Consideration of Comments

Project 2010-03 Modeling Data (MOD B)

The Project 2010-03 Drafting Team thanks all commenters who submitted comments on the draft MOD-033-1 standard. These standards were posted for a 45-day public comment period through January 21, 2014. Stakeholders were asked to provide feedback on the standards and associated documents through a special electronic comment form. There were 32 sets of comments, including comments from approximately 106 different people from approximately 54 companies representing 9 of the 10 Industry Segments as shown in the table on the following pages.

All comments submitted may be reviewed in their original format on the standard's project page.

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, Mark Lauby, at 404-446-2560 or at mark.lauby@nerc.net. In addition, there is a NERC Reliability Standards Appeals Process.[1]

[1] The appeals process is in the Standard Processes Manual: http://www.nerc.com/comm/SC/Documents/Appendix_3A_StandardsProcessesManual.pdf

Index to Questions, Comments, and Responses

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

Group/Individual		Commenter	Organization	Registered Ballot Body 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.	David Burke	Orange and Rockland Utilities Inc.	NPCC	3
3.	Greg Campoli	New York Independent System Operator	NPCC	2
4.	Sylvain Clermont	Hydro-Quebec TransEnergie	NPCC	1
5.	Chris de Graffenried	Consolidated Edison Co. of New York, Inc.	NPCC	1
6.	Gerry Dunbar	Northeast Power Coordinating Council	NPCC	10
7.	Mike Garton	Dominion Resources Services, Inc.	NPCC	5
8.	Kathleen Goodman	ISO - News England	NPCC	2
9.	Michael Jones	National Grid	NPCC	1

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
				1	2	3	4	5	6	7	8	9	10

	Additional Member	Additional Organization	Region	Segment Selection
10.	Helen Lainis	Independent Electricity System Operator	NPCC	2
11.	Ayesha Sabouba	Hydro One Networks Inc,	NPCC	1
12.	Michael Lombardi	Northeast Power Coordinating Council	NPCC	10
13.	Bruce Metruck	New York Power Authority	NPCC	6
14.	Mark Kenny	Northeast Utilities	NPCC	1
15.	Christina Koncz	PSEG Power LLC	NPCC	5
16.	David Ramkalawan	Ontario Power Generatiuon, Inc,	NPCC	5
17.	Randy MacDondald	New Brunswick Power Transmission	NPCC	9
18.	Silvia Parada Mitchell	NextEra Energy, LLC	NPCC	5
19.	Lee Pedowicz	Northeast Power Coordinating Council	NPCC	10
20.	Robert Pellegrini	The United Illuminating Company	NPCC	1
21.	Si Truc Phan	Hydro-Quebec TransEnergie	NPCC	1
22.	Brian Robinson	Utility Services	NPCC	8
23.	Brian Shanahan	National Grid	NPCC	1
24.	Wayne Sipperly	New York Power Authority	NPCC	5
25.	Ben Wu	Orange and Rockland Utilities Inc.	NPCC	1
26.	Peter Yost	Consolidated Edison Co. of new York, Inc.	NPCC	3

Group/Individual		Commenter	Organization	1	2	3	4	5	6	7	8	9	10
2.	Group	Janet Smith	Arizona Public Service	X		X			X				

No Additional Responses

Group/Individual		Commenter	Organization	1	2	3	4	5	6	7	8	9	10
3.	Group	Andrea Jessup	Bonneville Power Administration	X		X		X	X				

	Additional Member	Additional Organization	Region	Segment Selection
1.	Karl Fraughton	Transmission Grid Modeling	WECC	1
2.	Dmitry Kosterev	Transmission Planning	WECC	1

Group/Individual		Commenter	Organization	1	2	3	4	5	6	7	8	9	10
4.	Group	Doug Hohlbaugh	FirstEnergy	X		X	X	X	X				

	Additional Member	Additional Organization	Region	Segment Selection
1.	Bill Smith	FE RBB - Segment 1	RFC	1
2.	Cindy Stewart	FE RBB - Segment 3	RFC	3
3.	Doug Hohlbaugh	FE RBB - Segment 4	RFC	4
4.	Ken Dresner	FE RBB - Segment 5	RFC	5
5.	Kevin Querry	FE RBB - Segment 6	RFC	6

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
				1	2	3	4	5	6	7	8	9	10

6. Brian Hallett	FE Transmission	RFC	1
7. Marissa McLean	FE Transmission	RFC	1
8. Ed Baznik	FE Transmission	RFC	1

Group/Individual		Commenter	Organization	1	2	3	4	5	6	7	8	9	10
5.	Group	Shannon V. Mickens	SPP Standards Review Group		X								

Additional Member	Additional Organization	Region	Segment Selection
1. Jim Nail	Independence Power and Light	SPP	3
2. Kevin Nincehelser	Westar	SPP	1, 3, 5, 6
3. Bo Jones	Westar	SPP	1, 3, 5, 6
4. Tiffany Lake	Westar	SPP	1, 3, 5, 6
5. Mo Awad	Westar	SPP	1, 3, 5, 6
6. Robert Rhodes	SPP	SPP	2

Group/Individual		Commenter	Organization	1	2	3	4	5	6	7	8	9	10
6.	Group	Michael Lowman	Duke energy	X		X		X	X				

Additional Member	Additional Organization	Region	Segment Selection
1. Doug Hils		RFC	1
2. Lee Schuster		FRCC	3
3. Dale Goodwine		SERC	5
4. Greg Cecil		RFC	6

Group/Individual		Commenter	Organization	1	2	3	4	5	6	7	8	9	10
7.	Group	Connie Lowe	Dominion	X		X		X	X				

Additional Member	Additional Organization	Region	Segment Selection
1. Louis Slade		RFC	5, 6
2. Mike Garton		NPCC	5, 6
3. Randi Heise		MRO	5, 6
4. Michael Crowley		SERC	1, 3, 5, 6

Group/Individual		Commenter	Organization	1	2	3	4	5	6	7	8	9	10
8.	Group	Tom McElhinney	JEA	X		X		X					

Additional Member	Additional Organization	Region	Segment Selection
1. Ted Hobson		FRCC	1
2. Garry Baker		FRCC	3
3. John Babik		FRCC	5

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
				1	2	3	4	5	6	7	8	9	10
9.	Group	Frank Gaffney	Florida Municipal Power Agency	X		X	X	X	X				

	Additional Member	Additional Organization	Region	Segment Selection
1.	Tim Beyrle	City of New Smyrna Beach	FRCC	4
2.	Jim Howard	Lakeland Electric	FRCC	3
3.	Greg Woessner	Kissimmee Utility Authority	FRCC	3
4.	Lynne Mila	City of Clewiston	FRCC	3
5.	Cairo Vanegas	Fort Pierce Utility Authority	FRCC	4
6.	Randy Hahn	Ocala Utility Services	FRCC	3
7.	Don Cuevas	Beaches Energy Services	FRCC	1
8.	Stan Rzad	Keys Energy Services	FRCC	1
9.	Mark Schultz	Green Cove Springs	FRCC	3

Group/Individual		Commenter	Organization	1	2	3	4	5	6	7	8	9	10
10.	Group	Allen Schriver	North American Generator Forum - Standards Review Team (NAGF-SRT)					X					

	Additional Member	Additional Organization	Region	Segment Selection
1.	Joe O'Brien	NIPSCO	RFC	5
2.	Dana Showalter	E.ON Climate & Renewables	ERCOT	5

Group/Individual		Commenter	Organization	1	2	3	4	5	6	7	8	9	10
11.	Group	Ben Engelby	ACES Standards Collaborators						X				

	Additional Member	Additional Organization	Region	Segment Selection
1.	John Shaver	Arizona Electric Power Cooperative/Southwest Transmission Cooperative, Inc.	WECC	1, 4, 5
2.	Bob Solomon	Hoosier Energy Rural Electric Cooperative, Inc.	RFC	1
3.	Shari Heino	Brazos Electric Power Cooperative, Inc.	ERCOT	1, 5
4.	Amber Skillern	East Kentucky Power Cooperative	SERC	1, 3, 5

Group/Individual		Commenter	Organization	1	2	3	4	5	6	7	8	9	10
12.	Group	Dennis Chastain	Tennessee Valley Authority	X		X		X	X				

	Additional Member	Additional Organization	Region	Segment Selection
1.	Marjorie Parsons		SERC	6
2.	Robbie Bottoms		SERC	1
3.	Tom Cain		SERC	1

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
				1	2	3	4	5	6	7	8	9	10

4. DeWayne Scott		SERC	1
5. Ian Grant		SERC	3
6. David Thompson		SERC	5

13.	Group	Greg Campoli	ISO/RTO COuncil Standards Review Committee		X								

Additional Member	Additional Organization	Region	Segment Selection
1. Al DiCaprio	PJM	RFC	2
2. Kathleen Goodman	ISO-NE	NPCC	2
3. Ben Li	IESO	NPCC	2
4. Terry Bilke	MISO	MRO	2
5. Cheryl Moseley	ERCOT	ERCOT	2
6. Charles Yeung	SPP	SPP	2

14.	Individual	David Jendras	Ameren	X		X		X	X				
15.	Individual	Thomas Foltz	American Electric Power	X		X		X	X				
16.	Individual	Andrew Z. Pusztai	American Transmission Company	X									
17.	Individual	Scott Langston	City of Tallahassee	X									
18.	Individual	Bill fowler	City of Tallahassee			X							
19.	Individual	Karen Webb	City of Tallahassee - Electric Utility					X					
20.	Individual	Lance Bean	Consumers Energy Company			X		X					
21.	Individual	Don Idzior	Consumers Energy Company			X	X	X					
22.	Individual	John	Falsey					X					
23.	Individual	Eric Bakie	Idaho Power Company	X									
24.	Individual	Michael Falvo	Independent Electricity System Operator		X								
25.	Individual	Kathleen Goodman	ISO New England Inc.		X								
26.	Individual	Brett Holland	Kansas City Power & Light	X		X		X	X				
27.	Individual	Shirley Mayadewi	Manitoba Hydro	X		X		X	X				
28.	Individual	Joe O'Brien	NIPSCO	X		X		X	X				

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
				1	2	3	4	5	6	7	8	9	10
29.	Individual	Scott Brame	North Carolina Electric Membership Corporation	X		X	X	X					
30.	Individual	Laurie Williams	PNM -Public Service Company of New Mexico	X		X							
31.	Individual	Anthony Jablonski	ReliabilityFirst										X
32.	Individual	Alice Ireland	Xcel Energy	X		X		X	X				

If you support the comments submitted by another entity and would like to indicate you agree with their comments, please select "agree" below and enter the entity's name in the comment section (please provide the name of the organization, trade association, group, or committee, rather than the name of the individual submitter).

Summary Consideration: See summary consideration to Question 1, below.

Organization	Agree	Supporting Comments of “Entity Name”
N/A		

1. ***In draft 2 of proposed MOD-033-1 (Steady-State and Dynamic System Model Validation), Requirement R1, part 1.2, required "Comparison of the performance of the Planning Coordinator's portion of the existing system in a planning dynamic model to actual system response, through simulation of a dynamic local event, at least once every 24 calendar months. If no dynamic local event occurs within the 24 calendar months, use the next dynamic local event that occurs." In response to comments, the SDT agreed that some might benefit from additional clarity of the SDT's intent in part 1.2. In response, the SDT confirms that the intent of the requirement is to complete comparison using a dynamic local event within 24 months of the last dynamic local event used in comparison and to complete each comparison within 24 months of the dynamic local event. The SDT has rephrased part 1.2 to clarify the intent of the requirement to ensure that it is clear that a PC will not face a timing scenario that makes it impossible to comply. Specifically, the SDT added language to clarify that the reference of "at least once every 24 calendar months" means that the PC must "use a dynamic local event that occurs within 24 calendar months of the last dynamic local event used in comparison, and complete each comparison within 24 calendar months of the dynamic local event." This was the only change in the standard that may be substantive. Do you agree with the clarification? If not, please provide suggested alternative clarifications.***

Summary Consideration: The following is a summary consideration of the comments indicated below. Consistent with the NERC Standards Processes Manual, an individual response following each comment is not provided, and the team instead provides a summary response to each issue not previously considered and responded to from previous comment periods.

The 2010-03 Modeling Data Standard Drafting Team (SDT) thanks all participants for their feedback in finding ways to improve the proposed MOD-033-1 Reliability Standard. The SDT carefully considered all comments in determining whether to make changes to the standard, and this is a summary explanation of the SDT's deliberations. At this stage, the drafting team has reached a point where it has made a good faith effort at resolving applicable objections, and it has not made any substantive changes to MOD-033-1 since posting draft three. Therefore, the team is posting MOD-033-1 and its corresponding implementation plan for a final ballot.

In response to draft two, the SDT made one minor, but substantive, change to the language in Requirement R1, part 1.2, to address a specific timing concern that would have potentially and inadvertently created a situation where an entity would not have adequate time to perform its obligation under the requirement. The standard had otherwise achieved an approval rating that reflected industry consensus of more than two-thirds approval. In response to this change, some commenters agreed with the SDT that the change corrected the impossibility of collecting data and completing an analysis for a dynamic local event occurring in, for example, month 23 since the previous dynamic local event.

Some commenters provided comments that have already been considered and responded to during previous comment periods, and the SDT consideration and response to those issues remains the same. As noted above, the SDT believes that the majority of items

affecting consensus have been resolved, and the language in the standard reflects a consensus position. The suggestions for edits or changes already considered included topic areas such as, but not limited to, defining "dynamic local event," whether a standard is necessary, the scope of the standard, the timelines and details about Requirement R1 or Requirement R2, specific requirement language details, and that comparisons be conducted on less frequent intervals. One entity asserted that its comment from the last comment period relating to paragraph 81, duplication with other standards, the reliability need for validation, and suggesting a data request were not considered by the SDT. The SDT reviewed those previous comments and confirmed that those issues are discussed in summary response to the previous comment periods.

Rather than repeating those topics in this document, please refer to the response to comments from the previous two comment periods, which discusses each individual issue in detail. Both are posted on the Project 2010-03 SDT's project page. Draft one is located here:

http://www.nerc.com/pa/Stand/Project%20201003%20Modeling%20Data%20MOD%20B/Project_2010-03_Modeling_Data_Summary-of_Comments_2013-1007.pdf

And the response to comments from draft two is located here:

http://www.nerc.com/pa/Stand/Project%20201003%20Modeling%20Data%20MOD%20B/Project_2010-03_Modeling_Data_Summary-of_Comments_draft2_2013_1205.pdf

A few commenters asked for clarity or further changes regarding the 24 month timelines in Requirement R1 so that entities have flexibility to choose which dynamic local event they use, or that they are not forced to use a particular dynamic local event that occurs shortly after a previously used one. A few commenters indicated that the language may be confusing. Some commenters provided specific suggestions to change the language. The SDT did not make changes to the language, but explains that the requirement does provide such requested flexibility, as the parenthetical is read with the rest of part 1.2. Specifically, the dynamic local event chosen for comparison must be within 24 calendar months of the last chosen dynamic local event (but an entity may chose which one, so long as the 24 month time parameter is met, with other considerations for instances where the time between dynamic local events may exceed 24 calendar months), and once a dynamic local event is chosen for comparison, an entity must complete the comparison on that dynamic local event within 24 calendar months. On the issue of changing the wording of the parenthetical in part 1.2, the SDT notes that the language was heavily coordinated to reach a consensus point. The SDT appreciates the suggestions and has given them consideration. However, given the purpose of the requirement and the support reflected in the ballot for the current wording, changes to the language as suggested may not support the consensus position, and the SDT did not adopt them (with the exception of changing the capitalization of the word "use" to lowercase).

An entity provided suggested edits to the Compliance Section of the standard and suggested minor changes to specific words or phrases. The SDT notes that the Compliance Section language is similar to use in other standards under development, but also

confirms the commenter's understanding of the obligation under the requirements compared to the measures, and it did not make a change. However, the SDT is passing along this comment as a suggestion to ensure consistency in standards and projects under development. The other minor specific changes suggested by the entity concerned two minor typographical errors, and the SDT has made those corrections.

A commenter pointed out that the Purpose of MOD-033-1 refers to "the interconnected transmission system," but that Requirement R1 refers to "local event," and the entity asks for clarification of the differences. The SDT believes that when all Planning Coordinators in an Interconnection perform the comparisons required by the standard with local events, eventually, the model for the interconnected transmission system will be maintained with validated data.

One entity asked the SDT to comment on the scenario when entities choose very large differences as a threshold for "unacceptable" in Requirement R1 if the entity does not believe low comparison differences are unacceptable. The SDT notes that the requirement language specifies that entities must implement a process for data validation, which includes that comparisons occur within certain time parameters. As mentioned above, the SDT believes that by performing validations under the requirement, the model for the interconnected transmission system will be maintained with validated data, and those validations may help an entity determine instances of differences that are unacceptable to the entity. The SDT maintains that the Planning Coordinators are in the best position to determine when differences between expected performance and actual system behavior are unacceptable, and the requirement expects an entity to have guidelines it will use to make that determination. But the determination is one the Planning Coordinator must make. As the standard states in the "Guidelines and Technical Basis" section of the standard, "the guidelines the PC includes within its documented validation process should be meaningful for the Planning Coordinator's system. Guidelines for the dynamic event comparison may be less precise. Regardless, the comparison should indicate that the conclusions drawn from the two results should be consistent."

Organization	Yes or No	Question 1 Comment
Arizona Public Service	No	We propose the following redline to the standard in order to make the intent of the Standard clear. 1.2. Comparison of the performance of the Planning Coordinator's portion of theexisting system in a planning dynamic model to actual system response, throughsimulation of a dynamic local event, at least once every 24 calendar months (Usea dynamic local event that occurs within 24 calendar months of the last dynamiclocal event used

Organization	Yes or No	Question 1 Comment
		in comparison and complete each comparison within 24calendar months of the dynamic local event). If no dynamic local event occurswithin the 24 calendar months, use the next dynamic local event that occurs in the future, then perform a comparison within 24 months of that event.
Response:		
Duke energy	No	Duke Energy suggests revising the parenthetical in R1.2 to read as follows"(Use a dynamic local event that occurs 24 calendar month and complete that comparison within 24 calendar months of the dynamic local event)."This allows the PC the flexibility to choose which dynamic local event to use during the 24 month period if multiple dynamic local events occur in that 24 month period.
Response:		
JEA	No	In support of our negative vote, we would like to maintain our comments from our last vote.
Response:		
ACES Standards Collaborators	No	(1) Model validation is a good topic for a technical guideline document. We recommend that the drafting team consider other alternatives to developing a standard and work with the NERC Planning Committee to issue a guideline in lieu of a standard.The drafting team also concedes that "validation of model data is a good utility practice, but it does not easily lend itself to Reliability Standards requirement language. Furthermore, it is challenging to determine specifications for thresholds of disturbances that should be validated and how they are determined." If this persists as a standard, we recommend that the drafting team provide some sort of threshold of disturbances and technical justification. There is too much

Organization	Yes or No	Question 1 Comment
		ambiguity in the current language of the requirement.(2) For Requirement R1, Parts 1.1 and 1.2, what is the technical justification for performing simulations once every 24 months? Without technical justification for the 24 months, this timeline appears to be arbitrary. We continue to ask the drafting team to provide a rationale.(3) The new parenthetical is R1, part 1.3 "(Use a dynamic local event that occurs within 24 calendar months of the last dynamic local event used in comparison and complete each comparison within 24 calendar months of the dynamic local event)" is confusing. We recommend revising the language for clarity.(4) For Requirement R1, Part 1.3 needs to be modified to remove the clause "unacceptable differences in performance" because this language is ambiguous. The compliance guidance states that an entity will be required to include documented guidelines to determine whether the differences are unacceptable. These guidelines are subjective and open to multiple interpretations as to what unacceptable differences in performance actually are and there could be inconsistent application during an audit. (5) For Requirement R2, this requirement meets Paragraph 81 criteria because it is administrative, focuses on data collection activities, and requires periodic updates that do not directly support reliability. Furthermore, we cannot fathom a situation in which an RC or TOP would refuse to provide data to their associated PC for the purposes of improving their modeling. This is particularly true given that almost all PCs are also registered as RCs and TOPs. Today the NERC registry shows there are 81 registered PCs. Of these 81, only 4 are not also registered as a TOP or RC. All four of these are part of a larger system in which models are developed primarily by larger. For example, three are located in Georgia and are part of the Georgia Integrated Transmission System that is jointly planned. The last remaining one is part of a joint action agency in Florida which is usually integrated into larger system. The bottom line is that this requirement is further obviated by the fact the PCs can get the necessary modeling information internally.

Organization	Yes or No	Question 1 Comment
		We continue to request that the drafting team reference the P81 criteria and provide rationale why the requirement should remain in the standard. After our review of the criteria, we have determined that the requirement be struck in its entirety. (6) In regard to the statement by NERC Compliance in its guidance document, “Following final approval of the Reliability Standard, Compliance will develop the final Reliability Standards Auditor Worksheet (RSAW) and associated training.” What training will NERC compliance develop? Is this training for industry or auditors? Is this training the type of how to comply with the standard? This would be helpful to industry in preparing for implementing a new standard. However, we would strongly disagree that this should be a standard that requires enforceable training requirement.(7) We request that a draft RSAW be developed and published with the standard. The compliance guidance is helpful, but does not provide enough details. We request additional guidance on how this standard will be audited. (8) Thank you for the opportunity to comment.
Response:		
American Electric Power	No	After further review, AEP now believes that R2 is too open-ended in both data requested and potential format, especially given that only 30 days is being afforded to provide that data. MOD-032-1 added the text “unless a longer time period is agreed upon” to allow flexibility, and we believe similar verbiage should be added to MOD-033-1 as well. AEP disagrees with the response given by the team in its consideration of comments where it states that providing the data would not be unduly burdensome as it “only requires the TOP to provide any real time data that it has for a specific event or disturbance…”. As written, the requirement provide no bounds on what data could be requested, nor in what format. As a result, some requests could conceivably be quite burdensome and/or too difficult to provide within thirty days. The recommended text would provide the

Organization	Yes or No	Question 1 Comment
		flexibility necessary for both parties to agree on the amount of time needed to provide the data. In addition, AEP believes that performing comparisons every 24 months is unnecessarily excessive, and instead recommends the period be established as 60 months.Due to the concerns provided, and after further consideration, AEP has decided to vote negative on this proposed standard.
Response:		
City of Tallahassee	No	R1.2: the standard should provide guidance as to the scope of an acceptable event and parameter better defining the term local.R1.3: the language does not provide for consistency across differing PCs in a geographic region. (See comment R1.2)R1.4: the language does not provide for consistency across differing PCs in a geographic region (see comment R1.2)
Response:		
City of Tallahassee - Electric Utility	No	R1.2 -The standard should provide guidance as to the scope of an acceptable event and parameter better defining the term local. R1.3 The language does not provide for consistency across differing PCs in a geographic region (see comment R1.2) 1.4 - The language does not provide for consistency across differing PCs in a geographic region (see comment R1.2)
Response:		
Consumers Energy Company	No	The measurement R1 does not provide enough guidance. Here are some quotes from R1 that demonstrate what I mean ‘does not prescribe a specific method or procedure for the validation’, ‘the outcome is left to the judgment of the Planning Coordinator’ , ‘entities are encouraged to perform

Organization	Yes or No	Question 1 Comment
		the comparison on a more frequent basis’, the Planning Coordinator may consider among the other criteria’ ‘ may include comparisons of'. In summary, MOD-0330-1 as written is too vague. For this reason, the Consumers Energy ballot body is voting negative on MOD-033-1.
Response:		
Consumers Energy Company	No	MOD-33-1 is a standard that requires a data validation process. The measurement R1 does not provide enough guidance. Here are some quotes from R1 that start on page 13 of Model_ Validation_REDLINE_2013_1205.pdf that demonstrate what I mean "does not prescribe a specific method","entities are encouraged to perform the comparison on a more frequent basis", "the Planning Coordinator may consider among the other criteria", "may include simulations of". MOD-033-1 is too vague as written.
Response:		
ISO New England Inc.	No	The change does not clarify other aspects of this requirement. For example, this draft does not define “dynamic local event.” Also, the Purpose refers to “the interconncected transmission system” but R1 refers to “local event” so these differences should be clarified. Here are some suggested changes to this draft that might address these issues:Purpose: To establish consistent validation requirements to facilitate the collection of accurate data and building of planning models to analyze the reliability of that portion of the interconnected transmission system for which the Planning Authority, Planning Coordinator, Reliabiltiy Coordinator, or Transmission Operator is responsible.Define “dynamic local event” as “dynamic local event as determined by the the Planning Authority, Planning Coordinator, Reliabiltiy Coordinator, or Transmission Operator”

Organization	Yes or No	Question 1 Comment
Response:		
Kansas City Power & Light	No	Although I appreciate the drafting team's attempt at clarification of the standard, I believe that further modifications are necessary. First, I question why the clarification was inserted in parentheses and the placement of the clarification in general. Also, I have additional concerns regarding the following situation:Dynamic local event A occurs and the Planning Coordinator, according to R1.2, initiates the comparison of the model to actual system response. Dynamic local event B occurs the following month. There are no additional dynamic local events in the following 23 months. In this situation, the comparisons would have to be almost concurrent, forcing the Planning Coordinator to do twice as many comparison as otherwise required. Also, if the Planning Coordinator decided to wait to see if another event occurred within the 24 month period after event A, there would only be one month remaining in the 24 month period to complete the comparison.In order to prevent the Planning Coordinator from having to perform concurrent comparison, I would suggest inserting a minimum along with the maximum time between events.
Response:		
NIPSCO	No	We think that for comparisons 24 months is too frequent; 5 years would be adequate.
Response:		
PNM -Public Service Company of New Mexico	No	PNM appreciates the SDT's efforts to clarify R1.2 since the last version of the standard. As a registered PA/PC, PNM is still unclear on how to determine compliance with the requirement to perform an assessment every 24 months unless "no dynamic local event" occurs. The way the standard is worded appears to suggest that an entity could be compliant

Organization	Yes or No	Question 1 Comment
		with the Standard as long as when a local event occurs, it is used to validate the models within 24 months of the event's occurrence. As an auditor, the last sentence in R1.2 seems to nullify, in the circumstance where no local event occurs, the requirement to perform at least one validation every 24 months. If the intent of the Standard is to only require a validation of dynamic local events within 24 months of their occurrence, PNM suggests removing the once every 24 month aspect of the requirement or alternatively, establishing a maximum amount of time that can occur between validations. For the latter, PNM submits the following modification to R1.2 for the SDT's consideration:1.2. Comparison of the performance of the Planning Coordinator's portion of the existing system in a planning dynamic model to actual system response, through simulation of a dynamic local event at least once every 24 calendar months ...[delete text from original R1.2]... There shall be no more than [5?] calendar years between performance of validations performed pursuant to R1.2.PNM does not have a preference as to how frequently the validations must be performed, but sees a reliability need to ensure they are performed on some regular basis. The current R1.2 language may be too vague to ensure consistent enforcement among auditors and Regions. PNM agrees with the SDT's approach that 'dynamic local event' should not be a defined NERC term as defining this might put the Auditor in the position of having to somehow verify dynamic local events which would be burdensome without a corresponding improvement to BES reliability. However, it seems unlikely that a PA/PC would not experience an event at least once every 24 months given the brief guideline in the Standard which states, "a dynamic local event is a disturbance of the power system that produces some measureable transient response..."
Response:		

Organization	Yes or No	Question 1 Comment
ReliabilityFirst	No	ReliabilityFirst has concerns over the new parenthetical language added to Requirement R1, Part 1.2 and requests the rationale for these additions. Specifically ReliabilityFirst has concerns with the 24 month periodicity in which a comparison needs to be completed. ReliabilityFirst believes the comparison should be completed as soon as possible (but not more than six months) following a dynamic local event. ReliabilityFirst also believes Requirement R1, Part 1.2 should be split up (thus creating a new Part 1.3) and deleting the last sentence regarding no dynamic local event occurring. With the description of the “dynamic local event” contained in the background portion of the standard, there should always be at least one event the Planning Coordinator may choose that may be validated within the two-year period. ReliabilityFirst offers the following for consideration:1.2 Comparison of the performance of the Planning Coordinator’s portion of the existing system in a planning dynamic model to actual system response, through simulation of a dynamic local event, at least once every 24 calendar months (Use a dynamic local event that occurs within 24 calendar months of the last dynamic local event used in comparison). 1.3 Comparison shall be completed within six calendar months of the dynamic local event.
Response:		
FirstEnergy	Yes	FirstEnergy (FE) agrees that the change made by the SDT provides additional clarity as to when the validation required by the standard must be completed by the Planning Coordinator. FE’s Negative ballot position is based on our prior draft comments that remain concerns. Specifically, the standard is heavily dependent on the "documented data validation process" written by the PC. The standard is generally very vague and generic and provides very limited particulars and/or specifics. We support the validation effort, however, it should be limited to near-term (year one)

Organization	Yes or No	Question 1 Comment
		models since longer term models may differ greatly in modeling assumptions such as load, generation dispatch and interchange flows.
Response:		
SPP Standards Review Group	Yes	We suggest deleting the phrase “..., and M1 through M2,...” as shown in the second paragraph of R1.2 in the Compliance Section. As written this sentence implies that the applicable entity must be compliant with the Measures of the Requirments. That is not the case. Applicable entities are required to demonstrate compliance with the Requirements. The Measures provide examples of what types of evidence can be used to show compliance with the requirements. In the second line in the second paragraph in the Rationale Box for R2, insert an “a” between “at” and “generator”. In the first bullet at the bottom of Page 13 in the Guidelines and Technical Basis section, delete the “s” on “Voltages”.
Response:		
North American Generator Forum - Standards Review Team (NAGF-SRT)	Yes	Although the NAGF-SRT agrees with the clarification, the NAGF-SRT submits that the 24 month timeframe is too frequent and should be extended to 5 - 10 years.
Response:		
Tennessee Valley Authority	Yes	The burden of this standard is well beyond what most might think it is.
Response:		
Ameren	Yes	We believe that this clarification should address concerns regarding the impossibility of collecting data and completing an analysis for a dynamic local event occurring in month 23 since the previous dynamic local event.

Organization	Yes or No	Question 1 Comment
Response:		
Manitoba Hydro	Yes	Although Manitoba Hydro is in general agreement with the standard, we have the following comments:(1) R1 - this part actually incorporates two actions 1) that the Planning Coordinator document a data validation process and 2) that the Planning Coordinator implement such documented process. As written, they are intertwined. (2) R1, 1.2 - punctuation is missing before the bracketed sentence. It might read better to delete the brackets and delete the word ‘Use’ and replace with ‘using’ to make the bracketed sentence part of the comparison requirement rather than a separate instruction. (3) R1, 1.4 - the words ‘the Planning Coordinator will use’ should be inserted after ‘Guidelines’. (4) M2 - notification should more appropriately be ‘a written request’ to be consistent with the requirement language. (5) Compliance 1.3 - a change was made to this language but it did not address our original concern. The language still refers specifically to a process found in the NERC Rules of Procedure. Manitoba Hydro has only adopted certain portions of the NERC Rules of Procedure. The typical language found in standards in this section (that just lists possible processes) is preferable for consistency with the other standards.
Response:		
North Carolina Electric Membership Corporation	Yes	(1)Model validation is a good topic for a technical guideline document and we would have preferred that the drafting team consider other alternatives to developing a standard and work with the NERC Planning Committee to issue a guideline in lieu of a standard.The drafting team also concedes that “validation of model data is a good utility practice, but it does not easily lend itself to Reliability Standards requirement language. Furthermore, it is challenging to determine specifications for thresholds of disturbances that should be validated and how they are determined.” We fully understand

Organization	Yes or No	Question 1 Comment
		why the drafting team persists that this be a standard, but we still recommend that the drafting team provide some sort of threshold of disturbances and technical justification as in our opinion, there still remains much ambiguity in the current language of the requirement.(2)For Requirement R1, Parts 1.1 and 1.2, what is the technical justification for performing simulations once every 24 months? Without technical justification for the 24 months, this timeline appears to be arbitrary. We continue to ask the drafting team to provide a rationale.(3)The new parenthetical is R1, part 1.3 "(Use a dynamic local event that occurs within 24 calendar months of the last dynamic local event used in comparison and complete each comparison within 24 calendar months of the dynamic local event)" may be interpreted in various ways by PCs who are attempting to comply with this requirement. Can the drafting team consider providing a little more guidance to the PCs? (4)For Requirement R1, Part 1.3 needs to be modified to remove the clause "unacceptable differences in performance" because this language is ambiguous. The compliance guidance states that an entity will be required to include documented guidelines to determine whether the differences are unacceptable. These guidelines are subjective and open to multiple interpretations as to what unacceptable differences in performance actually are and there could be inconsistent application during an audit. (5)For Requirement R2, this requirement meets Paragraph 81 criteria because it is administrative, focuses on data collection activities, and requires periodic updates that do not directly support reliability. Furthermore, we cannot fathom a situation in which an RC or TOP would refuse to provide data to their associated PC for the purposes of improving their modeling. This is particularly true given that almost all PCs are also registered as RCs and TOPs. Today the NERC registry shows there are 81 registered PCs. Of these 81, only 4 are not also registered as a TOP or RC. All four of these are part of a larger system in which models are developed primarily by larger. For example, three are

Organization	Yes or No	Question 1 Comment
		located in Georgia and are part of the Georgia Integrated Transmission System that is jointly planned. The last remaining one is part of a joint action agency in Florida which is usually integrated into larger system. The bottom line is that this requirement is further obviated by the fact the PCs can get the necessary modeling information internally. We continue to request that the drafting team reference the P81 criteria and provide rationale why the requirement should remain in the standard. After our review of the criteria, we have determined that the requirement be struck in its entirety. (6)In regard to the statement by NERC Compliance in its guidance document, “Following final approval of the Reliability Standard, Compliance will develop the final Reliability Standards Auditor Worksheet (RSAW) and associated training.” What training will NERC compliance develop? Is this training for industry or auditors? Is this training the type of how to comply with the standard? This would be helpful to industry in preparing for implementing a new standard. However, we would strongly disagree that this should be a standard that requires enforceable training requirement.(7)We request that a draft RSAW be developed and published with the standard. The compliance guidance is helpful, but does not provide enough details. We request additional guidance on how this standard will be audited. (8)Thank you for the opportunity to comment.
Response:		
Bonneville Power Administration	Yes	
Dominion	Yes	
ISO/RTO COuncil Standards Review Committee	Yes	
American Transmission Company	Yes	

Organization	Yes or No	Question 1 Comment
City of Tallahassee	Yes	
Falsey	Yes	
Idaho Power Company	Yes	
Independent Electricity System Operator	Yes	
Xcel Energy	Yes	
Florida Municipal Power Agency		Our comments from the last posting were not addressed. Please see FMPA's comments posted on November 20, 2013.
Response:		

Additional Comments:

Seminole Electric Cooperative, Inc.
Michael Haff

COMMENTS

The SDT allows entities to determine what amount of difference is "unacceptable" in Requirement R1 Part 1.3. If an entity does not believe that attempting to verify long-term planning models against actual system responses produces more accurate models, this Requirement appears to allow an entity to state an "unacceptable difference" that an entity may never experience, e.g., 1,000% difference between a model variable and an actual system response, if the entity truly believes that no amount of difference in unacceptable. Can the SDT comment on the scenario when entities choose very large differences due to the fact they do not believe low comparison differences are unacceptable?

END OF REPORT