

Consideration of Comments on Regional Standard MOD-024-RFC-01

The Regional Reliability Standards Working Group thanks all commenters who submitted comments on the Regional Standard MOD-024-RFC-01. This standard was posted for a 45-day public comment period from October 21, 2009 through December 11, 2009. The stakeholders were asked to provide feedback on the standards through a special Electronic Comment Form. There were 10 sets of comments, including comments from over 30 different people from more than 15 companies representing 8 of the 10 Industry Segments as shown in the table on the following pages.

<https://rsvp.rfirst.org/MOD024RFC01/default.aspx>

If you feel that your comment has been overlooked, 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

¹ The appeals process is in the Reliability Standards Development Procedures:
<http://www.nerc.com/standards/newstandardsprocess.html>.

Index to Questions, Comments, and Responses

1. Was the proposed standard developed in a fair and open process, using the associated Regional Reliability Standards Development Procedure? 5

2. Does the proposed standard pose an adverse impact to reliability or commerce in a neighboring region or interconnection? 9

3. Does the proposed standard pose a serious and substantial threat to public health, safety, welfare, or national security?..... 10

4. Does the proposed standard pose a serious and substantial burden on competitive markets within the interconnection that is not necessary for reliability? 11

5. Does the proposed regional reliability standard meet at least one of the following criteria? 13

Consideration of Comments on Regional Reliability Standard MOD-024-RFC-01

The Industry Segments are:

- 1 — Transmission Owners
- 2 — RTOs, ISOs
- 3 — Load-serving Entities
- 4 — Transmission-dependent Utilities
- 5 — Electric Generators
- 6 — Electricity Brokers, Aggregators, and Marketers
- 7 — Large Electricity End Users
- 8 — Small Electricity End Users
- 9 — Federal, State, Provincial Regulatory or other Government Entities
- 10 — Regional Reliability Organizations, Regional Entities

		Commenter	Organization	Industry Segment											
				1	2	3	4	5	6	7	8	9	10		
1.	Group	Guy Zito	Northeast Power Coordinating Council												X
Additional Member		Additional Organization		Region	Segment Selection										
1.	Alan Adamson	New York State Reliability Council, LLC		NPCC	10										
2.	Gregory Campoli	New York Independent System Operator		NPCC	2										
3.	Roger Champagne	Hydro-Quebec TransEnergie		NPCC	2										
4.	Kurtis Chong	Independent Electricity System Operator		NPCC	2										
5.	Sylvain Clermont	Hydro-Quebec TransEnergie		NPCC	1										
6.	Chris de Graffenried	Consolidated Edison Co. of New York, Inc.		NPCC	1										
7.	Brian D. Evans-Mongeon	Utility Services		NPCC	8										
8.	Mike Garton	Dominion Resources Services, Inc.		NPCC	5										
9.	Brian L. Gooder	Ontario Power Generation Incorporated		NPCC	5										
10.	Kathleen Goodman	ISO - New England		NPCC	2										
11.	David Kiguel	Hydro One Networks Inc.		NPCC	1										
12.	Michael R. Lombardi	Northeast Utilities		NPCC	1										
13.	Randy MacDonald	New Brunswick System Operator		NPCC	2										
14.	Greg Mason	Dynegy Generation		NPCC	5										

Consideration of Comments on Regional Reliability Standard MOD-024-RFC-01

	Commenter	Organization	Industry Segment																	
			1	2	3	4	5	6	7	8	9	10								
15.	Bruce Metruck	New York Power Authority	NPCC	6																
16.	Ralph Rufrano	New York Power Authority	NPCC	5																
17.	Robert Pellegrini	The United Illuminating Company	NPCC	1																
18.	Saurabh Saksena	National Grid	NPCC	1																
19.	Michael Schiavone	National Grid	NPCC	1																
20.	Peter Yost	Consolidated Edison Co. of New York, Inc.	NPCC	3																
21.	Gerry Dunbar	Northeast Power Coordinating Council	NPCC	10																
22.	Lee Pedowicz	Northeast Power Coordinating Council	NPCC	10																
2.	Group	Sam Ciccone	FirstEnergy Corp.		X		X	X	X	X										
Additional Member Additional Organization Region Segment Selection																				
1.	Doug Hohlbaugh	FE	RFC				1, 3, 4, 5, 6													
3.	Individual	Scott Berry	Indiana Municipal Power Agency					X												
4.	Individual	Joylyn Stover	Consumers Energy				X	X	X											
5.	Individual	James H. Sorrels, Jr.	American Electric Power	X			X		X	X										
6.	Individual	Laura Lee	Duke Energy	X			X		X	X										
7.	Individual	Martin Bauer	US Bureau of Reclamation						X											
8.	Individual	Richard Kafka	Pepco Holdings, Inc.	X			X		X	X										
9.	Individual	Mark Westendorf	Midwest ISO				X													
10.	Individual	Kevin Koloini	American Municipal Power				X	X	X											

1. Was the proposed standard developed in a fair and open process, using the associated Regional Reliability Standards Development Procedure?

Summary Consideration:

Organization	Yes or No	Question 1 Comment
American Electric Power	Yes	
American Municipal Power	Yes	
Duke Energy	Yes	
Midwest ISO	Yes	
Northeast Power Coordinating Council	Yes	
Pepco Holdings, Inc.	Yes	
Consumers Energy	Yes	<p>1) During development of the proposed Standard comments were submitted requesting clarification of which Generating facilities the Standard is applicable to. Rather than indicate in the Applicability section of the Standard which part of the BES the Standard applies to the response of the SDT was “The NERC Compliance Registry Criteria stipulates the ones that are required to comply with this standard and the ones that are exempt.” Based on this response it is unclear if the requirements apply to all generating facilities or only those included under the RFC BES definition. As a result of the confusion noted above, it is unclear if the Standard is applicable to run of river hydro units. The confusion is compounded further by R2.2.3 which states “... some types of non-dispatchable run of river hydro plants...” and 2.4 which provides the requirements for hydro facilities.</p> <p>2) The Standard implements requirements based on Capacity Factor. Capacity Factor is a commercial measurement of operation and should not be included in a Reliability Standard.</p> <p>3) R4.1.1 of MOD-024-RFC-01 requires the Generator Operator to provide its' normalization methodology to the Resource Planners, Planning Coordinators and Transmission Planners for technical review. The</p>

Organization	Yes or No	Question 1 Comment
		Resource Planners, Planning Coordinators and Transmission Planners are commercial entities. Having commercial entities provide technical approval, rather than the RRO, could potentially provide market advantage to competitors, and possibly pose conflict of interest situations.
<p>Response:</p> <p>1) The Generating facilities the Standard is applicable to are no different than any other standard which applies to a Generator Operator. In general terms, the NERC Statement of Compliance Registry, states (as interpreted) that individual units > 20 MVA directly connected to the Bulk Power System (100 kV or higher) and/or a generating plant/facility (multiple units in aggregate) > 75 MVA directly connected to the Bulk Power System (100 kV or higher) fall under the Generator Operators responsibilities. Listed below are the four sections of the NERC Statement of Compliance Registry Criteria which stipulates which units/plants the Generator Operators are responsible for (in regards to compliance):</p> <p>III.c.1 Individual generating unit > 20 MVA (gross nameplate rating) and is directly connected to the bulk power system, or;</p> <p>III.c.2 Generating plant/facility > 75 MVA (gross aggregate nameplate rating) or when the entity has responsibility for any facility consisting of one or more units that are connected to the bulk power system at a common bus with total generation above 75 MVA gross nameplate rating, or;</p> <p>III.c.3 Any generator, regardless of size, that is a blackstart unit material to and designated as part of a transmission operator entity’s restoration plan, or;</p> <p>III.c.4 Any generator, regardless of size, that is material to the reliability of the bulk power system.</p> <p>2) The SDT does not believe capacity factor is solely a commercial quantity. The concept of capacity factor is commonly understood and is intended to allow generators that do not run very often to still use operational tracking by giving a much larger window to perform the verification. The less a generator runs, the less opportunity it has to verify its capability by operational tracking on an annual basis.</p> <p>3) The Resource Planners, Planning Coordinators and Transmission Planners are entities listed in the NERC Functional Model and are subject to standards. The GOP is only submitting the normalization methodology to the Resource Planners, Planning Coordinators and Transmission Planners for technical review and not approval. Since these entities will be the ones potentially requesting the verified data (per R5), the SDT believes there is no problem in supplying the normalization methodology as well. The SDT believes supplying methodologies supporting the data is acceptable.</p>		
Indiana Municipal Power Agency	No	The RFC voting process is flawed because a company with many subsidiaries can have many votes (4 to 10 votes in one registered entity category (LSE) or in multiple entity categories on a standard up for ballot), whereas a company with no subsidiaries can only have one vote in the voting process.

Consideration of Comments on Regional Reliability Standard MOD-024-RFC-01

Organization	Yes or No	Question 1 Comment
		<p>In addition, MOD-024-RFC-01 does not follow the NERC Functional Model when it comes to assigning which entity is responsible for submitting data to other requesting entities. The Functional Model says generator data reporting is the responsibility of the Generator Owner and this regional standard assigns the responsibility to the Generator Operator. The current NERC Standard Drafting Team draft of MOD-024 assigns this responsibility to the Generator Owner in accordance with the Functional Model. NERC should remand this standard to RFC to modify it to be consistent with the Functional Model.</p> <p>After this standard is revised to be consistent with the Functional Model, approval of this regional standard by NERC should be conditioned upon its automatic retirement upon implementation of the NERC-wide version of MOD-024, to ensure that there are no overlapping or inconsistent standard requirements in effect for any entity. After the NERC-wide standard goes into effect, if RFC determines that there is a need for a regional standard to supplement the NERC-wide standard, RFC can develop a new standard at that time.</p>
<p>Response: The current voting structure was developed by industry representatives and had gone through the formal Standards Process to be approved. Furthermore, the ReliabilityFirst Standards Development Procedure was approved by NERC and FERC as part of the RFC Delegation agreement. The SDT is working within the existing rules as detailed in the ReliabilityFirst Standards Development Procedure.</p> <p>The functional model is only a guideline for the standards and the drafting team is allowed to apply the standard to the entity in which the SDT feels is the appropriate. The SDT understands that the GO is listed in the NERC standard but believes that the intent is to have the GOP perform the verification. The GO authorizes the verification to be performed through contractual agreements. Where there are multiple GO's the GOP will develop the normalization methodology and verify the data and submit the data on behalf of the GO's.</p> <p>It is the intent of ReliabilityFirst is to revisit the MOD-024-RFC-01 standard once the continent wide NERC MOD-024 standard is approved. A drafting team will be formed to review any duplicative requirements.</p>		
FirstEnergy Corp.	Yes	<p>We agree that the standard was developed in a fair and open process. Furthermore, we believe that the SDT and RFC went beyond the minimum requirements to assure the standard did not result in the lowest common denominator by fully vetting the standard and assuring the industry was in agreement with the standard during the regional ballot process. We applaud the efforts of the SDT and RFC.</p>
<p>Response: Thank you for your support.</p>		

Consideration of Comments on Regional Reliability Standard MOD-024-RFC-01

Organization	Yes or No	Question 1 Comment
US Bureau of Reclamation	No	We noted that there was an error in the standard. The questions were posed in such a manner that would ensure passages with agreement. This makes the process flawed. It should be customary to allow for providing comment about errors or notice of any other note worthy issue not covered by the questions.
Response: The draft MOD-024-RFC-01 standard had gone through four comment periods at the regional level which was open to all interested individuals. Such errors should have been noted during these regional comment periods.		

2. Does the proposed standard pose an adverse impact to reliability or commerce in a neighboring region or interconnection?

Summary Consideration:

Organization	Yes or No	Question 2 Comment
Northeast Power Coordinating Council	No	
FirstEnergy Corp.	No	
Indiana Municipal Power Agency		No Comments.
Consumers Energy	No	
American Electric Power	No	
Duke Energy	No	
US Bureau of Reclamation	No	
Pepco Holdings, Inc.	No	
Midwest ISO	No	
American Municipal Power	No	

3. Does the proposed standard pose a serious and substantial threat to public health, safety, welfare, or national security?

Summary Consideration:

Organization	Yes or No	Question 3 Comment
Northeast Power Coordinating Council	No	
FirstEnergy Corp.	No	
Indiana Municipal Power Agency		No Comments.
Consumers Energy	No	
American Electric Power	No	
Duke Energy	No	
US Bureau of Reclamation	No	
Pepco Holdings, Inc.	No	
Midwest ISO	No	
American Municipal Power	No	

4. Does the proposed standard pose a serious and substantial burden on competitive markets within the interconnection that is not necessary for reliability?

Summary Consideration:

Organization	Yes or No	Question 4 Comment
American Electric Power	No	
Consumers Energy	No	
Duke Energy	No	
FirstEnergy Corp.	No	
Midwest ISO	No	
Northeast Power Coordinating Council	No	
Pepco Holdings, Inc.	No	
US Bureau of Reclamation	No	
American Municipal Power	Yes	<p>After reviewing the final version that was approved by the RFC Board, an internal discussion prompted a calculation of an estimated "ballpark" burden on our company. We found that this standard will have a very significant burden if we interpret the standard to include "all units under their operational control" to mean all units under 85 MVA that our company operates down to 1 MW. If we exclude our smaller units, the units that are not material to BES, we still calculate a significant increase in testing burden. Therefore, AMP believes that the reliability standard as drafted would impose an unjustified burden on competitive markets within the ReliabilityFirst region. Specifically, the standard, with respect to its scope and implementation, imposes an undue burden on generator operators in the market. These burdensome issues are substantially likely to increase costs for our members without a direct increase in reliability, particularly for small generating facilities or for those bound to high commodity prices.</p> <p>For this reason, AMP recommends modifying the proposed standard to generally use a two hour test in place of the four hour test. If it can be shown that an entity is applying a two hour test inconsistent with the spirit, intent</p>

Organization	Yes or No	Question 4 Comment
		or purpose of the standard, then give a responsible entity the ability to require a four hour test.
		<p>Response: the statement "all units under their operational control" does not mean all units under 85 MVA that your company operates down to 1 MW. The standard applies to units operated by the Generator Operator which are included in the NERC Statement of compliance Registry Criteria section III (c). Since the standard does not go down to 1MVA, the SDT does not believe an undue burden is placed on Generator Operators. Listed below is the four sections of the NERC Statement of compliance Registry Criteria for your reference:</p> <p>III.c.1 Individual generating unit > 20 MVA (gross nameplate rating) and is directly connected to the bulk power system, or;</p> <p>III.c.2 Generating plant/facility > 75 MVA (gross aggregate nameplate rating) or when the entity has responsibility for any facility consisting of one or more units that are connected to the bulk power system at a common bus with total generation above 75 MVA gross nameplate rating, or;</p> <p>III.c.3 Any generator, regardless of size, that is a blackstart unit material to and designated as part of a transmission operator entity’s restoration plan, or;</p> <p>III.c.4 Any generator, regardless of size, that is material to the reliability of the bulk power system.</p> <p>The RFC standard, which was created to meet the requirements of the present NERC Board approved NERC MOD-024-1 standard, looks to verify the capability of the unit under normal (24/7) operations. Since the RFC standard encourages operational tracking instead of requiring a specific test, the SDT believes that fossil and nuclear units which are applicable for the four hour verification requirement most likely will be run at least one time during the year (or 5 years) period for four continuous hours and operational tracking can be used (does not necessarily need to be an actual “test”) to meet the requirements of this standard.</p>
Indiana Municipal Power Agency		No comments.

5. Does the proposed regional reliability standard meet at least one of the following criteria?

- The proposed standard has more specific criteria for the same requirements covered in a continent-wide standard
- The proposed standard has requirements that are not included in the corresponding continent-wide reliability standard
- The proposed regional difference is necessitated by a physical difference in the bulk electric system.

Summary Consideration:

Organization	Yes or No	Question 5 Comment
American Municipal Power	Yes	
Consumers Energy	Yes	
Pepco Holdings, Inc.	Yes	
FirstEnergy Corp.	Yes	<p>FirstEnergy Corp. has the following additional comments and suggestions. We thank RFC and the SDT members for taking time out of their schedule to meet with FirstEnergy regarding some questions we had on the implementation plan. We now understand, without question, what dates must be met for compliance. As a suggestion for further improvement in Section A.5 of the standard, it may be beneficial to the rest of industry if it included the specific dates of all approvals and compliance monitoring implementation. For example, the standard implementation plan states: "For units required to be verified annually per Requirement 1, the compliance monitoring implementation period will begin 30 calendar days following the first summer peak period that begins at least 60 calendar days following the effective date." This equates to the entity being compliant on October 1, 2010 and must be prepared to show Summer 2010 verification values. We ask the SDT to consider a revision to section A.5. which currently states "Effective Date: Upon Board Approval" so that it is clear what the key approval and compliance dates are. We suggest the following wording:KEY DATES:RFC Board of Directors Approval: 8-27-09RFC Effective (the date compliance monitoring begins for RFC member entities): 10-1-10 (requires evidence of 2010 Summer Peak verification for units required to be annually verified); 10-1-15 (requires evidence of 2010, 2011, 2012, 2013, 2014 or Summer 2015 verification for units required to be verified every five years)NERC Board of Trustees Approval: TBDNERC Effective (the date compliance monitoring begins for NERC registered entities in those jurisdictions that do not require regulatory approval): TBDFERC Approval: TBDFERC Effective (the date compliance monitoring begins for NERC registered entities in those jurisdictions that require regulatory approval): TBDThen, the "TBD shown under NERC and FERC approvals above could be replaced once the NERC BoT and FERC approvals are obtained and the effective dates would follow the same timeline that was used for the RFC effective dates for</p>

Consideration of Comments on Regional Reliability Standard MOD-024-RFC-01

Organization	Yes or No	Question 5 Comment
		annual and five-year units. Furthermore, we feel that the suggested changes above could be made without the need for any further vetting through industry and the standard could be balloted through NERC with these dates detailed in the standard.
<p>Response: Thank you for your suggestions. Since the standard is RFC Board approved, any subsequent changes made to the standard must go through the full standards process (via a SAR). RFC has attempted to cover a number of your suggestions through an Implementation Plan guidance document. If at some point this standard goes through the Standards Process again, your suggestions may be considered</p>		
Indiana Municipal Power Agency		No Comments.
US Bureau of Reclamation	No	The equation used for calculating the capacity factor in R 2.2.3 is not consistent with calculation of net capacity factors under NERC GADs. Step C requires " The quotient of the summed summer peak hour net outputs (Step A) divided by the summed Summer Peak Period Hour net maximum capability (Step B) times 100 will yield a single year capacity factor for that year." The correct equation should have been " The quotient times 100 of the summed summer peak hour net outputs (Step A) divided by the summed Summer Peak Period Hour net maximum capability (Step B) times the total hours in the summer peak period will yield a single year capacity factor for that year."
<p>Response: Thank you for your feedback. R2.2.3 Step C has been revised to be consistent with calculation of net capacity factors under NERC GADs. This change is to be considered as errata.</p>		
Midwest ISO	Yes	The NERC defined Planning Authority/Coordinator function has not been in existence for 15 years. To require a large RTO who is registered across multiple regions to trace this information back 15 years when they haven't existed in the Planning Authority/Coordinator function for that same time period seems senseless. Because an RTO's footprint changes with it's membership and considering the fact that some RTO's members did not exist 15 years ago as they do today makes any information gathered beyond the existence of the Planning Authority/Coordinator useless. Instead, we offer the following language consideration for R4.2 to read: "R4.2 Each Planning Coordinator shall make available to each Generator Operator the current and previous 5 years of annual summer and winter peak load dates and times within six months of the end of each summer and winter Peak Period. Each Regional Entity shall make available to each Generator Operator any historical annual summer and winter peak load dates within the previous 15 years during which the Planning Coordinator was not in existence within six months of the end of each summer and winter Peak Period."
<p>Response: The SDT believes that the Planning Coordinators should/may have the data available on an individual company basis and should be able to create a "history" for their footprint as it stands today. Basically, every company in the Planning Coordinator footprint should have this hourly load</p>		

Consideration of Comments on Regional Reliability Standard MOD-024-RFC-01

Organization	Yes or No	Question 5 Comment
<p>data and they should be able to aggregate it to get the Planning Coordinator annual summer and winter peak load dates and times (for the 15 year period). If this data is unavailable, a request for Interpretation may be needed to further clarify.</p>		
Duke Energy	Yes	The proposed standard has more specific criteria for the same requirements covered in a continent-wide standard.
<p>Response: The continent wide NERC standard is still in the drafting phase and may be subject to change.</p>		
Northeast Power Coordinating Council	Yes	This regional standard establishes the procedures to address verification of generator gross and net Reactive Power capability as required in NERC’s MOD-025-1 requirements 1 and 2. For the purpose of developing Regional standards, requirements in those standards should not be included to address market issues required by the region beyond the scope of the standard's purpose, or repeat data requests for facilities not connected to the BES that should already be covered by FERC approved tariffs.
<p>Response: This standard was developed in response to the NERC MOD-024-1 standard (not MOD-025-1). The MOD-024-RFC-01 standard does not require verifications of units not connected to the BES (unless specific units fall under III.c.3 or III.c.4 of the NERC Statement of Compliance Registry Criteria for Generator Operators).</p>		
American Electric Power	No	<p>While the continent-wide standard requires that REs provide these types of requirements, the continent-wide standard standard is currently under revision. While other REs have delayed their final work and submission of a standard until the continent-wide standard has been finalized, RFC has continued forward without the benefit of the revised standard. Since the standard is already applicable to RFC members, we recommend that NERC remand this standard back to RFC so that the resulting revision of the continent-wide standard can be thoroughly considered. Furthermore,</p> <p>AEP is concerned that while the standard articulates requirements for testing, it does not specify a commensurate benchmark that we are testing to, acceptable deviation from the benchmark, and procedures for handling a “failed” test. The RRO must know of and use the capabilities of the member generating units; when testing reveals values that are not consistent with expectations of the RRO, it would seem appropriate that a trigger level and processes be identified for the explanation, re-test, and/or submission of a modified capability statement. For example, under the former ECAR requirements, we would test to or in excess of the unit capabilities stated in the ECAR “Uniform Rating of Generation Equipment Report”. Based on the results of the actual performance tests, we would reassess those ratings and notify ECAR of recommended changes.</p>
<p>Response: The SDT is moving forward with this standard for several reasons; (1) The associated standard at the NERC level may yet take a</p>		

Organization	Yes or No	Question 5 Comment
		<p>considerable amount of time to complete and RFC needs to comply with the fill in the blank requirements of the existing NERC standard, (2) RFC standard work continues to supply input into the NERC MOD-024 development. (3) Replacement of the legacy documents is required in the RFC Bylaws and will address ambiguities, inconsistencies and deficiencies of those documents, (4) This standard development was based on a SAR developed by the Day Two team, (5) Completion of this standard is consistent with RFC Strategic Plan following direction provided by the ReliabilityFirst Board.</p> <p>The purpose of the verification is to simply verify the units' capability (on a consistent basis). The SDT does not believe anything is gained by requiring verification to a preselected value. It is up to the individual GOP to determine whether or not a unit had "failed" a verification or test. If the GOP determined a unit had "failed" a verification or test, they always have the option of re-verifying the unit (as long it is verified within the periodicity requirements).</p>