	Affirmative	
9	Maine Public Utilities Commission	Jacob A McDermott	Affirmative	
9	National Association of Regulatory Utility Commissioners	Diane J. Barney	Affirmative	
9	New York State Department of Public Service	Thomas G Dvorsky	Affirmative	
9	Oregon Public Utility Commission	Jerome Murray	Abstain	
10	Electric Reliability Council of Texas, Inc.	Kent Saathoff	Affirmative	
10	Florida Reliability Coordinating Council	Linda Campbell	Abstain	
10	Midwest Reliability Organization	Dan R Schoenecker	Negative	View
10	New York State Reliability Council	Alan Adamson	Affirmative	
10	Northeast Power Coordinating Council, Inc.	Guy V. Zito	Affirmative	
10	ReliabilityFirst Corporation	Jacquie Smith	Affirmative	
10	SERC Reliability Corporation	Carter B. Edge	Abstain	
10	Western Electricity Coordinating Council	Louise McCarren	Abstain	

Account Log-In/Register

Copyright © 2008 by the North American Electric Reliability Corporation. : All rights reserved.
A New Jersey Nonprofit Corporation

Exhibit D

Interpretation Development Team Roster

RFI of MOD-001-1 and MOD-029-1 by NYISO — Project 2009-15		
Chairman	Laura Lee — Senior Engineer, Systems Operations	VACAR-South (Duke)
	Bill Blevins	Electric Reliability Council of Texas, Inc.
	John Burnett	Los Angeles Department of Water & Power
	DuShaune Carter	Southern Company
	Charles Falls	Salt River Project
	John Harmon	Midwest ISO, Inc.
	Raymond K. Kershaw — Senior Staff Engineer	ITC Transmission
	Dennis Kimm, Jr. — Senior Transmission Engineer	MidAmerican Energy Co.
	Ross Kovacs — Trans. Strategic Coordinator	Georgia Transmission Corporation
	Cheryl Mendrala — Principal Engineer	ISO New England, Inc.
	Abbey Nulph — Policy and Strategy Assessment	Bonneville Power Administration
	Narinder K. Saini — Policy Consultant	Entergy Services, Inc.
	Matthew Schull	North Carolina Municipal Power Agency #1
	Nathan A. Schweighart	Tennessee Valley Authority
	Jerry W. Smith	Arizona Public Service Co.
	Aaron Staley	Orlando Utilities Commission
	Brent Torgrimson	Texas Regional Entity
	Donald Williams — Senior Engineer	PJM Interconnection, L.L.C.
NERC Staff	Maureen E. Long — Standards Process Manager	North American Electric Reliability Corporation
NERC Staff Coordinator	Andrew J. Rodriquez — Manager of Business Practice Coordination	North American Electric Reliability Corporation
NERC Staff	Edward H. Ruck Senior Compliance Investigator	North American Electric Reliability Corporation