RFC Reliability Standards Voting Process Comments

BAL-502-RFC-2 Planning Resource Adequacy Analysis, Assessment and Documentation

Comment Period 06/24/2008 through 07/23/2008

1. Do you agree with the Requirements of this proposed standard? If no, provide specific suggestions that would make the requirements acceptable to you.

Name: Kurzynowski, Jeanne M	Organization: Consumers Energy
Phone: 517-788-1110	Department: Trans & Reg Strategies
Segment:	
Answer: No	<u>Comment</u>

R2.3 contains redundant Load forecast characteristics. Load forecast uncertainty is defined as containing load variability due to weather, regional economic forecasts. Recommend deleting bulleted item: R2.3.1 Load forecast characteristics: ? Median (50:50) forecast peak load. ? Load forecast uncertainty. ? Load diversity. ? Seasonal load variations. ? Load variability due to weather, regional economic forecasts, etc. (should be deleted) ? Daily demand modeling assumptions (firm, interruptible). ? Contractual arrangements concerning curtailable/interruptible load. R2.3 requirements R2.3.3 & R2.3.4 are not aligned with the MRO standard. Page 3 of 6 from MRO standard: Standard RES-501-MRO-01 - Planned Resource Adequacy Assessment http://www.midwestreliability.org/04 standards/approved standards/mro standards/RES-501-MRO-01 Final 20071229 Clean.pdf R1.3 Include, at a minimum, documentation of how and why the following were/were not included in the analysis: R1.3.3 Transmission limitations that prevent the delivery of generation reserves. R1.3.3.1 Transmission maintenance outage schedules. R1.3.3.2 Transmission forced outage rates R1.3.3.3 Transmission availability for emergency considering firm commitments Draft Standard BAL-502-RFC-02 V1 R2.3.3 Transmission limitations, including the effect of firm commitments that prevent the delivery of generation reserves (should be moved to section R2.4) R2.3.4 Assistance from other interconnected systems including multi-area assessment considering transmission limitations. (should be moved to section R2.4) R2.4 Consider the following Resource availability characteristics and document how and why they were included in the analysis or why they were not included: R2.3.3 and R2.3.4 should be moved to SECTION R2.4. Another alternative would be to work with MRO and change their standard to the more restrictive RFC version. Typo in section R2.4 R2.4 Consider the following Resource availability characteristics and document how and why they were included in the analysis or why they were not included: ? Any other Demand (Load) Response Programs not included in R2.4.1. Should be: ? Any other Demand (Load) Response Programs not included in R2.3.1.

Name:Kaminski, Vincent FOrganization:Allegheny Electric Cooperative Inc.Phone:717-901-4496Department:Power Supply & EngineerinSegment:Answer:NoComment

The RFC standard is not necessary if the requirements are also covered in a corresponding NERC standard. Otherwise we will have duplicative reporting/standard which couls end up conflicting with each other.

If it is deemed appropriate/necessary to have a RFC standard, it should be revised to clearly reflect that being a signatory to the PJM Reliability Assurance Agreement (or other similar agreement(s)) is deemed to be adequate documentation to demonstrate that the LSE has complied with the requirements of this standard. (MISO members should be able to satify the requirements of the standard by providing the comparable MISO documentation.)

Phone: **217-789-4632** Segment: Answer: **Abstain**

> Name: BEAVERS, HARVIE D Phone: 8142268001

Segment:

Answer: Abstain

Comment

Department: PROJECTS

Organization: PINEY CREEK LP/COLMAC

Based on review of standard, other comments, and the implementation plan, it is unclear that a specific 'new' standard that differs from BAL-502-RFC-1 is required. If 'agreement' exists that 'honors' existing methods of resource analysis, adequacy, assessment, and documentation exist, and BAL-502-RFC-1 was 'approved' with those recognized, the only update would be addition of the severity levels. If no such agreement exists, then this standard appears to be needed, but needs some administrative correction so that the acronyms are identified similer to how Reliability First Corporation (RFC) is in the purpose section. After that the acronyms are sufficient.

Name: Ness, Thad K Phone: 614-716-2053 Segment: Answer: No Organization: **AEP** Department: **Regulatory Services**

Comment

The SDT has perpetuated in its draft standard the existence of the Planning Reserve Sharing Group function and pseudo-entity. This must be addressed.

The PRSG is not a functional entity defined by NERC. The PRSG is assumed to be a collective set up by a group of LSEs to perform the specific functions defined in the standard, but it does not have any standing of its own for compliance purposes.

The LSEs are presumed to have the ultimate responsibility for the PRSG functions. However, in general, a Load Serving Entity will not have the expertise to carry out or even closely monitor the functions being delegated to the PRSG.

The functions presumed to be carried out by the PRSG for the LSEs are not defined as LSE functions in NERC's functional model, either in existing version 3 or in proposed version 4. These functions belong to the Planning Coordinator under version 3 and to the Transmission Planner under version 4.

Among the currently defined tasks and relationships of the Planning Coordinator are the following that are assigned to the PRSG in this standard:

Ensures a plan (generally one year and beyond) is available for adequate resources within a Planning Coordinator Area.

1. Maintain and develop methodologies and tools for the analysis and development of resource adequacy plans.

2. Define information required for planning purposes, consolidate and collect or develop

such information, including:

- b. Demand and energy forecasts, capacity resources, and demand response programs.
- c. Generator unit performance characteristics and capabilities.

d. Long-term capacity purchases and sales.

3. Evaluate, develop, document, and report on resource - plans for the Planning Coordinator Area. Integrate the respective plans and verify that the integrated plan meets reliability standards, and, if not, report on potential - resource adequacy deficiencies and provide alternative plans to mitigate identified deficiencies. d. Monitor and evaluate - resource plan implementation.

4. Coordinate with adjoining Planning Coordinators so that system models and resource - expansion plans take into account modifications made to adjacent Planning Coordinator Areas.

5. Develop and maintain - resource (demand and capacity) system models to evaluate - resource adequacy.

The Planning Coordinator is responsible for assessing the longer-term reliability of its Planning Coordinator Area.

1. Coordinates and collects data for system modeling from Transmission Planner, Resource Planner, and other Planning Coordinators.

- 5. Collects information including:
- b. Demand and energy forecasts, capacity resources, and demand response programs
- from Load-Serving Entities, and Resource Planners.
- c. Generator unit performance characteristics and capabilities from Generator Owners.

d. Long-term capacity purchases and sales from Transmission Service Providers.

- 6. Collects and reviews reports on transmission and resource plan implementation from
- Resource Planners and Transmission Planners.
- 9. Provides the coordinated plans to affected Regional Reliability Organization(s),

Transmission Service Providers, Transmission Planners, Transmission Operators, and Transmission Owners.

AEP recommends that the applicability of the standard to be revised to include Planning Coordinator for the appropriate functions. AEP further recommends that all references to "PRSG" be replaced with Planning Coordinator. An appropriate change will be required in the future if the functions of the Planning Coordinator are transferred to some other entity in version 4 of the functional model.

Name:	Kure, Paul D
Phone:	330-580-8006

Organization: ReliabilityFirst Corporation Department: Engineering

Group Members

<u>Name</u>	Organization
Popiela, Thomas	NIPSCO
Jeff Beattie	Consumers Energy
Matt Swanson	Midwest ISO
Tom Falin	PJM
Diane Jenner	Duke Energy
Jesse Moser	Midwest ISO
Dale Flaherty	Duquesne Light
Huffman, Daniel	First Energy Solutions Corp.
Moleski, Thomas	PJM
Orlando, Jim	NIPSCO
Doug Burton	NIPSCO
Matt Ellis	Midwest ISO
Herman Schkabla	Indianapolis Power & Light
Don Schlegel	AEP
Kure, Paul D	ReliabilityFirst Corporation

Segment: Answer: **No**

<u>Comment</u>

Except as noted in the comments, the ReliabilityFirst Resource Assessment Subcommittee members named on the group list are providing the following consensus comments on the items identified from the standard.

4. Applicability

4.1 Load Serving Entity

The requirement for the LSE to secure the resources needed to meet the planning reserve was removed from this standard, since it is not considered enforceable by FERC, NERC or RFC under section 215 of the Federal Power Act. The RAS questions whether the LSE is the appropriate entity for the applicability of this standard. There are other organizations that are more capable of performing the type of analyses required in this standard. Also, the PRSG is not a NERC registered entity, but a collection of LSEs grouped together for the sole purpose of satisfying the requirements of this standard. The RAS requests that the drafting team consider changing the applicability of this standard to a NERC registered entity that would be able to perform the type of analyses in this standard.

(Note: This consensus comment of the RAS members above does not include Duke Energy, Midwest ISO and PJM representatives. Since this would be a material change from the original applicability of the standard, MISO and PJM wanted time to review this suggested change within their respective organizations before offering their support or opposition to this comment.)

R2.1 Calculate a Planning reserve margin that will result in the sum of the probabilities for loss of load for the integrated peak hour for at least all non-holiday weekdays for each planning year being equal to 0.1. (This is comparable to a 1 day in 10 year criterion).

The RAS believes the peak hour for all days in the planning year should be included in the analysis, but it is up to the entity performing the study to determine if days with zero loss of load probability on the peak hour need to be explicitly calculated. The RAS suggests the wording should be changed from ??integrated peak hour for at least all non-holiday weekdays for each planning year?? to ??integrated peak hour for all days of each planning year??

R2.2 Be performed or verified separately for individual years of Year One through Year Ten. Year One is defined as the planning year that begins with the upcoming annual peak period.

R2.2.1 Perform an analysis for Year One. R2.2.2 Perform an analysis or verification at a minimum for one year in the 2 through 5 year period and at a minimum one year in the 6 though 10 year period.

There is some confusion with the phrase ??individual years of Year One through Year Ten.? in R2.2 and only requiring analysis or verification for one year each in the 2 through 5 year period and the 6 through 10 year period in R2.2.2. Is the annual analysis required under R2 intended to provide a reserve margin for three specific years in the study period or all ten years? The intent of the standard needs to be clarified, and other applicable references to planning years or planning reserve need to be consistent with the number of years of analysis or verification required.

R2.3.3 Transmission limitations, including the effect of firm commitments that prevent the delivery of generation reserves R2.3.4 Assistance from other interconnected systems including multi-area assessment considering transmission limitations.

As requirements under a subsection of R2.3, these items, R2.3.3 and R2.3.4, must be included in the analysis. The RAS believes inclusion of these two requirements in the analysis should be up to the discretion of the responsible entity performing the analysis. Therefore, it is more appropriate to include these items under R2.4 or R2.5 as discretionary items requiring documentation of why they were included or not included in the analysis.

Name: Mortenson, Eric M Phone: 630-576-6898 Segment: Answer: No Organization: Exelon Department: Transmission Planning

Comment

NO. The applicability is to the LSE (PRSG) NERC Functional Entity. The LSEs would not have access to the transmission data necessary to respond to R2.3.3 (Transmission limitations, including the effect of firm commitments that prevent delivery of generation reserves); R2.3.4 (Assistance from other interconnected systems including

multi-area assessment considering transmission limitations); R2.4 (...Resource availability characteristics...); R2.5 (Transmission characteristics including transmission outage schedules); or R2.3.2 Resource characteristics.

Also, the LSE may not be the best entity to determine the load forecast for the overall PRSG region. A BA or PC would be able to provide more stable forecasts coincitized over these areas. LSEs could be supplying varying loads over a 10 year period, with the ability to change responsibility on short notice.

Originally the LSE would have been a more likely applicable entity when there were procurement requirements associated with this standard.

Name: Mattey, Robert J	Organization:	n: Ohio Valley Electric Corp.	
Phone: 740-289-7217	Department:	nt: Electrical Operations	
Segment:			
Answer: No		Comment	
	a a	es such as MISO or PJM there are LSEs that are not. For those, it would seem the standard to be applicable to that entity.	to make sense to have a

I would also question the need for the standard at all as I would think resource adequacy would be the responsibility of the RTOs or ISOs. If the intent of the standard is to monitor if this is being done by those organizations then the need to have some type of limit on the amount of load that makes this standard applicable is even more relevant.

Name: Brown, Patrick A Phone: 610-666-4597 Segment: Answer: No Organization: **PJM** Department: **NERC and Regional Coordin**

Comment

No, PJM does not agree with the Requirements of this proposed standard. PJM requests the following changes:

Purpose- The purpose discusses the desire to establish common criteria, based on 1 day in ten year LOLE. To be more correct, this should be one event in ten years. Description in R2 explains this sufficiently, but the purpose will read more clearly if this is stated up front.

Applicability- Under the original standard, the LSE was required to provide proof that they had met the standard. The new standard simply requires the PRSG to compare ?its load and resource capability?. With the removal of the requirement to provide resources, PJM questions if it is still appropriate to hold the LSE as the sole applicable entity. PJM would request that the SDT investigate the possibility that this might now fall on more (or different) entities under the NERC Functional Model.

Requirements

R1 Text is awkward. Should read ?All load in the RFC footprint is included in a PRSG and each end-use customer is included in one and only one PRSG.?

R1.2 Discusses the planning period, where year would be more specific. Suggested change would be to have the sentence end ?180 days prior to the first day of the planning year under review, whichever is earlier.

R2.1 Practically speaking, all of the loss of load probability occurs in the non-holiday weekdays. However, this comes as a result of the analysis that has been performed. This is not an input. Text should read ??for all days in the planning year being equal to 0.1. (This is comparable to a 1 event in 10 year criterion).

R2.1.1 Requirement currently requires the respondent to use Total Internal Demand. Valid analysis procedures exist that use Net Internal Demand. Text should be changed to read ?Calculation can be performed using Total Internal Demand, or Net Internal Demand. Respondent should document which is used, and why.?

R2.3.3 Peak period should be changed to peak season.

R2.3.3 Deals with Transmission Limitations. Seems to follow more naturally under R2.5

R2.3.4 Deals with resources from outside interconnected systems. Seems to follow more naturally under R2.4

R2.4 Fourth bullet discusses R2.4.1. No reference found.

Definitions ? please add:

Resource Capability ? the reliability value (MW) of the resource in meeting the Planning Resource Adequacy Standard, based on output characteristics and performance over appropriate peak demand periods.

Planning Year - The annual period over which the LOLE is measured, and the resulting resource requirements are established (typically June 1st through the following May 31st).

Name: Swanson, Matthew

Phone: 651-632-8484 Segment: Answer: Abstain	Department: Regulatory Standards		
Name: Shaw, Marka	Organization: Reliant Energy Mid Atlantic Po	wer Holdin	
Phone: 703-807-0340	Department:		
Segment: Answer: No	Comment		
	re critical elements of Resource Adequacy Assessment o ensure a more accurate forecast, the forecasts should		
Name: Berry, Scott	Organization: Indiana Municipal Power Agen	су	
Phone: 317-428-6710	Department:	-	
Segment: Answer: No	Comment		
Name: Kafka, Richard J Phone: 301-469-5274 Segment: Answer: No	Organization: Pepco Department: Transmission <u>Comment</u> LSEs, but nearly all the requirements apply to the entity	u sonuing as the PSPG "administrat	or" there is no NEPC
	C, we must know the entity, such as Resource Planner of		
Name: Hohlbaugh, Douglas G	Organization: Ohio Edison Company	Grou	o Members
Phone: 330-384-4698	Department: FERC Compliance	Name	Organization
		Martinko, Robert M	American Transmission Systems, Inc.
		Hohlbaugh, Douglas G	Ohio Edison Company
		Ciccone, Sam J	Cleveland Electric Illuminating Company
		Folk, David L	Pennsylvania Power Company
		Huffman, Daniel	First Energy Solutions Corp.
		Hartley, Lawrence E	First Energy Solutions Corp.
Segment:	Comment		
Answer: No	Comment		

APPLICABILITYConsideration should be given to placing the requirement on an entity other than the LSE. A resource adequacy assessment is only as good as the load forecast used. It may be more appropriate to rely on load forecasts at the BA or control area level than to rely on the aggregation of LSE forecasts. It is not prudent to rely on competitive LSEs, operating in deregulated markets, to accurately predict how much load they may win out of auctions, and then sum those estimates up to use as the basis for a resource adequacy evaluation. In deregulated markets it would be much better to eliminate the error introduced by competitive LSE forecasts and replace it with more stable predictable forecasts tied to a geographic area. BA or control area forecasts would be a much better basis to use for resource adequacy assessments and the entity that provides those should be the applicable entity under this standard.

We suggest showing the applicability to include LSE or a PRSG and adjust the Definition of the PRSG as shown below. The reason for this change is that as currently stated a PRSG could be defined as only one LSE. We believe it is clearer to indicate that a PRSG is defined as more than one LSE grouped together and allow provisions for meeting the standard requirements by a single LSE or a LSE through participation in a PRSG.

The standard drafting team may also want to consider the roles of the Resource Planner and/or the Planning Coordinator as having a role in completing an assessment of resource adequacy. Since the standard is moving away from the need to secure resource adequacy, there is less of a real-time aspect that placed focus solely on the LSE.

REQUIREMENTS R1 - Our suggestion is to delete R1 based on the proposed changes in Applicability above. A standard should not force a LSE into a PRSG. Also, the notifications to RFC seem more administrative and not aimed at improving reliability.

R2 - Relating to our comment under "Applicability" above, requirement 2 should be broken into specific requirements applicable one or more appropriate NERC registered entities per the functional model.

R2.1 - This requirement also implies that a planning reserve margin needs to be calculated for "each planning year". This should be reworded to be more clear and consistent with R2.2.1 and R2.2.2, that only a minimum of 3 years need to be analyzed or verified.

R2.1.2 - The FAQ does a good job of defining what "Median (50:50)" forecast. Consideration should be given to moving the definition into the standard as follows: "Median (50:50) - A forecast developed from median economic and weather data. Median data reflects the mid-point of the scenarios used to determine a range of expected economic forecasts or scenarios of possible weather impacts. The median forecast is expected to have a 50% probability of being too high and 50% probability of being too low (50:50) when compared to what will actually occur."

R2.2

We suggest revising R2.2 to read "Be performed or verified separately for the annual peak period for each of the following years:"

- The original sentence of this requirement may inadvertently imply that every year of the 10-yr timeframe must be analyzed. It should be reworded to clearly state that only 3 years must be analyzed as described in the subrequirements.

- The second sentence of the requirement describes the definition of "Year One". This sentence should be removed from the requirement and added to the definitions section as follows "Year One - The planning year that begins with the upcoming annual peak period."

R2.2.3 This requirement is not necessary because it should be assumed that the responsible entity would determine the annual peak period. "Annual peak period can be integrated into the text of R2.2 as shown above.

R2.3.3 and R2.5 - LSE or PRSG may not be allowed access to Transmission information per the standards of conduct. If this information is needed, these requirements must be placed on another entity other than the LSE that would have unrestricted access to the information.

R2.6 - We question how the PRSG would assure that resource capacity is not counted more than once as reserve capacity "by multiple PRSGs". We suggest each entity simply assure that it has not counted any of its reserve more than once and delete the last phrase ("by multiple PRSGs") of this requirement.

R3: - The LOLE study is to include the consideration of transmission limitations per the sub-requirements of R2. However, R3 has no related requirement that the planning reserve margin comparison consider transmission limitations. The LOLE studies currently conducted in the Midwest ISO and PJM footprints all involve zonal analysis to address transmission limitations. If separate zones are warranted for the LOLE analysis, then separate reserve comparisons are also warranted as part of the comparison of R3. If the resources of one zone can not be fully delivered or utilized in another zone, then faulty resource adequacy assessments can result if reserve comparisons are not made on a zonal basis. Simply summing up the resources and loads in the footprint will give an overly simplistic and potentially distorted resource adequacy assessment.

- The current wording implies that every year of the 10-yr period must be compared with the planning reserve margin benchmark. If the comparison is to be made for each year, but benchmarks may only exist for 3 of the 10 years, what value is to be used for the comparison for the other 7 years? Please clarify the intent.

- The requirement requires documentation but does not describe what must be done with this documentation or how it is utilized. We suggest adding a subrequirement (R3.1) that requires submission to an entity upon request.

DEFINITIONS 1) Planned Reserve Sharing Group (PRSG) Per our comment under "Applicability" above, we suggest revising the definition of the PRSG to read as follws:

"Planned Reserve Sharing Group ("PRSG") - a group of Load Serving Entities ("LSEs") that agree to study their collective resources to assess the planned Resource Adequacy for the load of the PRSG as a whole.

Since MISO, PJM and other RTOs currently provide administrative assistance in the required planning tasks, we ask the SDT to try to capture this aspect of the PRSG in the definition or consider the RTOs role as a Planning Coordinator as have applicability to this standard..

2) Add the following definitions per our comments above:

Year One - The planning year that begins with the upcoming annual peak period.

Median (50:50) - A forecast developed from median economic and weather data. Median data reflects the mid-point of the scenarios used to determine a range of expected economic forecasts or scenarios of possible weather impacts. The median forecast is expected to have a 50% probability of being too high and 50% probability of being too low (50:50) when compared to what will actually occur.

Name: Shaver, Jason Phone: 262-506-6885 Segment: Answer: No Organization: American Transmission Co. Department: Operations

<u>Comment</u>

ATC disagrees with Requirements R2, R2.2, and R3.

? The PRSG should not be the accountable entity for R2 or R3, because it is not a defined entity in the Functional Model, is not registered NERC entity, and not listed in the Applicability section. We suggest replacing ?The PRSG shall? with ?Each LSE through its membership in one or more PRSG shall? for its associated system?.

? Each LSE should identify any planned Generation and Transmission facilities they use in any Year One through Year Ten analysis. Each LSE should also have the rationale or criteria that they use for deciding which planned facilities to include in the required analyses. We suggest that two sub-requirements be added to this section

? a R2.2.4 for identifying any planned facilities that are included in the analyses and a R2.2.5 for having a rationale regarding which planned facilities are included in the analyses.

2. Do you agree with the Measures of this proposed standard? If no, provide specific suggestions that would make the requirements acceptable to you.

		Organization: Consumers Energy Department: Trans & Reg Strategies		
Phone: Segment:	Kaminski, Vincent F 717-901-4496 Abstain	Organization: Allegheny Electric Cooperative Inc Department: Power Supply & Engineerin		
Phone: Segment:	Thomas, Bob C 217-789-4632 Abstain	Organization: Illinois Municipal Electric Agency Department: General Counsel Group		
	BEAVERS, HARVIE D 8142268001 Yes	Organization: PINEY CREEK LP/COLMAC Department: PROJECTS		
Phone: Segment: Answer:	Abstain	Organization: AEP Department: Regulatory Services <u>Comment</u> riate applicability, it would be premature to address this pa	rt of the standard at this time	
			Γ	
	Kure, Paul D 330-580-8006	Organization: ReliabilityFirst Corporation Department: Engineering	Gro	oup Members
			NamePopiela, ThomasJeff BeattieMatt SwansonTom FalinDiane JennerJesse MoserDale FlahertyHuffman, DanielMoleski, Thomas	Organization NIPSCO Consumers Energy Midwest ISO PJM Duke Energy Midwest ISO Duquesne Light First Energy Solutions Corp PJM

Doug Burton	NIPSCO
Matt Ellis	Midwest ISO
Herman Schkabla	Indianapolis Power & Light
Don Schlegel	AEP
Kure, Paul D	ReliabilityFirst Corporation

Segment: Answer: **Abstain**

	Mortenson, Eric M 630-576-6898 Yes	Organization: Exelon Department: Transmission Planning
Phone: Segment:	Mattey, Robert J 740-289-7217 Abstain	Organization: Ohio Valley Electric Corp. Department: Electrical Operations
	Brown, Patrick A 610-666-4597 Yes	Organization: PJM Department: NERC and Regional Coordin
Phone: Segment:	Swanson, Matthew 651-632-8484 Abstain	Organization: MISO Department: Regulatory Standards
Phone: Segment:	Shaw, Marka 703-807-0340 Abstain	Organization: Reliant Energy Mid Atlantic Power Holdin Department:
	Berry, Scott 317-428-6710 No	Organization: Indiana Municipal Power Agency Department: <u>Comment</u>
		t a NERC registered entity and cannot be held accountable to NERC standards. If M2 or M3 is not performed, is the individual s as a whole (PRSG) held accountable?
	Kafka, Richard J 301-469-5274	Organization: Pepco Department: Transmission

Answer: No

Name: Hohlbaugh, Douglas G Phone: 330-384-4698	Organization: Ohio Edison Company Department: FERC Compliance	Grou	Group Members	
- Hone: 330-304-4030		Name	Organization	
		Martinko, Robert M	American Transmission Systems, Inc.	
		Hohlbaugh, Douglas G	Ohio Edison Company	
		Ciccone, Sam J	Cleveland Electric Illuminating Company	
		Folk, David L	Pennsylvania Power Company	
		Huffman, Daniel	First Energy Solutions Corp	
		Hartley, Lawrence E	First Energy Solutions Corp	
Segment:				
Answer: Abstain	Comment			
ased on FE's questions on applicability and	proposed requirement adjustments, we believe it is pren	nature to address the measures at	this time.	
Name: Shaver, Jason	Organization: American Transmission Co.			
Phone: 262-506-6885	Department: Operations			
Segment:	•			
Answer: Yes	Comment			
ATC generally agrees with the Measures and	has no specific suggested changes.			

3. Do you agree with the Violation Risk Factors of this proposed standard? If no, provide specific suggestions that would make the requirements acceptable to you.

	Kurzynowski, Jeanne M 517-788-1110 Yes	-	Consumers Energy Trans & Reg Strategies		
Phone: Segment:	Kaminski, Vincent F 717-901-4496 Abstain		Allegheny Electric Cooperative Inc. Power Supply & Engineerin		
Phone: Segment:	Thomas, Bob C 217-789-4632 Abstain		Illinois Municipal Electric Agency General Counsel Group		
	BEAVERS, HARVIE D 8142268001 Yes	Organization: Department:	PINEY CREEK LP/COLMAC PROJECTS		
Phone: Segment: Answer:	Abstain		AEP Regulatory Services <u>Comment</u> ould be premature to address this part o	of the standard at this time	
Name:	Kure, Paul D	Organization:	ReliabilityFirst Corporation		oup Members
FIIONE.	330-580-8006	Department:	Engineering	<u>Name</u> Popiela, Thomas Jeff Beattie Matt Swanson Tom Falin Diane Jenner Jesse Moser	<u>Organization</u> NIPSCO Consumers Energy Midwest ISO PJM Duke Energy Midwest ISO

Doug Burton	NIPSCO
Matt Ellis	Midwest ISO
Herman Schkabla	Indianapolis Power & Light
Don Schlegel	AEP
Kure, Paul D	ReliabilityFirst Corporation

Segment: Answer: **Abstain**

Name: Mortenson, Eric M Phone: 630-576-6898 Segment: Answer: Abstain	Organization: Exelon Department: Transmission Planning
Name: Mattey, Robert J Phone: 740-289-7217 Segment: Answer: Abstain	Organization: Ohio Valley Electric Corp. Department: Electrical Operations
Name: Brown, Patrick A Phone: 610-666-4597 Segment: Answer: Abstain	Organization: PJM Department: NERC and Regional Coordin
Name: Swanson, Matthew Phone: 651-632-8484 Segment: Answer: Abstain	Organization: MISO Department: Regulatory Standards
Name: Shaw, Marka Phone: 703-807-0340 Segment: Answer: Abstain	Organization: Reliant Energy Mid Atlantic Power Holdin Department:
Name: Berry, Scott Phone: 317-428-6710 Segment: Answer: Abstain	Organization: Indiana Municipal Power Agency Department:
Name: Kafka, Richard J Phone: 301-469-5274 Segment: Answer: No	Organization: Pepco Department: Transmission

Name: Hohlbaugh, Douglas G Phone: 330-384-4698	Organization: Ohio Edison Company Department: FERC Compliance	Grou	p Members
		Name	Organization
		Martinko, Robert M	American Transmission Systems, Inc.
		Hohlbaugh, Douglas G	Ohio Edison Company
		Ciccone, Sam J	Cleveland Electric Illuminating Company
		Folk, David L	Pennsylvania Power Company
		Huffman, Daniel	First Energy Solutions Corp.
		Hartley, Lawrence E	First Energy Solutions Corp.
Segment:			
Answer: Abstain	Comment		
	d proposed requirement adjustments, we believe it is pre- st of the requirements since they do not have direct real-		time. However, in general the
Name: Shaver, Jason	Organization: American Transmission Co.		
Phone: 262-506-6885	Department: Operations		
Segment:			
Answer: Yes	Comment		
ATC generally agrees with the Violation Risk	Factors and has no specific suggested changes.		

4. Do you agree with the Violation Severity Levels of this proposed standard? If no, provide specific suggestions that would make the requirements acceptable to you.

Name: Kurzynowski, Jeanne M Phone: 517-788-1110 Segment: Answer: Yes	Organization: Consumers Energy Department: Trans & Reg Strategies		
Name: Kaminski, Vincent F Phone: 717-901-4496 Segment: Answer: Abstain	Organization: Allegheny Electric Cooperative Inc. Department: Power Supply & Engineerin		
Name: Thomas, Bob C Phone: 217-789-4632 Segment: Answer: Abstain	Organization: Illinois Municipal Electric Agency Department: General Counsel Group		
Name: BEAVERS, HARVIE D Phone: 8142268001 Segment: Answer: Yes	Organization: PINEY CREEK LP/COLMAC Department: PROJECTS		
Name: Ness, Thad K Phone: 614-716-2053 Segment: Answer: Abstain Since AEP has concerns regarding the approx	Organization: AEP Department: Regulatory Services <u>Comment</u> priate applicability, it would be premature to address this part	of the standard at this time	
			•
Name: Kure, Paul D Phone: 330-580-8006	Organization: ReliabilityFirst Corporation Department: Engineering	Gro	oup Members
		<u>Name</u> Popiela, Thomas Jeff Beattie Matt Swanson Tom Falin Diane Jenner Jesse Moser Dale Flaherty Huffman, Daniel Moleski, Thomas Orlando, Jim	Organization NIPSCO Consumers Energy Midwest ISO PJM Duke Energy Midwest ISO Duquesne Light First Energy Solutions Corp. PJM NIPSCO

Doug Burton	NIPSCO
Matt Ellis	Midwest ISO
Herman Schkabla	Indianapolis Power & Light
Don Schlegel	AEP
Kure, Paul D	ReliabilityFirst Corporation

Segment: Answer: **Abstain**

Name: Mortenson, Eric M Phone: 630-576-6898 Segment: Answer: Abstain	Organization: Exelon Department: Transmission Planning
Name: Mattey, Robert J Phone: 740-289-7217 Segment: Answer: Abstain	Organization: Ohio Valley Electric Corp. Department: Electrical Operations
Name: Brown, Patrick A Phone: 610-666-4597 Segment: Answer: Abstain	Organization: PJM Department: NERC and Regional Coordin
Name: Swanson, Matthew Phone: 651-632-8484 Segment: Answer: No	Organization: MISO Department: Regulatory Standards <u>Comment</u>

Many of the Violation Severity levels seem higher than would be appropriate if the assumption that only a complete lack of effort would constitute a Severe violation. In the modified severity level chart below the assumption that only a failure to perform and document a study, with special mention of year one, would constitute a severe violation. Other violations have been shifted to accommodate this assumption and give a more even distribution of violations.
Lower Level Violations:
R2:
The PRSG Resource Adequacy analysis failed to express the planning reserve developed from R2.2 as a percentage of the net Median (50:50) forecast peak load per R2.1.2
OR
The PRSG failed to determine the annual peak period for Resource Adequacy analysis per R2.2.3.
R3:
The PRSG failed to document an assessment of its Resource Adequacy by comparing its load and resource capability for one of the years in the 2 through 10 year period per R3.
Moderate Level Violations:
R1:
The LSE that has not reported to RFC its membership in a PRSG, as of the effective date, reported to RFC more than 90 but less than or equal to 120 calendar days of the effective date of BAL-502-RFC-02 which PRSG it belongs to per R1.1.
OR
The LSE either notified RFC more than 60 but less than 90 calendar days prior to a proposed PRSG membership change or more than 150 but less than 180 calendar days prior to the planning period under review, which ever is earlier per R1.2
OR
The LSE either notified RFC less than 60 days prior to a proposed PRSG membership change or less than 150 calendar days prior to the planning period under review which ever is earlier per R1.2
R2:
The PRSG Resource Adequacy analysis failed to include 1 of the Load forecast Characteristics subcomponents under R2.3.1 and documentation of its use
OR

The PRSG Resource Adequacy analysis failed to include 1 of the Resource Characteristics subcomponents under R2.3.2 and documentation of its use

OR

The PRSG Resource Adequacy analysis failed to consider 1 or 2 of the Resource availability characteristics subcomponents under R2.4 and documentation of how and why they were included in the analysis or why they were not included

OR

The PRSG Resource Adequacy analysis failed to consider 1 of the Transmission characteristics subcomponents under R2.5 and documentation of how and why they were included in the analysis or why they were not included

OR

The PRSG Resource Adequacy analysis failed to Document that the resource capacity is not counted more than once, as reserve, by multiple PRSGs per R2.6

OR

The PRSG Resource Adequacy analysis failed to include 2 or more of the Load forecast Characteristics subcomponents under R2.3.1 and documentation of their use

R3:

The PRSG failed to document an assessment of its Resource Adequacy by comparing its load and resource capability for two or more of the years in the 2 through 10 year period per R3.

High Level Violations:

R1:

The LSE is a member of one or more PRSGs but the load was included more than once per R1

OR

The LSE that has not reported to RFC its membership in a PRSG, as of the effective date, reported to RFC more than 120 days of the effective date of BAL-502-RFC-02 which PRSG it belongs to per R1.1.

OR

The LSE has failed to be a member of one or more PRSGs so that all its load in the RFC footprint is included in a PRSG per R1

R2:

The PRSG Resource Adequacy analysis failed to be performed or verified separately for individual years of Year One through Year Ten per R2.2

OR

The PRSG Resource Adequacy analysis failed to Calculate a Planning reserve margin that will result in the sum of the probabilities for loss of load for the integrated peak hour for at least all non-holiday weekdays for each planning year being equal to 0.1 per R2.1

OR

The Planning reserve margin calculation failed to be performed using the Net Internal Demand per R2.1.1

OR

The PRSG failed to perform an analysis or verification for one year in the 2 through 5 year period or one year in the 6 though 10 year period or both per R2.2.2

OR

If the analysis is verified per R2.2.2, the PRSG verification failed to be supported by current or past studies for the same planning year per R2.2.2.1

OR

The PRSG Resource Adequacy analysis failed to include 2 or more of the Resource Characteristics subcomponents under R2.3.2 and documentation of their use

OR

The PRSG Resource Adequacy analysis failed to include Transmission limitations and documentation of its use per R2.3.3

OR

The PRSG Resource Adequacy analysis failed to include Assistance from other interconnected systems and documentation of its use per R2.3.4

OR

The PRSG Resource Adequacy analysis failed to consider all of the Resource availability characteristics subcomponents under R2.4 and documentation of how and why they were included in the analysis or why they were not included

OR

The PRSG Resource Adequacy analysis failed to consider all of the Transmission characteristics subcomponents under R2.5 and documentation of how and why they were included in the analysis or why they were not included

R3:

The PRSG failed to document an assessment of its Resource Adequacy by comparing its load and resource capability for year 1 of the 10 year period per R3.

Severe Level Violations:

R2:

The PRSG failed to perform and document a Resource Adequacy analysis annually per R2.

OR

Name: Shaw, Marka Phone: 703-807-0340 Segment: Answer: Abstain	Organization: Reliant Energy Mid Department:	Atlantic Power Holdin	
Name: Berry, Scott Phone: 317-428-6710 Segment: Answer: Abstain	Organization: Indiana Municipal I Department:	Power Agency	
Name: Kafka, Richard J Phone: 301-469-5274 Segment: Answer: No	Organization: Pepco Department: Transmission		
Name: Hohlbaugh, Doug Phone: 330-384-4698	las G Organization: Ohio Edison Comp Department: FERC Compliance		up Members
Filone. 330-304-4090	Department. FERC compliance	Name	Organization
		Martinko, Robert M	American Transmission Systems, Inc.
		Hohlbaugh, Douglas G	Ohio Edison Company
		Ciccone, Sam J	Cleveland Electric Illuminating Company
		Folk, David L	Pennsylvania Power Company
		Huffman, Daniel	First Energy Solutions Corp
		Hartley, Lawrence E	First Energy Solutions Corp
Segment:	Comment		
Answer: Abstain	Dicability and proposed requirement adjustments, we be	elieve it is premature to address the VSIs at the	is time
Name: Shaver, Jason	Organization: American Transmi	ssion Co.	
Phone: 262-506-6885	Department: Operations		
Segment: Answer: No	Comment		

5. Do you agree with the Implementation Plan of this proposed standard? If no, provide specific suggestions that would make the requirements acceptable to you.

		Organization: Consumers Energy Department: Trans & Reg Strategies		
Phone: Segment:	Kaminski, Vincent F 717-901-4496 Abstain	Organization: Allegheny Electric Cooperative Inc. Department: Power Supply & Engineerin		
Phone: Segment:	Thomas, Bob C 217-789-4632 Abstain	Organization: Illinois Municipal Electric Agency Department: General Counsel Group		
Phone: Segment:		Organization: PINEY CREEK LP/COLMAC Department: PROJECTS		
	Abstain ent as in section A.2	Comment		
Phone: Segment:	Ness, Thad K 614-716-2053 Abstain	Organization: AEP Department: Regulatory Services Comment		
		priate applicability, it would be premature to address this part	t of the standard at this time	
	Kure, Paul D 330-580-8006	Organization: ReliabilityFirst Corporation Department: Engineering	Gro	oup Members
		,	NamePopiela, ThomasJeff BeattieMatt SwansonTom FalinDiane JennerJesse MoserDale Flaherty	Organization NIPSCO Consumers Energy Midwest ISO PJM Duke Energy Midwest ISO Duquesne Light

Orlando, Jim	NIPSCO
Doug Burton	NIPSCO
Matt Ellis	Midwest ISO
Herman Schkabla	Indianapolis Power & Light
Don Schlegel	AEP
Kure, Paul D	ReliabilityFirst Corporation

Segment: Answer: **Abstain**

	Mortenson, Eric M 630-576-6898 Yes	Organization: Exelon Department: Transmission Planning
Phone: Segment:	Mattey, Robert J 740-289-7217 Abstain	Organization: Ohio Valley Electric Corp. Department: Electrical Operations
	Brown, Patrick A 610-666-4597 Yes	Organization: PJM Department: NERC and Regional Coordin
Phone: Segment:	Swanson, Matthew 651-632-8484 Abstain	Organization: MISO Department: Regulatory Standards
Phone: Segment:	Shaw, Marka 703-807-0340 Abstain	Organization: Reliant Energy Mid Atlantic Power Holdin Department:
Phone: Segment: Answer:		Organization: Indiana Municipal Power Agency Department: <u>Comment</u>
	ntation plan should ensure tha MISO in the year 2009 will he	It the standard does not go into effect until every LSE in the RFC footprint has a PRSG available to join. The forming of a Ip with this issue.
	Kafka, Richard J 301-469-5274	Organization: Pepco Department: Transmission

Segment:

The standard is not at the point where an implementation plan can be determined.

Name: Hohlbaugh, Douglas G	Organization: Ohio Edison Company Department: FERC Compliance	Group Members	
Phone: 330-384-4698		Name	Organization
		Martinko, Robert M	American Transmission Systems, Inc.
		Hohlbaugh, Douglas G	Ohio Edison Company
		Ciccone, Sam J	Cleveland Electric Illuminating Company
		Folk, David L	Pennsylvania Power Company
		Huffman, Daniel	First Energy Solutions Corp
		Hartley, Lawrence E	First Energy Solutions Corp
Segment: Answer: Yes			
Name: Shaver, Jason	Organization: American Transmission Co.		
Phone: 262-506-6885	Department: Operations		
Segment:			
Answer: Yes	<u>Comment</u>		

6. Do you agree that this standard is ready for Ballot? If no, provide specific suggestions that would make it acceptable to you.

Name: Kurzynowski, Jeanne M	Organization: Consumers Energy
Phone: 517-788-1110	Department: Trans & Reg Strategies
Segment:	
Answer: No	Comment
R2.3 contains redundant Load forecast character Recommend deleting bulleted item:	eristics. Load forecast uncertainty is defined as containing load variability due to weather, regional economic forecasts.
R2.3.1 Load forecast characteristics:	
? Median (50:50) forecast peak load.	
? Load forecast uncertainty.? Load diversity.	
? Seasonal load variations.	
? Load variability due to weather, regional econ	omic forecasts, etc. (should be deleted)
? Daily demand modeling assumptions (firm, int	
? Contractual arrangements concerning curtaila	ible/interruptible load.
	gned with the MRO standard. Page 3 of 6 from MRO standard: Standard RES-501-MRO-01 - Planned Resource ability.org/04_standards/approved_standards/mro_standards/RES-501-MRO-01_Final_20071229_Clean.pdf
R1.3.3 Transmission limitations that prevent the	how and why the following were/were not included in the analysis: e delivery of generation reserves. R1.3.3.1 Transmission maintenance outage schedules. .3.3.3 Transmission availability for emergency considering firm commitments
Draft Standard BAL-502-RFC-02 V1 R2.3.3 Transmission limitations, including the e	ffect of firm commitments that prevent the delivery of generation reserves (should be moved to section R2.4)
R2.3.4 Assistance from other interconnected sy	vstems including multi-area assessment considering transmission limitations. (should be moved to section R2.4)
R2.4 Consider the following Resource availabili	ty characteristics and document how and why they were included in the analysis or why they were not included:
R2.3.3 and R2.3.4 should be moved to SECTIC	ON R2.4. Another alternative would be to work with MRO and change their standard to the more restrictive RFC version.
Typo in section R2.4 R2.4 Consider the follow not included:	wing Resource availability characteristics and document how and why they were included in the analysis or why they were
? Any other Demand (Load) Response Program	
? Any other Demand (Load) Response Program	ns not included in R2.3.1.
Name: Kaminski, Vincent F	Organization: Allegheny Electric Cooperative Inc.
Phone: 717-901-4496	Department: Power Supply & Engineerin

Segment: Answer: **No**

Comment

The RFC standard is not necessary if the requirements are also covered in a corresponding NERC standard. Otherwise we will have duplicative reporting/standard which couls end up conflicting with each other.

If it is deemed appropriate/necessary to have a RFC standard, it should be revised to clearly reflect that being a signatory to the PJM Reliability Assurance Agreement (or other similar agreement(s)) is deemed to be adequate documentation to demonstrate that the LSE has complied with the requirements of this standard. (MISO members should be able to satify the requirements of the standard by providing the comparable MISO documentation.)

This clarification should be included in the standard before it is circulated for balloting.

Name: Thomas, Bob C Phone: 217-789-4632 Segment:	Organization: Illinois Municipal Electric Agency Department: General Counsel Group		
Answer: No	Comment		
	d be added to the Applicability section. The proposed standard inclution. The addition of PRSG to the Applicability section would avoid c		
rationale" for the need beyond reliability	of why this region-specific standard and region-specific PRSG functi y provisions in existing NERC standards. This may have been provid n with this proposed revision. (The SAR adequately addresses cons	ded with the proposal and	adoption of BAL-502-RFC-01 (in
Name: BEAVERS, HARVIE D	Organization: PINEY CREEK LP/COLMAC		
Phone: 8142268001	Department: PROJECTS		
Segment: Answer: No	Comment		
	quirement in relation to current PJM/MSO methods.		
Name: Ness, Thad K	Organization: AEP		
Phone: 614-716-2053	Department: Regulatory Services		
Segment: Answer: No	Comment		
See comments to Question #1.	Comment		
Name: Kure, Paul D	Organization: ReliabilityFirst Corporation	Gr	oup Members
Phone: 330-580-8006	Department: Engineering	Name	Organization
		Popiela, Thomas	NIPSCO
		Jeff Beattie	Consumers Energy
		Matt Swanson	Midwest ISO

Tom Falin	PJM
Diane Jenner	Duke Energy
Jesse Moser	Midwest ISO
Dale Flaherty	Duquesne Light
Huffman, Daniel	First Energy Solutions Corp.
Moleski, Thomas	PJM
Orlando, Jim	NIPSCO
Doug Burton	NIPSCO
Matt Ellis	Midwest ISO
Herman Schkabla	Indianapolis Power & Light
Don Schlegel	AEP
Kure, Paul D	ReliabilityFirst Corporation

Segment: Answer: **No**

Comment

The RAS does not believe the standard is ready for ballot based on the issues in question 1 above that need to be reviewed and clarified.

Name: Mortenson, Eric M	Organization: Exelon	
Phone: 630-576-6898	Department: Transmission Planning	
Segment:		
Answer: No	Comment	
Please see Question 1.		
Name: Mattey, Robert J	Organization: Ohio Valley Electric Corp.	
Phone: 740-289-7217	Department: Electrical Operations	
Segment:		
Answer: Abstain		
Name: Brown, Patrick A	Organization: PJM	
Phone: 610-666-4597	Department: NERC and Regional Coordin	
Segment:		
Answer: No	Comment	
See response to question 1.		
Name: Swanson, Matthew	Organization: MISO	
Phone: 651-632-8484	Department: Regulatory Standards	
Segment:		
Answer: No	Comment	

Name: Shaw, Marka Phone: 703-807-0340 Segment:	Organization: Reliant Energy Mid Atlantic Power Holdin Department:				
Answer: No	Comment				
he issue identified above needs to be addre	ssed.				
Name: Berry, Scott	Organization: Indiana Municipal Power Agend	су			
Phone: 317-428-6710	Department:				
Segment: Answer: No	Comment				
See IMPA's comments for questions one, two					
Name: Kafka, Richard J Phone: 301-469-5274 Segment: Answer: No	Organization: Pepco Department: Transmission				
Name: Hohlbaugh, Douglas G Phone: 330-384-4698	Organization: Ohio Edison Company Department: FERC Compliance	Group Members			
Thone. 330-304-4030		Name	Organization		
		Martinko, Robert M	American Transmission Systems, Inc.		
		Hohlbaugh, Douglas G	Ohio Edison Company		
		Ciccone, Sam J	Cleveland Electric Illuminating Company		
		Folk, David L	Pennsylvania Power		
			Company		
		Huffman, Daniel	Company First Energy Solutions Corp		

Name: Shaver, Jason Phone: 262-506-6885 Segment: Drganization: American Transmission Co Department: Operations ATC disagrees that the standard is ready for Ballot and suggests that the issues with the Requirements and Violation Severity Levels be resolved before going to Ballot.