Please use this form to submit comments on the Resource Adequacy SAR Drafting Team's second draft of the Resource Adequacy Assessment SAR. Comments must be submitted by **March 30**, **2006**. You must submit the completed form by e-mailing it to sarcomm@nerc.com with the words "Resource Adequacy SAR Comments" in the subject line. If you have questions please contact Mark Ladrow at mark.ladrowenerc.net or 609.452.8060.

ALL DATA ON THIS FORM WILL BE TRANSFERRED AUTOMATICALLY TO A DATABASE.

DO: **Do** enter text only, with no formatting or styles added.

 $\underline{\textbf{Do}}$ use punctuation and capitalization as needed (except quotations).

Do use more than one form if responses do not fit in the spaces provided.

Do submit any formatted text or markups in a separate WORD file.

DO NOT: **Do not** insert tabs or paragraph returns in any data field.

<u>Do not</u> use numbering or bullets in any data field. **<u>Do not</u>** use quotation marks in any data field.

Individual Commenter Information						
(Co	(Complete this page for comments from one organization or individual.)					
Name:	Fre	ed He	eizer			
Organization:	Ohi	Ohio Public Utilities Commission				
Telephone:	614	-644-7	7692			
E-mail:	Fre	d.Heiz	zer@puc.state.oh.us			
NERC Region	n		Registered Ballot Body Segment			
☐ ERCOT			1 — Transmission Owners			
☐ FRCC			2 — RTOs, ISOs, Regional Reliability Councils			
∐ MAPP □ NPCC			3 — Load-serving Entities			
⊠ RFC			4 — Transmission-dependent Utilities			
☐ SERC			5 — Electric Generators			
SPP			6 — Electricity Brokers, Aggregators, and Marketers			
∐ WECC □ NA – Not			7 — Large Electricity End Users			
Applicable			8 — Small Electricity End Users			
• •		\boxtimes	9 — Federal, State, Provincial Regulatory or other Government Entities			

Group Comments (Complete this page if comments are from a group.)					
Additional Member Organization	Region*	Segment*			

^{*} If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background

Please review the consideration given to the comments on the first draft of the Resource Adequacy Assessment SAR as well as the revisions made to the SAR before answering the questions on this comment form.

Please Enter All Comments in Simple Text Format.

1.	Do you agree with the scope of the revised SAR? In particular, does the substitution of the word "framework" for "criterion" in the first detailed element broaden the scope sufficiently for all manner of resource adequacy arrangements in the Regions to be accommodated in the regional methodologies to assess resource adequacy?
	☐ Yes ☑ No
	Comments: The term "framework" is too broad a term to be used in this standard which specifically speaks to assessing regional resource adequacy and not simply setting up a "framework" to assess regional resource adequacy. We recommend using the term "rules and criterion" in place of "framework" in order to be clear about the intent of the standard.
2.	Do you agree with the addition of the LSE as an entity that should be required to comply with proposed reporting requirements (to be defined in the Standard Drafting Process) to allow regional resource adequacy assessments to be performed?
	⊠ Yes
	□ No
	Comments:
3.	Do you agree with the proposed definition of Resource Adequacy?
	☐ Yes
	⊠ No
	Comments: We recommend the definition be made more clear by deleting "with a specified degree of reliability" and replace it with "and includes reserve requirements".
4.	Do you agree with the language added requiring the regional resource adequacy framework to include a probability-based evaluation of whether projected resources will be sufficient to meet forecasted load taking into account relevant uncertainties?
	⊠ Yes
	□ No
	Comments:
5.	Are you aware of any associated NAESB Business Practices that should be developed to coordinate with this SAR?
	☐ Yes
	⊠ No
	Comments:

6. Please provide any other comments on this SAR that you haven't already provided.

Comments: In 3) we recommend not singling out fuel supply as a risk. We recommend removing the phrase in the thrid sentence "of fuel supply interruptions" be replaced with "resource unavailability"

Please use this form to submit comments on the Resource Adequacy SAR Drafting Team's second draft of the Resource Adequacy Assessment SAR. Comments must be submitted by **March 30**, **2006**. You must submit the completed form by e-mailing it to sarcomm@nerc.com with the words "Resource Adequacy SAR Comments" in the subject line. If you have questions please contact Mark Ladrow at mark.ladrow@nerc.net or 609.452.8060.

ALL DATA ON THIS FORM WILL BE TRANSFERRED AUTOMATICALLY TO A DATABASE.

DO: **Do** enter text only, with no formatting or styles added.

 $\underline{\textbf{Do}}$ use punctuation and capitalization as needed (except quotations).

Do use more than one form if responses do not fit in the spaces provided.

<u>Do</u> submit any formatted text or markups in a separate WORD file.

DO NOT: **Do not** insert tabs or paragraph returns in any data field.

<u>Do not</u> use numbering or bullets in any data field. **<u>Do not</u>** use quotation marks in any data field.

Individual Commenter Information						
(Co	(Complete this page for comments from one organization or individual.)					
Name:	Kar	l Koh	Irus			
Organization:	City	City Water, Light & Power				
Telephone:	217	-321-	1391			
E-mail:	kko	hlrus	@cwlp.com			
NERC Region	n		Registered Ballot Body Segment			
☐ ERCOT			1 — Transmission Owners			
☐ FRCC			2 — RTOs, ISOs, Regional Reliability Councils			
∐ MAPP □ NPCC			3 — Load-serving Entities			
⊠ RFC			4 — Transmission-dependent Utilities			
☐ SERC		\boxtimes	5 — Electric Generators			
SPP			6 — Electricity Brokers, Aggregators, and Marketers			
∐ WECC □ NA – Not			7 — Large Electricity End Users			
Applicable			8 — Small Electricity End Users			
	•		9 — Federal, State, Provincial Regulatory or other Government Entities			

Group Comments (Complete this page if comments are from a group.)					
Additional Member Organization	Region*	Segment*			

^{*} If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background

Please review the consideration given to the comments on the first draft of the Resource Adequacy Assessment SAR as well as the revisions made to the SAR before answering the questions on this comment form.

Please Enter All Comments in Simple Text Format.

1.	Do you agree with the scope of the revised SAR? In particular, does the substitution of the word "framework" for "criterion" in the first detailed element broaden the scope sufficiently for all manner of resource adequacy arrangements in the Regions to be accommodated in the regional methodologies to assess resource adequacy?
	⊠ Yes
	□ No
	Comments:
2.	Do you agree with the addition of the LSE as an entity that should be required to comply with proposed reporting requirements (to be defined in the Standard Drafting Process) to allow regionaresource adequacy assessments to be performed?
	⊠ Yes
	□ No
	Comments:
3.	Do you agree with the proposed definition of Resource Adequacy?
	⊠ Yes
	□ No
	Comments:
4.	Do you agree with the language added requiring the regional resource adequacy framework to include a probability-based evaluation of whether projected resources will be sufficient to meet forecasted load taking into account relevant uncertainties?
	⊠ Yes
	□ No
	Comments:
5.	Are you aware of any associated NAESB Business Practices that should be developed to coordinate with this SAR?
	☐ Yes
	⊠ No
	Comments:
6.	Please provide any other comments on this SAR that you haven't already provided.
	Comments: Item 2 needs to be modified.

- 1. Regions should also be included as an appropriate entity.
- 2. Generation reserve sharing pool(s) should not be included as an appropriate entity(ies). Generation Reserve Sharing Pools or Groups deal with operating reserves and meeting the NERC Disturbance Control Standard (DCS). This SAR deals with planning reserve and resource adequacy, not operating reserves.
- 3. Planning Reserve Sharing Groups (PRSGs) should be included as an appropriate entity.

Please use this form to submit comments on the Resource Adequacy SAR Drafting Team's second draft of the Resource Adequacy Assessment SAR. Comments must be submitted by **March 30**, **2006**. You must submit the completed form by e-mailing it to <a href="mark-leaf-edge-newdown-new

ALL DATA ON THIS FORM WILL BE TRANSFERRED AUTOMATICALLY TO A DATABASE.

DO: **Do** enter text only, with no formatting or styles added.

 $\underline{\textbf{Do}}$ use punctuation and capitalization as needed (except quotations).

<u>Do</u> use more than one form if responses do not fit in the spaces provided.

<u>Do</u> submit any formatted text or markups in a separate WORD file.

DO NOT: **<u>Do not</u>** insert tabs or paragraph returns in any data field.

<u>Do not</u> use numbering or bullets in any data field. **<u>Do not</u>** use quotation marks in any data field.

Individual Commenter Information						
(Co	(Complete this page for comments from one organization or individual.)					
Name:	Will	liam J	J. Smith			
Organization:	Alle	Allegheny Power				
Telephone:	(72	4) 838	-6552			
E-mail:	wsr	nith1	@alleghenypower.com			
NERC Region	ion Registered Ballot Body Segment		Registered Ballot Body Segment			
☐ ERCOT		\boxtimes	1 — Transmission Owners			
☐ FRCC			2 — RTOs, ISOs, Regional Reliability Councils			
∐ MAPP □ NPCC			3 — Load-serving Entities			
⊠ RFC			4 — Transmission-dependent Utilities			
☐ SERC			5 — Electric Generators			
SPP			6 — Electricity Brokers, Aggregators, and Marketers			
∐ WECC □ NA – Not			7 — Large Electricity End Users			
Applicable			8 — Small Electricity End Users			
			9 — Federal, State, Provincial Regulatory or other Government Entities			

Group Comments (Complete this page if comments are from a group.)					
Additional Member Organization	Region*	Segment*			

^{*} If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background

Please review the consideration given to the comments on the first draft of the Resource Adequacy Assessment SAR as well as the revisions made to the SAR before answering the questions on this comment form.

Please Enter All Comments in Simple Text Format.

1.	Do you agree with the scope of the revised SAR? In particular, does the substitution of the word "framework" for "criterion" in the first detailed element broaden the scope sufficiently for all manner of resource adequacy arrangements in the Regions to be accommodated in the regional methodologies to assess resource adequacy?
	⊠ Yes
	□ No
	Comments:
2.	Do you agree with the addition of the LSE as an entity that should be required to comply with proposed reporting requirements (to be defined in the Standard Drafting Process) to allow regionaresource adequacy assessments to be performed?
	⊠ Yes
	□ No
	Comments:
3.	Do you agree with the proposed definition of Resource Adequacy?
	⊠ Yes
	□ No
	Comments:
4.	Do you agree with the language added requiring the regional resource adequacy framework to include a probability-based evaluation of whether projected resources will be sufficient to meet forecasted load taking into account relevant uncertainties?
	⊠ Yes
	□ No
	Comments:
5.	Are you aware of any associated NAESB Business Practices that should be developed to coordinate with this SAR?
	☐ Yes
	⊠ No
	Comments:
6.	Please provide any other comments on this SAR that you haven't already provided.
	Comments: No other comments.

Please use this form to submit comments on the Resource Adequacy SAR Drafting Team's second draft of the Resource Adequacy Assessment SAR. Comments must be submitted by **March 30**, **2006**. You must submit the completed form by e-mailing it to sarcomm@nerc.com with the words "Resource Adequacy SAR Comments" in the subject line. If you have questions please contact Mark Ladrow at mark.ladrowenerc.net or 609.452.8060.

ALL DATA ON THIS FORM WILL BE TRANSFERRED AUTOMATICALLY TO A DATABASE.

DO:	<u>Do</u> enter te	ext only,	with no	formatting	or styles	added.
-----	--------------------	-----------	---------	------------	-----------	--------

<u>Do</u> use punctuation and capitalization as needed (except quotations).

Do use more than one form if responses do not fit in the spaces provided.

Do submit any formatted text or markups in a separate WORD file.

DO NOT: **<u>Do not</u>** insert tabs or paragraph returns in any data field.

<u>Do not</u> use numbering or bullets in any data field.

<u>Do not</u> use quotation marks in any data field.

Individual Commenter Information					
(Compl	lete t	this page for comments from one organization or individual.)			
Name:					
Organization:					
Telephone:					
E-mail:					
NERC Region		Registered Ballot Body Segment			
☐ ERCOT		1 — Transmission Owners			
FRCC	\boxtimes	2 — RTOs, ISOs, Regional Reliability Councils			
_		3 — Load-serving Entities			
☐ RFC		4 — Transmission-dependent Utilities			
☐ SERC		5 — Electric Generators			
SPP		6 — Electricity Brokers, Aggregators, and Marketers			
=		7 — Large Electricity End Users			
Applicable		8 — Small Electricity End Users			
• •		9 — Federal, State, Provincial Regulatory or other Government Entities			
NERC Region ERCOT FRCC MAPP NPCC RFC SERC SPP WECC NA – Not		1 — Transmission Owners 2 — RTOs, ISOs, Regional Reliability Councils 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			

Group Comments (Complete this page if comments are from a group.)

cyeung@spp.org

Group Name: ISO/RTO Council
Lead Contact: Charles Yeung

Contact Organization: SPP
Contact Segment: 2

Contact E-mail:

Contact Telephone: 832-724-6164

Additional Member Name Additional Member Organization Region* Segment* Anita Lee AESO WECC 2 Mike Calimano NYISO NPCC 2 Lisa Szot CAISO WECC 2 Al DiCaprio PJM RFC 2 Bill Phillips MISO RFC 2 NPCC Pete Brandien ISO-NE 2 Ron Falsetti IESO NPCC 2 **ERCOT ERCOT** 2 Sam Jones

^{*} If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background

Please review the consideration given to the comments on the first draft of the Resource Adequacy Assessment SAR as well as the revisions made to the SAR before answering the questions on this comment form.

1. Do you agree with the scope of the revised SAR? In particular, does the substitution of the word "framework" for "criterion" in the first detailed element broaden the scope sufficiently for all

Please Enter All Comments in Simple Text Format.

	manner of resource adequacy arrangements in the Regions to be accommodated in the regional methodologies to assess resource adequacy?
	☐ Yes
	⊠ No
	Comments: We agree with the substitution of "framework" for "criterion" as framework covers such other elements as methodology, assumptions and approach. However, it is equally important that criterion be also included. By this replacement, we are concerned that some Regions would simply develop the methodology, guideline, etc. but not the criterion, which we believe is of paramount importance as it is the "specifed degree of reliability" as stipulated in the proposed definition for resource adequacy. We therefore suggest the wording in (1) be revised to "Each NERC Regional Reliability Organization shall establish a framework and the criterion by which to assess the resource adequacy of the Region." With this change, the rest of (1) may need to be revised accordingly, particularly the phrase"resource adequacy criteria or requirements, where such criteria/requirements exist" since the criteria/requirements will exist.
	Since the jurisdiction over resource adequacy lies outside of FERC and the statutory authority of the EPAct 2005, there should not be a concern that this particular NERC standard takes on a "fill-in-the-blank" approach. We understand NERC intends to move away from reliability standards that rely on the Regional Councils to complete the standards and that this is driven by the FERC statutory authority over reliability, not resources adequacy.
2.	Do you agree with the addition of the LSE as an entity that should be required to comply with proposed reporting requirements (to be defined in the Standard Drafting Process) to allow regionaresource adequacy assessments to be performed?
	☐ Yes
	⊠ No
	Comments: This SAR should only apply to Regional Reliability Organizations (see Purpose). There is no check box on the SAR for them. If the standard is intended to require the Regions to establish criteria, methodology, guideline and procedure to perform the assessment, and the ISO/RTOs to establish their requirements according to the Regional criteria, then the requirements for information provision should be stipulated in the Regional requirements, rather than in a NERC standard. NERC is then strictly in an oversight role due to States and Canadian Provincial jurisdiction with respect to dealing with Resource Adequacy and FERC's restrictions on NERC dealing with Resource Adequacy.
3.	Do you agree with the proposed definition of Resource Adequacy? ☐ Yes ☒ No

Comments: The proposed definition does not capture system losses - a key component in evaluating the amount of aggregate resource needed to ensure adequacy. We therefore propose that Resource adequacy be defined as "the ability of supply-side and demand-side resources to meet the aggregate electrical demand and energy requirements for the end-use customers and system losses with a specified degree of reliability.

4.	Do you agree with the language added requiring the regional resource adequacy framework to include a probability-based evaluation of whether projected resources will be sufficient to meet forecasted load taking into account relevant uncertainties?
	⊠ Yes
	⊠ No
	Comments: We agree with the inclusion but suggest that "but not limited to" after "include" since some Regions may apply a deterministic approach either in lieu of or in combination with a probabilistic approach. Further, the requirement should stipulate that the evaluation must satisfy the applicable resource adequacy criterion.
5.	Are you aware of any associated NAESB Business Practices that should be developed to coordinate with this SAR?
	Yes
	⊠ No
	Comments:
6.	Please provide any other comments on this SAR that you haven't already provided.
	Comments: Requirement 6 states that a review of deliverability must take place but, no requirements up to that point in this SAR requires the existence of deliverability evaluations. Delete this requirement out of requirement 6. Load deliverability is a separate issue from Resource Adequacy and should not be addressed in this SAR.

Please use this form to submit comments on the Resource Adequacy SAR Drafting Team's second draft of the Resource Adequacy Assessment SAR. Comments must be submitted by **March 30**, **2006**. You must submit the completed form by e-mailing it to sarcomm@nerc.com with the words "Resource Adequacy SAR Comments" in the subject line. If you have questions please contact Mark Ladrow at mark.ladrowenerc.net or 609.452.8060.

ALL DATA ON THIS FORM WILL BE TRANSFERRED AUTOMATICALLY TO A DATABASE.

DO: **Do** enter text only, with no formatting or styles added.

 $\underline{\textbf{Do}}$ use punctuation and capitalization as needed (except quotations).

<u>Do</u> use more than one form if responses do not fit in the spaces provided.

<u>Do</u> submit any formatted text or markups in a separate WORD file.

DO NOT: **<u>Do not</u>** insert tabs or paragraph returns in any data field.

<u>Do not</u> use numbering or bullets in any data field. **<u>Do not</u>** use quotation marks in any data field.

Individual Commenter Information							
(Co	(Complete this page for comments from one organization or individual.)						
Name:	Jas	on Sh	naver				
Organization:	Am	erica	n Transmission Compayn LLC				
Telephone:	262	506 6	5885				
E-mail:	jsha	aver@	Patclic.com				
NERC Region	า		Registered Ballot Body Segment				
☐ ERCOT		\boxtimes	1 — Transmission Owners				
☐ FRCC			2 — RTOs, ISOs, Regional Reliability Councils				
☐ MAPP ☐ NPCC			3 — Load-serving Entities				
⊠ RFC			4 — Transmission-dependent Utilities				
☐ SERC			5 — Electric Generators				
SPP			6 — Electricity Brokers, Aggregators, and Marketers				
☐ WECC ☐ NA – Not			7 — Large Electricity End Users				
Applicable			8 — Small Electricity End Users				
••			9 — Federal, State, Provincial Regulatory or other Government Entities				

Group Comments (Complete this page if comments are from a group.)						
Group Name:						
Lead Contact:						
Contact Organization:						
Contact Segment:						
Contact Telephone:						
Contact E-mail:						
Additional Member Name	Additional Member Organization	Region*	Segment*			

^{*} If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background

Please review the consideration given to the comments on the first draft of the Resource Adequacy Assessment SAR as well as the revisions made to the SAR before answering the questions on this comment form.

Please Enter All Comments in Simple Text Format.

1.	Do you agree with the scope of the revised SAR? In particular, does the substitution of the word "framework" for "criterion" in the first detailed element broaden the scope sufficiently for all manner of resource adequacy arrangements in the Regions to be accommodated in the regional methodologies to assess resource adequacy?
	⊠ Yes
	□ No
	Comments:
2.	Do you agree with the addition of the LSE as an entity that should be required to comply with proposed reporting requirements (to be defined in the Standard Drafting Process) to allow regiona resource adequacy assessments to be performed?
	⊠ Yes
	□ No
	Comments: A Load Serving Entity has a key role in performing Resource Adequacy.
3.	Do you agree with the proposed definition of Resource Adequacy?
	Yes
	⊠ No
	Comments: ATC thinks that the following words should be placed after the word "reliability":
	" specified degree of reliability with due consideration for transmission constraints."
4.	Do you agree with the language added requiring the regional resource adequacy framework to include a probability-based evaluation of whether projected resources will be sufficient to meet forecasted load taking into account relevant uncertainties?
	⊠ Yes
	□ No
	Comments:
5.	Are you aware of any associated NAESB Business Practices that should be developed to coordinate with this SAR?
	⊠ Yes
	□ No
	Comments: ATC is does not know the exact NAESB Business Practice that needs to be developed but the SDT should review any existing NAESB B.P. that deal with the gas transaction. How is "TLR" performed for gas transaction?

6. Please provide any other comments on this SAR that you haven't already provided.

Comments: The SAR SDT needs to provide additional information on how items 5 and 6 will be developed into standards? ATC views numbers 5 and 6 as business practices for NERC to follow, and therefore should not be part of any SAR. For numbers 5 and 6 to have any enforcement they would have to be ordered and audited by FERC.

The SAR Form should, at a minimum, list RRO as a Reliability Function. If NERC is going to continue to use this process to develop business practices then NERC should also be listed under the Reliability Functions.

The comment form posted with this SAR did not list MRO as a NERC regional entity.

When resource adequacy is used most individuals would think about MW, but will this SAR also address the issue of MVARs?

Please use this form to submit comments on the Resource Adequacy SAR Drafting Team's second draft of the Resource Adequacy Assessment SAR. Comments must be submitted by **March 30**, **2006**. You must submit the completed form by e-mailing it to sarcomm@nerc.com with the words "Resource Adequacy SAR Comments" in the subject line. If you have questions please contact Mark Ladrow at mark.ladrowenerc.net or 609.452.8060.

ALL DATA ON THIS FORM WILL BE TRANSFERRED AUTOMATICALLY TO A DATABASE.

DO: **Do** enter text only, with no formatting or styles added.

<u>Do</u> use punctuation and capitalization as needed (except quotations).

<u>Do</u> use more than one form if responses do not fit in the spaces provided.

Do submit any formatted text or markups in a separate WORD file.

DO NOT: **Do not** insert tabs or paragraph returns in any data field.

<u>Do not</u> use numbering or bullets in any data field. **<u>Do not</u>** use quotation marks in any data field.

Individual Commenter Information							
(Co	(Complete this page for comments from one organization or individual.)						
Name:	Mu	rale G	opinathan				
Organization:	Nor	theas	et Utilities				
Telephone:	(86	0) 665	i-6896				
E-mail:	gop	oinm@	nu.com				
NERC Regio	n		Registered Ballot Body Segment				
☐ ERCOT		\boxtimes	1 — Transmission Owners				
☐ FRCC			2 — RTOs, ISOs, Regional Reliability Councils				
☐ MAPP ☒ NPCC			3 — Load-serving Entities				
☐ RFC			4 — Transmission-dependent Utilities				
☐ SERC			5 — Electric Generators				
SPP			6 — Electricity Brokers, Aggregators, and Marketers				
∐ WECC □ NA – Not			7 — Large Electricity End Users				
Applicable			8 — Small Electricity End Users				
			9 — Federal, State, Provincial Regulatory or other Government Entities				

Group Comments (Complete this page if comments are from a group.)						
Group Name:						
Lead Contact:						
Contact Organization:						
Contact Segment:						
Contact Telephone:						
Contact E-mail:						
Additional Member Name	Additional Member Organization	Region*	Segment*			

^{*} If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background

Please review the consideration given to the comments on the first draft of the Resource Adequacy Assessment SAR as well as the revisions made to the SAR before answering the questions on this comment form.

Please Enter All Comments in Simple Text Format.

1.	Do you agree with the scope of the revised SAR? In particular, does the substitution of the word "framework" for "criterion" in the first detailed element broaden the scope sufficiently for all manner of resource adequacy arrangements in the Regions to be accommodated in the regional methodologies to assess resource adequacy?
	⊠ Yes
	□ No
	Comments:
2.	Do you agree with the addition of the LSE as an entity that should be required to comply with proposed reporting requirements (to be defined in the Standard Drafting Process) to allow regiona resource adequacy assessments to be performed?
	⊠ Yes
	⊠ No
	Comments: Yes, BUT ONLY IF an LSE is not covered by a planning authority or resource planner. Otherwise, no, if the LSE is a member of a tight pool pool / RTO because the tight power pool / RTO will do the resource adequacy assessment.
3.	Do you agree with the proposed definition of Resource Adequacy?
	⊠ Yes
	□ No
	Comments: Yes, so long as fuel supply interruption / deliverability concerns are addressed separately from the probability-based evaluation. This is because the probability of fuel interruption is speculative at best and thus needs to be assessed in the final analysis deterministically.
4.	Do you agree with the language added requiring the regional resource adequacy framework to include a probability-based evaluation of whether projected resources will be sufficient to meet forecasted load taking into account relevant uncertainties?
	⊠ Yes
	□ No
	Comments:
5.	Are you aware of any associated NAESB Business Practices that should be developed to coordinate with this SAR?
	☐ Yes
	⊠ No

Comments:

6. Please provide any other comments on this SAR that you haven't already provided.

Comments:

Please use this form to submit comments on the Resource Adequacy SAR Drafting Team's second draft of the Resource Adequacy Assessment SAR. Comments must be submitted by **March 30**, **2006**. You must submit the completed form by e-mailing it to sarcomm@nerc.com with the words "Resource Adequacy SAR Comments" in the subject line. If you have questions please contact Mark Ladrow at mark.ladrowenerc.net or 609.452.8060.

ALL DATA ON THIS FORM WILL BE TRANSFERRED AUTOMATICALLY TO A DATABASE.

DO: **Do** enter text only, with no formatting or styles added.

<u>Do</u> use punctuation and capitalization as needed (except quotations).

Do use more than one form if responses do not fit in the spaces provided.

<u>Do</u> submit any formatted text or markups in a separate WORD file.

DO NOT: **<u>Do not</u>** insert tabs or paragraph returns in any data field.

<u>Do not</u> use numbering or bullets in any data field. **<u>Do not</u>** use quotation marks in any data field.

Individual Commenter Information				
(Co	omp	lete t	this page for comments from one organization or individual.)	
Name:	Mic	hael (Calimano	
Organization:	Nev	w Yor	k Independent System Operator	
Telephone:	518	3-356-0	6129	
E-mail:	mc	alim	ano@nyiso.com	
NERC Regio	n		Registered Ballot Body Segment	
☐ ERCOT			1 — Transmission Owners	
☐ FRCC		\boxtimes	2 — RTOs, ISOs, Regional Reliability Councils	
∐ MAPP ⊠ NPCC			3 — Load-serving Entities	
☐ RFC			4 — Transmission-dependent Utilities	
☐ SERC			5 — Electric Generators	
SPP			6 — Electricity Brokers, Aggregators, and Marketers	
☐ WECC			7 — Large Electricity End Users	
Applicable	ι		8 — Small Electricity End Users	
			9 — Federal, State, Provincial Regulatory or other Government Entities	

Group Comments (Complete this page if comments are from a group.)						
Group Name:						
Lead Contact:						
Contact Organization:						
Contact Segment:						
Contact Telephone:						
Contact E-mail:						
Additional Member Name	Additional Member Organization	Region*	Segment*			

^{*} If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background

Please review the consideration given to the comments on the first draft of the Resource Adequacy Assessment SAR as well as the revisions made to the SAR before answering the questions on this comment form.

Please Enter All Comments in Simple Text Format.

1.	Do you agree with the scope of the revised SAR? In particular, does the substitution of the word "framework" for "criterion" in the first detailed element broaden the scope sufficiently for all manner of resource adequacy arrangements in the Regions to be accommodated in the regional methodologies to assess resource adequacy?
	Yes
	⊠ No
	Comments: The word framework allows for entities to conduct assessments that are not based on any measurable criteria that can be tied directly to system reliability. Although the last sentence of this first section tries to bring it back into focus by including a probability based evaluation, such an evaluation would be relatively meaningless without consistant measurable criteria.
2.	Do you agree with the addition of the LSE as an entity that should be required to comply with proposed reporting requirements (to be defined in the Standard Drafting Process) to allow regional resource adequacy assessments to be performed?
	☐ Yes
	⊠ No
	Comments: This SAR should only apply to Regional Reliability Organizations (see Purpose). There is no check box on the SAR for them. If the standard is intended to require the Regions to establish criteria, methodology, guideline and procedure to perform the assessment, and the ISO/RTOs to establish their requirements according to the Regional criteria, then the requirements for information provision should be stipulated in the Regional requirements, rather than in a NERC standard. NERC is then strictly in an oversight role due to States and Canadian Provincial jurisdiction with respect to dealing with Resource Adequacy and FERC's restrictions on NERC dealing with Resource Adequacy.
3.	Do you agree with the proposed definition of Resource Adequacy?
	☐ Yes
	⊠ No
	Comments: This definintion supports the establishment of a standard based on measureable criterea. The criterea may not be sufficient if it is based soley on a single Region-wide reserve margin since diversity could allow sub-regions to meet criteria with different levels of reserve margin.
	In addition The proposed definition does not capture system losses - a key component in evaluating the amount of aggregate resource needed to ensure adequacy. We therefore propose that Resource adequacy be defined as "the ability of supply-side and demand-side resources to meet the aggregate electrical demand and energy requirements for the end-use customers and system losses with a specified degree of reliability.

4.	Do you agree with the language added requiring the regional resource adequacy framework to include a probability-based evaluation of whether projected resources will be sufficient to meet forecasted load taking into account relevant uncertainties?
	⊠ Yes
	⊠ No
	Comments: If that framework contains specific reliability criteria.
5.	Are you aware of any associated NAESB Business Practices that should be developed to coordinate with this SAR?
	☐ Yes
	⊠ No
	Comments:
6.	Please provide any other comments on this SAR that you haven't already provided.
	Comments: Although this SAR does not provide for a nationwide criterion for resource adequacy, it should be noted that allowance of a patchwork set of assessment 'frameworks' could lead to a similar type situation that initiated the ERO legislation.

Please use this form to submit comments on the Resource Adequacy SAR Drafting Team's second draft of the Resource Adequacy Assessment SAR. Comments must be submitted by **March 30**, **2006**. You must submit the completed form by e-mailing it to <a href="mark-leaf-edge-newdown-new

ALL DATA ON THIS FORM WILL BE TRANSFERRED AUTOMATICALLY TO A DATABASE.

DO: <u>Do</u> enter text only, with no formatting or styles added	DO:	Do enter	text only,	with no	formatting	or styles	added.
---	-----	-----------------	------------	---------	------------	-----------	--------

 $\underline{\textbf{Do}}$ use punctuation and capitalization as needed (except quotations).

<u>Do</u> use more than one form if responses do not fit in the spaces provided.

<u>Do</u> submit any formatted text or markups in a separate WORD file.

DO NOT: **<u>Do not</u>** insert tabs or paragraph returns in any data field.

<u>Do not</u> use numbering or bullets in any data field. **Do not** use quotation marks in any data field.

Name: Organization: Telephone: E-mail: NERC Region Registered Ballot Body Segment 1 — Transmission Owners 2 — RTOs, ISOs, Regional Reliability Councils MAPP MAPP MAPP A — Transmission-dependent Utilities 5 — Electric Generators 5 — Electricity Brokers, Aggregators, and Marketers MECC NA — Not Applicable 9 — Federal, State, Provincial Regulatory or other Government Entities 9 — Federal, State, Provincial Regulatory or other Government Entities 1 — Transmission-dependent Utilities 2 — Electric Generators 3 — Large Electricity End Users 3 — Small Electricity End Users 3 — Small Electricity End Users 3 — Federal, State, Provincial Regulatory or other Government Entities 3 — Transmission-dependent Utilities 4 — Tran	Individual Commenter Information				
Organization: Telephone: E-mail: NERC Region Registered Ballot Body Segment ERCOT 1 - Transmission Owners FRCC 2 - RTOs, ISOs, Regional Reliability Councils MAPP NPCC 3 - Load-serving Entities NPCC 4 - Transmission-dependent Utilities SERC 5 - Electric Generators SPP 6 - Electricity Brokers, Aggregators, and Marketers WECC NA - Not Applicable 8 - Small Electricity End Users	(Complete this page for comments from one organization or individual.)				
Telephone: E-mail: NERC Region Registered Ballot Body Segment ERCOT 1 - Transmission Owners FRCC 2 - RTOs, ISOs, Regional Reliability Councils MAPP 3 - Load-serving Entities NPCC 4 - Transmission-dependent Utilities SERC 5 - Electric Generators SPP 6 - Electricity Brokers, Aggregators, and Marketers WECC NA - Not Applicable 8 - Small Electricity End Users	Name:				
E-mail: NERC Region Registered Ballot Body Segment DERCOT DISTRICT SERCE SER	Organization:				
NERC Region Registered Ballot Body Segment ☐ ERCOT ☐ 1 — Transmission Owners ☐ FRCC ☐ 2 — RTOs, ISOs, Regional Reliability Councils ☐ MAPP ☐ 3 — Load-serving Entities ☐ NPCC ☐ 4 — Transmission-dependent Utilities ☐ SERC ☐ 5 — Electric Generators ☐ SPP ☐ 6 — Electricity Brokers, Aggregators, and Marketers ☐ WECC ☐ 7 — Large Electricity End Users ☐ NA - Not Applicable 8 — Small Electricity End Users	Telephone:				
□ ERCOT □ 1 — Transmission Owners □ FRCC □ 2 — RTOs, ISOs, Regional Reliability Councils □ MAPP □ 3 — Load-serving Entities □ NPCC □ 4 — Transmission-dependent Utilities □ SERC □ 5 — Electric Generators □ SPP □ 6 — Electricity Brokers, Aggregators, and Marketers □ WECC □ 7 — Large Electricity End Users □ NA - Not Applicable ■ 8 — Small Electricity End Users	E-mail:				
☐ FRCC ☐ 2 — RTOs, ISOs, Regional Reliability Councils ☐ MAPP ☐ 3 — Load-serving Entities ☐ NPCC ☐ 4 — Transmission-dependent Utilities ☐ SERC ☐ 5 — Electric Generators ☐ SPP ☐ 6 — Electricity Brokers, Aggregators, and Marketers ☐ WECC ☐ 7 — Large Electricity End Users ☐ NA - Not Applicable 8 — Small Electricity End Users	NERC Region		Registered Ballot Body Segment		
□ MAPP □ 3 — Load-serving Entities □ NPCC □ 4 — Transmission-dependent Utilities □ SERC □ 5 — Electric Generators □ SPP □ 6 — Electricity Brokers, Aggregators, and Marketers □ WECC □ 7 — Large Electricity End Users □ NA - Not Applicable ■ 8 — Small Electricity End Users	☐ ERCOT		1 — Transmission Owners		
□ NPCC □ 3 — Load-serving Entities □ RFC □ 4 — Transmission-dependent Utilities □ SERC □ 5 — Electric Generators □ SPP □ 6 — Electricity Brokers, Aggregators, and Marketers □ WECC □ 7 — Large Electricity End Users □ NA – Not Applicable □ 8 — Small Electricity End Users	=		2 — RTOs, ISOs, Regional Reliability Councils		
□ RFC □ 4 — Transmission-dependent Utilities □ SERC □ 5 — Electric Generators □ SPP □ 6 — Electricity Brokers, Aggregators, and Marketers □ WECC □ 7 — Large Electricity End Users □ NA – Not Applicable ■ 8 — Small Electricity End Users	=		3 — Load-serving Entities		
□ SPP □ 6 — Electricity Brokers, Aggregators, and Marketers □ WECC □ NA – Not Applicable □ 8 — Small Electricity End Users	=		4 — Transmission-dependent Utilities		
 WECC NA – Not Applicable T – Large Electricity End Users 8 – Small Electricity End Users 	SERC		5 — Electric Generators		
□ NA – Not Applicable	=		6 — Electricity Brokers, Aggregators, and Marketers		
Applicable 8 — Small Electricity End Users			7 — Large Electricity End Users		
9 — Federal, State, Provincial Regulatory or other Government Entities			8 — Small Electricity End Users		
			9 — Federal, State, Provincial Regulatory or other Government Entities		

Group Comments (Complete this page if comments are from a group.)

Group Name: WECC Loads and Resources Subcommittee

Lead Contact: John Leland

Contact Organization: NorthWestern Energy

Contact Segment: 1

Contact Telephone: (406) 497-3383

Contact E-mail: john.leland@northwestern.com

Additional Member Name	Additional Member Organization	Region*	Segment*
Mike Jaske	California Energy Commission	WECC	9
Joni Zenger	Utah Division of Public Utilties	WECC	9
Grace Anderson	California Energy Commission	WECC	9

^{*} If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background

Please review the consideration given to the comments on the first draft of the Resource Adequacy Assessment SAR as well as the revisions made to the SAR before answering the questions on this comment form.

Please Enter All Comments in Simple Text Format.

1.	Do you agree with the scope of the revised SAR? In particular, does the substitution of the word "framework" for "criterion" in the first detailed element broaden the scope sufficiently for all manner of resource adequacy arrangements in the Regions to be accommodated in the regional methodologies to assess resource adequacy?
	⊠ Yes
	□ No
	Comments: In paragraph #1, the word framework is a critical improvement upon the previous phrases of criterion (or criteria) used in earlier drafts of the SAR. We strongly support the use of the word framework and encourage that the meaning of a framework be elaborated upon to be clear what is included within the required framework.
	For example, an RA framework encompasses the metric and benchmark (numerical guideline/target) that is being used for analysis and for judging success, but it also includes: (1) the procedures by which capacity is counted for various types of resources, (2) the protocols for forecasting load, (3) what uncertainties are to be addressed through sensitivity cases and what ones through scenario analyses, and, (4) criteria for determining what resource additions ought to be included based upon degree of certainty about commitments, etc.
2.	Do you agree with the addition of the LSE as an entity that should be required to comply with proposed reporting requirements (to be defined in the Standard Drafting Process) to allow regional resource adequacy assessments to be performed?
	☐ Yes
	□ No
	Comments:
3.	Do you agree with the proposed definition of Resource Adequacy?
J.	☐ Yes
	⊠ No
	Comments: In paragraph 1, definition of resource adequacy (RA), the phrase,with a specified degree of reliability, should be deleted and replaced with the following phrasealong with necessary planning reserves to cover reasonable contingencies as determined by the Region.
	We support inclusion of a definition of RA in the SAR, but the current language overstates what we know resource adequacy requirements can deliver. We do not know how to compute reliability, nor do we have assurance that the actions of a planning assessment with induce resource adequacy. We can have greater assurance that we know how to compute planning reserves covering various contingencies.

4.	Do you agree with the language added requiring the regional resource adequacy framework to include a probability-based evaluation of whether projected resources will be sufficient to meet forecasted load taking into account relevant uncertainties?
	☐ Yes
	⊠ No
	Comments: In Paragraph #1, we support deletion of specification of a method like LOLP or LOLE, because we do not believe these kinds of analyses are meaningful for the WI. At the present time there is no method that fully addresses all of the key uncertainties facing the WI. Nor do we believe that such a methodology and the necessary data will be available anytime soon.
	The term probability-based evaluation still remains an issue of concern. To make resource adequacy assessments meaningful, probabilistic assessment methodologies should not be prescribed until all relevant uncertainties can be characterized using data applicable to the Region. To allow interconnections to develop a framework and implementation requirements that best reflect their unique physical and institutional characteristics, we request deletion of the term "probability-based" in the final sentence.
	Finally, the types of uncertainties called out in the previous draft SAR are relevant for the west and we would therefore recommend reinstating the list of relevant factors deleted in this draft.
5.	Are you aware of any associated NAESB Business Practices that should be developed to coordinate with this SAR?
	☐ Yes
	⊠ No
	Comments:
6.	Please provide any other comments on this SAR that you haven't already provided.
	Comments:
	Comment
	Throughout this SAR it is unclear whether the SAR drafting team uses shall and should consistently. We urge that shall be used only when something is being made mandatory. We urge use of should or may when some feature or provision is recommended, but not required.
	Comment
	In paragraph #1, the word recognize is apparently used to mean that the establishment of resource adequacy requirements by local/state/regional governments and other policy-setting bodies should be taken into account. This is a crucial issue for WECC and some other Councils that have states or RTOs establishing RA requirements of their own. In WECC, California has established a much stronger version of RA than that contemplated by this SAR or in the development effort now underway within WECC.

We propose that recognize be replaced with accommodate. We understand accommodate to mean that the requirements of the local/state/regional government or policy-setting entity would be addressed in parallel with the requirements of a Region.

For example, if WECC were to determine that a monthly capacity reserve margin requirement that varied from 14% in summer months to 12% in winter months was the appropriate benchmark for a capacity metric, WECC would assess the WI using such a seasonal benchmark. Pursuant to the last sentence, the ...Region or sub-region would establish assessment methodologies to determine whether the adequacy criteria are met, but also prepare a scenario in which California's year-round capacity requirement of 15% would be compared to the Region's adequacy criteria. In this manner any sub-region or state/provincial requirement is accommodated, in the sense that assessments are conducted that would identify the differential caused by the alternative benchmarks thought appropriate by WECC versus those (higher or lower) mandated by sub-regional entities.

Comment

In paragraph 2, there is inconsistency between the redrafted paragraph 1 and the unchanged paragraph 2. While the revised paragraph no longer requires the region to establish a criterion (this has been replaced by a framework), paragraph 2 still refers to sub-units of the Region establishing requirements to comply with the regional criterion (or criteria).

In the west, at least, we have no RTOs and none on the horizon. Since the ISO is a California entity, it is already subject to mandatory RA requirements established by the California PUC. Further, all reserve sharing pools in the WI are operating reserve pools, and not planning reserve sharing pools. The perspective of an operating reserve sharing pool is completely different for the longer-term future perspective intrinsic to resource adequacy requirements. We thus do not believe it is appropriate for operating reserve sharing pools to have planning reserve requirements.

We urge that the first sentence be revised to delete reference to ISOs and reserve sharing pools and to read: RTOs or sub-regional entities may establish RA requirements consistent with the resource adequacy framework of the Region

Comment

Paragraph #5 indicates that NERC may conduct audits to verify compliance by a Region with NERC resource adequacy standards, once established. The phrase, ...and may also include the performance of independent analysis by NERC, suggests that NERC would have the data and capability to conduct such independent analyses. To our knowledge, NERC is not now in possession of the data that would allow such independent analyses as WECC now uses. One implication of this phrase is that NERC is going to require submission of all of the backup data used in conducting resource adequacy assessments or that it would acquire these data as part of the audit process.

Paragraph #5 also includes the phrase, ...confirm the consistent application of standard resource adequacy assessment methodologies, as part of the NERC compliance review process. We object to this language. Even the qualifier ...including appropriate Regional variations is insufficient to remove our concerns.

We believe that there is no standard resource adequacy assessment methodology. WECC is developing is own resource adequacy framework, which over time will likely involve a customized assessment methodology. The WI is unique among the three interconnections in North America. The Eastern Interconnection and ERCOT are likely to be unique as well. There is no standard methodology equally applicable to each of the three interconnections. To the extent this concept of standard methodologies among Regions is applicable at all it is likely to be to the multiple Regions within the Eastern Interconnection.

We encourages NERC to undertake periodic audits of the regions, with the goal of evaluating whether the Region is complying with its own RA framework. Independent analyses are not feasible nor are standard methodologies. We thus urge the second sentence of paragraph 5 be revised to delete the reference to criteria and replace it with framework. The remainder of paragraph 5 should be deleted in its entirety.

Please use this form to submit comments on the Resource Adequacy SAR Drafting Team's second draft of the Resource Adequacy Assessment SAR. Comments must be submitted by **March 30**, **2006**. You must submit the completed form by e-mailing it to sarcomm@nerc.com with the words "Resource Adequacy SAR Comments" in the subject line. If you have questions please contact Mark Ladrow at mark.ladrowenerc.net or 609.452.8060.

ALL DATA ON THIS FORM WILL BE TRANSFERRED AUTOMATICALLY TO A DATABASE.

DO: <u>Do</u> enter text only, with no formatting or styles added	DO:	Do enter	text only,	with no	formatting	or styles	added.
---	-----	-----------------	------------	---------	------------	-----------	--------

 $\underline{\textbf{Do}}$ use punctuation and capitalization as needed (except quotations).

<u>Do</u> use more than one form if responses do not fit in the spaces provided.

<u>Do</u> submit any formatted text or markups in a separate WORD file.

DO NOT: **<u>Do not</u>** insert tabs or paragraph returns in any data field.

Do not use numbering or bullets in any data field.

<u>Do not</u> use quotation marks in any data field.

Name: Organization: Telephone: E-mail:	Individual Commenter Information				
Organization: Telephone: E-mail: NERC Region Registered Ballot Body Segment ERCOT 1 - Transmission Owners FRCC 2 - RTOs, ISOs, Regional Reliability Councils MAPP NPCC 3 - Load-serving Entities RFC 4 - Transmission-dependent Utilities SERC 5 - Electric Generators SPP WECC NA - Not Applicable 8 - Small Electricity End Users	(Complete this page for comments from one organization or individual.)				
Telephone: E-mail: NERC Region Registered Ballot Body Segment ERCOT 1 - Transmission Owners FRCC 2 - RTOs, ISOs, Regional Reliability Councils MAPP 3 - Load-serving Entities NPCC RFC 4 - Transmission-dependent Utilities SERC SERC 5 - Electric Generators SPP 6 - Electricity Brokers, Aggregators, and Marketers WECC NA - Not Applicable 8 - Small Electricity End Users	Name:				
E-mail: NERC Region Registered Ballot Body Segment □ ERCOT □ 1 — Transmission Owners □ FRCC □ 2 — RTOs, ISOs, Regional Reliability Councils □ MAPP □ NPCC □ RFC □ 4 — Transmission-dependent Utilities □ SERC □ 4 — Transmission-dependent Utilities □ SPP □ SPP □ 6 — Electric Generators □ WECC □ NA - Not Applicable	Organization:				
NERC Region Registered Ballot Body Segment ☐ ERCOT ☐ 1 — Transmission Owners ☐ FRCC ☐ 2 — RTOs, ISOs, Regional Reliability Councils ☐ MAPP ☐ 3 — Load-serving Entities ☐ NPCC ☐ 4 — Transmission-dependent Utilities ☐ SERC ☐ 5 — Electric Generators ☐ SPP ☐ 6 — Electricity Brokers, Aggregators, and Marketers ☐ WECC ☐ 7 — Large Electricity End Users ☐ NA - Not Applicable 8 — Small Electricity End Users	Telephone:				
□ ERCOT □ 1 — Transmission Owners □ FRCC □ 2 — RTOs, ISOs, Regional Reliability Councils □ MAPP □ 3 — Load-serving Entities □ NPCC □ 4 — Transmission-dependent Utilities □ SERC □ 5 — Electric Generators □ SPP □ 6 — Electricity Brokers, Aggregators, and Marketers □ WECC □ 7 — Large Electricity End Users □ NA – Not Applicable ■ Small Electricity End Users	E-mail:				
☐ FRCC ☐ 2 — RTOs, ISOs, Regional Reliability Councils ☐ MAPP ☐ 3 — Load-serving Entities ☐ NPCC ☐ 4 — Transmission-dependent Utilities ☐ SERC ☐ 5 — Electric Generators ☐ SPP ☐ 6 — Electricity Brokers, Aggregators, and Marketers ☐ WECC ☐ 7 — Large Electricity End Users ☐ NA - Not Applicable 8 — Small Electricity End Users	NERC Region		Registered Ballot Body Segment		
□ MAPP □ 3 — Load-serving Entities □ NPCC □ 4 — Transmission-dependent Utilities □ SERC □ 5 — Electric Generators □ SPP □ 6 — Electricity Brokers, Aggregators, and Marketers □ WECC □ NA – Not Applicable □ MAPP □ 3 — Load-serving Entities □ 4 — Transmission-dependent Utilities □ 5 — Electric Generators □ 7 — Large Electricity End Users □ 8 — Small Electricity End Users	☐ ERCOT		1 — Transmission Owners		
□ NPCC □ RFC □ 4 — Transmission-dependent Utilities □ SERC □ 5 — Electric Generators □ SPP □ 6 — Electricity Brokers, Aggregators, and Marketers □ WECC □ NA – Not Applicable □ NA – Small Electricity End Users □ 8 — Small Electricity End Users	=		2 — RTOs, ISOs, Regional Reliability Councils		
□ RFC □ 4 — Transmission-dependent Utilities □ SERC □ 5 — Electric Generators □ SPP □ 6 — Electricity Brokers, Aggregators, and Marketers □ WECC □ 7 — Large Electricity End Users □ NA – Not Applicable ■ 8 — Small Electricity End Users	=		3 — Load-serving Entities		
□ SPP □ 6 — Electricity Brokers, Aggregators, and Marketers □ WECC □ NA – Not Applicable □ 8 — Small Electricity End Users			4 — Transmission-dependent Utilities		
☐ WECC ☐ NA – Not Applicable ☐ 8 — Small Electricity End Users ☐ 8 — Small Electricity End Users	⊠ SERC	\boxtimes	5 — Electric Generators		
NA – Not Applicable 7 — Large Electricity End Users 8 — Small Electricity End Users	=	\boxtimes	6 — Electricity Brokers, Aggregators, and Marketers		
Applicable 8 — Small Electricity End Users	=		7 — Large Electricity End Users		
9 — Federal, State, Provincial Regulatory or other Government Entities			8 — Small Electricity End Users		
			9 — Federal, State, Provincial Regulatory or other Government Entities		

Group Comments (Complete this page if comments are from a group.)

Group Name: Southern Co. Generation

Lead Contact: Roman Carter

Contact Organization: Southern Co. Generation

Contact Segment: 6

Contact Telephone: 205.257.6027

Contact E-mail: jrcarter@southernco.com

Additional Member Name	Additional Member Organization	Region*	Segment*
Roger Green	Southern Co. Generation	SERC	5
Terry Crawley	Southern Nuclear	SERC	5
Tom Higgins	Southern Company Generation	SERC	5
Clifford Shepard	Southern Co. Generation	SERC	6
Garey Rozier	Southern Co. Generation	SERC	6
Wayne Moore	Southern Co. Generation	SERC	6

^{*} If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background

with this SAR?

Please review the consideration given to the comments on the first draft of the Resource Adequacy Assessment SAR as well as the revisions made to the SAR before answering the questions on this comment form.

Please Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1.	Do you agree with the scope of the revised SAR? In particular, does the substitution of the word "framework" for "criterion" in the first detailed element broaden the scope sufficiently for all manner of resource adequacy arrangements in the Regions to be accommodated in the regional methodologies to assess resource adequacy?
	⊠ Yes
	□ No
	Comments: However, this Standard should emphasize consistency in reporting and not the establishment of requiring specific reserve levels or resource adequacy specifics. This SAR and subsequent standard should provide "what" requirements or data the resource adequacy plan should report, and allow the regions and subregions to provide "how" the requirements are to be met.
2.	Do you agree with the addition of the LSE as an entity that should be required to comply with proposed reporting requirements (to be defined in the Standard Drafting Process) to allow regional resource adequacy assessments to be performed?
	□ No
	Comments: As long as the proposed reporting requirements placed on the LSE follow the tasks and functions for the LSE contained in the Functional Model and the requirements are appropriate for the resource adequacy SAR.
3.	Do you agree with the proposed definition of Resource Adequacy?
	⊠ Yes
	□ No
	Comments:
4.	Do you agree with the language added requiring the regional resource adequacy framework to include a probability-based evaluation of whether projected resources will be sufficient to meet forecasted load taking into account relevant uncertainties?
	⊠ Yes
	□ No
	Comments: Although the SAR needs to be very clear about the types of "common mode failure" that will be evaluated. Additionally, this Standard should emphasize consistency in reporting, and not the establishment of requiring specific reserve levels or resource adequacy specifics.

5. Are you aware of any associated NAESB Business Practices that should be developed to coordinate

☐ Yes
⊠ No
Comments: However, one could exist.

6. Please provide any other comments on this SAR that you haven't already provided.

Comments: We are concerned about the potential conflict that may develop between local/regional regulatory agency obligations and any potential NERC resource adequacy standard. In no case, should a NERC standard impose a greater Resource Adequacy requirement than that required by local/regional regulatory agencies.

It is acceptable to make the aggregate results of an audit public, but it is not appropriate to make proprietary information available to the public. We believe the standard should not require the public disclosure of commercially sensitive information.

To what extent does the regional resource adequacy criteria have to be consistent with adjacent regions? Each region and subregion should have the flexibility to develop their resource adequacy plan in a manner which best fits their region.

Southern Generation would like to state that ultimately it is the responsibility of the local or regional appropriate regulatory body (in our case the State Public Service Commission) to establish, approve and oversee resource adequacy issues. These regulatory bodies should be recognized by NERC in the development of this resource adequacy SAR.

The components and requirements of this SAR should be cross-referenced with the tasks and responsibilities of the Resource Planner and Planning Authority (already mentioned LSE) of the Functional Model.

Please use this form to submit comments on the Resource Adequacy SAR Drafting Team's second draft of the Resource Adequacy Assessment SAR. Comments must be submitted by **March 30**, **2006**. You must submit the completed form by e-mailing it to sarcomm@nerc.com with the words "Resource Adequacy SAR Comments" in the subject line. If you have questions please contact Mark Ladrow at mark.ladrowenerc.net or 609.452.8060.

ALL DATA ON THIS FORM WILL BE TRANSFERRED AUTOMATICALLY TO A DATABASE.

DO: **Do** enter text only, with no formatting or styles added.

<u>Do</u> use punctuation and capitalization as needed (except quotations).

<u>Do</u> use more than one form if responses do not fit in the spaces provided.

<u>Do</u> submit any formatted text or markups in a separate WORD file.

DO NOT: **Do not** insert tabs or paragraph returns in any data field.

<u>Do not</u> use numbering or bullets in any data field. **<u>Do not</u>** use quotation marks in any data field.

Individual Commenter Information					
(Complete this page for comments from one organization or individual.)					
Name:	Ror	n Fals	etti		
Organization:	IES	0			
Telephone:	905	-855-	6187		
E-mail:	ron	.false	tti@ieso.ca		
NERC Regio	n		Registered Ballot Body Segment		
☐ ERCOT			1 — Transmission Owners		
☐ FRCC		\boxtimes	2 — RTOs, ISOs, Regional Reliability Councils		
∐ MAPP ⊠ NPCC			3 — Load-serving Entities		
☐ RFC			4 — Transmission-dependent Utilities		
☐ SERC	SPP		5 — Electric Generators		
SPP			6 — Electricity Brokers, Aggregators, and Marketers		
∐ WECC □ NA – Not			7 — Large Electricity End Users		
Applicable			8 — Small Electricity End Users		
• •			9 — Federal, State, Provincial Regulatory or other Government Entities		

Group Comments (Complete this page if comments are from a group.)					
Group Name:					
Lead Contact:					
Contact Organization:					
Contact Segment:					
Contact Telephone:					
Contact E-mail:					
Additional Member Name	Additional Member Organization	Region*	Segment*		

^{*} If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background

Please review the consideration given to the comments on the first draft of the Resource Adequacy Assessment SAR as well as the revisions made to the SAR before answering the questions on this comment form.

Please Enter All Comments in Simple Text Format.

In	sert a "check" mark in the appropriate boxes by double-clicking the gray areas.
1.	Do you agree with the scope of the revised SAR? In particular, does the substitution of the word "framework" for "criterion" in the first detailed element broaden the scope sufficiently for all manner of resource adequacy arrangements in the Regions to be accommodated in the regional methodologies to assess resource adequacy?
	⊠ Yes
	⊠ No
	Comments: We agree with the substitution of "framework" for "criterion" as framework covers such other elements as methodology, assumptions and approach. However, it is equally important that criterion be also included. By this replacement, we are concerned that some Regions would simply develop the methodology, guideline, etc. but not the criterion, which we believe is of paramount importance as it is the "specifed degree of reliability" as stipulated in the proposed definition for resource adequacy. We therefore suggest the wording in (1) be revised to "Each NERC Regional Reliability Organization shall establish a framework and the criterion by which to assess the resource adequacy of the Region." With this change, the rest of (1) may need to be revised accordingly, particularly the phrase"resource adequacy criteria or requirements, where such criteria/requirements exist" since the criteria/requirements will exist.
2.	Do you agree with the addition of the LSE as an entity that should be required to comply with proposed reporting requirements (to be defined in the Standard Drafting Process) to allow regional resource adequacy assessments to be performed?
	⊠ No
	Comments: Depending on the intent of the standard and specific information requirements. If the standard is intended to require the Regions to establish criteria, methodology, guideline and procedure to perform the assessment, and the ISO/RTOs to establish their requirements according to the Regional criteria, then the requirements for information provision should be stipulated in the Regional requirements, rather than in a NERC standard. NERC's role is strictly an oversight of the Regions methodology and procedures due to States and Canadian Provincial jurisdiction with respect to dealing with Resource Adequacy.
3.	Do you agree with the proposed definition of Resource Adequacy?
	⊠ Yes
	⊠ No
	Comments: The proposed definition does not capture system losses - a key component in evaluating the amount of aggregate resource needed to ensure adequacy. We therefore propose that Resource adequacy be defined as "the ability of supply-side and demand-side resources to meet the aggregate electrical demand and energy requirements for the end-use customers and system losses with a specified degree of reliability.

4.	Do you agree with the language added requiring the regional resource adequacy framework to include a probability-based evaluation of whether projected resources will be sufficient to meet forecasted load taking into account relevant uncertainties?
	⊠ Yes
	⊠ No
	Comments: We agree with the inclusion but suggest that "but not limited to" after "include" since some Regions may apply a deterministic approach either in lieu of or in combination with a probabilistic approach. Further, the requirement should stipulate that the evaluation must satisfy the applicable resource adequacy criterion.
5.	Are you aware of any associated NAESB Business Practices that should be developed to coordinate with this SAR?
	☐ Yes
	⊠ No
	Comments:
6.	Please provide any other comments on this SAR that you haven't already provided.
	Comments:

Please use this form to submit comments on the Resource Adequacy SAR Drafting Team's second draft of the Resource Adequacy Assessment SAR. Comments must be submitted by **March 30**, **2006**. You must submit the completed form by e-mailing it to <a href="mark-leaf-edge-newdown-new

ALL DATA ON THIS FORM WILL BE TRANSFERRED AUTOMATICALLY TO A DATABASE.

DO: <u>Do</u> enter text only, with no formatting or styles added	DO:	Do enter	text only,	with no	formatting	or styles	added.
---	-----	-----------------	------------	---------	------------	-----------	--------

 $\underline{\textbf{Do}}$ use punctuation and capitalization as needed (except quotations).

<u>Do</u> use more than one form if responses do not fit in the spaces provided.

<u>Do</u> submit any formatted text or markups in a separate WORD file.

DO NOT: **<u>Do not</u>** insert tabs or paragraph returns in any data field.

<u>Do not</u> use numbering or bullets in any data field. **Do not** use quotation marks in any data field.

(Complete this page for comments from one organization or individual.)	
Name	
Name:	
Organization:	
Telephone:	
E-mail:	
NERC Region Registered Ballot Body Segment	
☐ ERCOT ☐ 1 — Transmission Owners	
FRCC 2 — RTOs, ISOs, Regional Reliability Councils	
☐ MAPP ☐ 3 — Load-serving Entities	
RFC 4 — Transmission-dependent Utilities	
SERC 5 — Electric Generators	
☐ SPP ☐ 6 — Electricity Brokers, Aggregators, and Marketers	
☐ WECC ☐ 7 — Large Electricity End Users	
Applicable 8 — Small Electricity End Users	
9 — Federal, State, Provincial Regulatory or other Government Entities	

Group Comments (Complete this page if comments are from a group.)

Group Name: SRP

Lead Contact: Shirley McKean

Contact Organization: SRP

Contact Segment: Transmission Owner

Contact Telephone: 602-236-0924

Contact E-mail: sxmckean@srpnet.com

Additional Member Name	Additional Member Organization	Region*	Segment*
Daniel Brickley	SRP	WECC	1
James Peterson	SRP	WECC	1

^{*} If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background

Please review the consideration given to the comments on the first draft of the Resource Adequacy Assessment SAR as well as the revisions made to the SAR before answering the questions on this comment form.

Please Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1.	Do you agree with the scope of the revised SAR? In particular, does the substitution of the word "framework" for "criterion" in the first detailed element broaden the scope sufficiently for all manner of resource adequacy arrangements in the Regions to be accommodated in the regional methodologies to assess resource adequacy?
	Yes
	⊠ No
	Comments: It is unclear what is meant by "Framework". "Assessment Methodologies" would be clearer.
	It is also unclear what is meant by "shall recognize" [p. SAR-4, #1), 2 nd sentence]. Is this suggesting the NERC RRO shall assess reliability using all applicable criteria?
2.	Do you agree with the addition of the LSE as an entity that should be required to comply with proposed reporting requirements (to be defined in the Standard Drafting Process) to allow regional resource adequacy assessments to be performed?
	⊠ Yes
	□ No
	Comments:
3.	Do you agree with the proposed definition of Resource Adequacy? ☐ Yes ☐ No
	Comments: The phrase "specified degree of reliaiblity" (p. SAR-4. paragraph 2) is ambiguous.
4.	Do you agree with the language added requiring the regional resource adequacy framework to include a probability-based evaluation of whether projected resources will be sufficient to meet forecasted load taking into account relevant uncertainties?
	☐ Yes
	⊠ No
	Comments: The only evaluation measures currently being used in the WECC are deterministic. Until a probability-based evaluation methodology has been agreed to and put in place, we shouldn't agree to move to a probability-based evaluation.
5.	Are you aware of any associated NAESB Business Practices that should be developed to coordinate with this SAR?
	☐ Yes
	⊠ No

Comments:

6. Please provide any other comments on this SAR that you haven't already provided.

Comments: When is this to be measured? Real time, day ahead, year ahead, 5 years ahead, 10 years ahead?

Please use this form to submit comments on the Resource Adequacy SAR Drafting Team's second draft of the Resource Adequacy Assessment SAR. Comments must be submitted by **March 30**, **2006**. You must submit the completed form by e-mailing it to sarcomm@nerc.com with the words "Resource Adequacy SAR Comments" in the subject line. If you have questions please contact Mark Ladrow at mark.ladrowenerc.net or 609.452.8060.

ALL DATA ON THIS FORM WILL BE TRANSFERRED AUTOMATICALLY TO A DATABASE.

DO: **Do** enter text only, with no formatting or styles added.

<u>Do</u> use punctuation and capitalization as needed (except quotations).

Do use more than one form if responses do not fit in the spaces provided.

<u>Do</u> submit any formatted text or markups in a separate WORD file.

DO NOT: **<u>Do not</u>** insert tabs or paragraph returns in any data field.

<u>Do not</u> use numbering or bullets in any data field. **<u>Do not</u>** use quotation marks in any data field.

Individual Commenter Information					
(Complete this page for comments from one organization or individual.)					
Name:	Ala	n Ada	amson		
Organization:	Nev	v Yorl	k State Reliability Council(NYSRC)		
Telephone:	518	18-355-1937			
E-mail:	aad	lamso	on@nycap.rr.com		
NERC Region	n		Registered Ballot Body Segment		
☐ ERCOT			1 — Transmission Owners		
☐ FRCC		\boxtimes	2 — RTOs, ISOs, Regional Reliability Councils		
☐ MAPP 図 NPCC			3 — Load-serving Entities		
☐ RFC			4 — Transmission-dependent Utilities		
☐ SERC			5 — Electric Generators		
SPP			6 — Electricity Brokers, Aggregators, and Marketers		
∐ WECC □ NA – Not			7 — Large Electricity End Users		
Applicable			8 — Small Electricity End Users		
			9 — Federal, State, Provincial Regulatory or other Government Entities		

Group Comments (Complete this page if comments are from a group.)					
Group Name:					
Lead Contact:					
Contact Organization:					
Contact Segment:					
Contact Telephone:					
Contact E-mail:					
Additional Member Name	Additional Member Organization	Region*	Segment*		

^{*} If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background

Please review the consideration given to the comments on the first draft of the Resource Adequacy Assessment SAR as well as the revisions made to the SAR before answering the questions on this comment form.

Please Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1.	Do you agree with the scope of the revised SAR? In particular, does the substitution of the word "framework" for "criterion" in the first detailed element broaden the scope sufficiently for all manner of resource adequacy arrangements in the Regions to be accommodated in the regional methodologies to assess resource adequacy?
	☐ Yes
	⊠ No
	Comments: The NYSRC strongly believes that is important that a Regional or Region-specific resource adequacy criterion be required for each Region. We note that the proposed definition of Resource Adequacy includes the requirement to meet "a specified degree of reliability", which IS a measureable reliability criterion. We also note that Part 2 of the SAR refers to "the resource criterion of the Region". It is unclear then why the requirement for a Region-specific criterion has been removed from Part 1of the SAR and replaced with "framework", but retained in Part 2. We disagree, therefore, that the term "framework" replace "criterion". Also, a regional criterion should not be confused with a regional methodology for evaluating reliability as suggested by the question.
2.	Do you agree with the addition of the LSE as an entity that should be required to comply with proposed reporting requirements (to be defined in the Standard Drafting Process) to allow regional resource adequacy assessments to be performed?
	⊠ Yes
	□ No
	Comments: Other parties with data required for resource adequacy assessments should have reporting requirements as well. Such data should be required to be submitted only to the entity that actually performs the assessment, such as a Region, sub-Region. or ISO.
3.	Do you agree with the proposed definition of Resource Adequacy?
	⊠ Yes
	□ No
	Comments:
4.	Do you agree with the language added requiring the regional resource adequacy framework to include a probability-based evaluation of whether projected resources will be sufficient to meet forecasted load taking into account relevant uncertainties?
	☐ Yes
	⊠ No
	Comments: Although we strongly agree that a probability-based evaluation should be required, the SAR should further say, as in the previous draft, that this evaluation should determine whether the applicable regional resource adequacy criterion (such as LOLE or LOLP)

	"Regional criterion". (See our comments under Question 1.)
5.	Are you aware of any associated NAESB Business Practices that should be developed to coordinate with this SAR?
	☐ Yes
	⊠ No
	Comments:
6.	Please provide any other comments on this SAR that you haven't already provided.
	Comments: We thank the SAR drafting team for considering in this new draft SAR, many of the comments that we provided for the first draft.

shall be satisfied. Also, the term "framework" should be replaced by "Region-specific" or

Please use this form to submit comments on the Resource Adequacy SAR Drafting Team's second draft of the Resource Adequacy Assessment SAR. Comments must be submitted by **March 30**, **2006**. You must submit the completed form by e-mailing it to sarcomm@nerc.com with the words "Resource Adequacy SAR Comments" in the subject line. If you have questions please contact Mark Ladrow at mark.ladrowenerc.net or 609.452.8060.

ALL DATA ON THIS FORM WILL BE TRANSFERRED AUTOMATICALLY TO A DATABASE.

DO: **Do** enter text only, with no formatting or styles added.

 $\underline{\textbf{Do}}$ use punctuation and capitalization as needed (except quotations).

<u>Do</u> use more than one form if responses do not fit in the spaces provided.

<u>Do</u> submit any formatted text or markups in a separate WORD file.

DO NOT: **Do not** insert tabs or paragraph returns in any data field.

<u>Do not</u> use numbering or bullets in any data field. **<u>Do not</u>** use quotation marks in any data field.

Individual Commenter Information				
(Co	(Complete this page for comments from one organization or individual.)			
Name:	Dar	1 Huff	man	
Organization:	Firs	stEne	rgy Solutions	
Telephone:	330	-315-	7262	
E-mail:	huf	fman	d@firstenergycorp.com	
NERC Region			Registered Ballot Body Segment	
☐ ERCOT			1 — Transmission Owners	
FRCC			2 — RTOs, ISOs, Regional Reliability Councils	
│			3 — Load-serving Entities	
			4 — Transmission-dependent Utilities	
☐ SERC		\boxtimes	5 — Electric Generators	
SPP			6 — Electricity Brokers, Aggregators, and Marketers	
│			7 — Large Electricity End Users	
Applicable			8 — Small Electricity End Users	
			9 — Federal, State, Provincial Regulatory or other Government Entities	

Group Comments (Complete this pa	ge if comments are from a group.)		
Group Name:			
Lead Contact:			
Contact Organization:			
Contact Segment:			
Contact Telephone:			
Contact E-mail:			
Additional Member Name	Additional Member Organization	Region*	Segment*

^{*} If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background

Please review the consideration given to the comments on the first draft of the Resource Adequacy Assessment SAR as well as the revisions made to the SAR before answering the questions on this comment form.

Please Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1.	Do you agree with the scope of the revised SAR? In particular, does the substitution of the word "framework" for "criterion" in the first detailed element broaden the scope sufficiently for all manner of resource adequacy arrangements in the Regions to be accommodated in the regional methodologies to assess resource adequacy?
	⊠ Yes
	□ No
	Comments: This broadening of the scope appears to be more appropriate, in recognition of Section 1211 of the Energy Policy of 2005 which states (2) This section does not authorize the ERO or the Commission to order the construction of additional generation or transmission capacity or to set and enforce compliance with standards for adequacy or safety of electric facilities or services.
2.	Do you agree with the addition of the LSE as an entity that should be required to comply with proposed reporting requirements (to be defined in the Standard Drafting Process) to allow regional resource adequacy assessments to be performed?
	□ No
	Comments: However, thought will need to be given as to how best to implement this for LSEs operating in deregulated markets.
3.	Do you agree with the proposed definition of Resource Adequacy?
	□ No
	Comments: Consider changing the ending phrase "with a specified degree of reliability" to "at a specified degree of reliability".
4.	Do you agree with the language added requiring the regional resource adequacy framework to include a probability-based evaluation of whether projected resources will be sufficient to meet forecasted load taking into account relevant uncertainties?
	⊠ Yes
	□ No
	Comments:
5.	Are you aware of any associated NAESB Business Practices that should be developed to coordinate with this SAR?
	☐ Yes

	⊠ No	
	Comments:	
6.	Please provide any other comments on this SAR that you haven't already provided.	
	Comments: No additional comments.	

Please use this form to submit comments on the Resource Adequacy SAR Drafting Team's second draft of the Resource Adequacy Assessment SAR. Comments must be submitted by **March 30**, **2006**. You must submit the completed form by e-mailing it to <a href="mark-leaf-edge-newdown-new

ALL DATA ON THIS FORM WILL BE TRANSFERRED AUTOMATICALLY TO A DATABASE.

DO:	<u>Do</u> enter	text only,	with no	formatting	or styles	added.
-----	-----------------	------------	---------	------------	-----------	--------

 $\underline{\textbf{Do}}$ use punctuation and capitalization as needed (except quotations).

Do use more than one form if responses do not fit in the spaces provided.

Do submit any formatted text or markups in a separate WORD file.

DO NOT: **<u>Do not</u>** insert tabs or paragraph returns in any data field.

<u>Do not</u> use numbering or bullets in any data field. **Do not** use quotation marks in any data field.

Individual Commenter Information						
(Comp	(Complete this page for comments from one organization or individual.)					
Name:						
Organization:						
Telephone:						
E-mail:						
NERC Region		Registered Ballot Body Segment				
☐ ERCOT		1 — Transmission Owners				
FRCC	\boxtimes	2 — RTOs, ISOs, Regional Reliability Councils				
∐ MAPP ⊠ NPCC		3 — Load-serving Entities				
□ RFC		4 — Transmission-dependent Utilities				
☐ SERC		5 — Electric Generators				
☐ SPP		6 — Electricity Brokers, Aggregators, and Marketers				
∐ WECC □ NA – Not		7 — Large Electricity End Users				
Applicable		8 — Small Electricity End Users				
		9 — Federal, State, Provincial Regulatory or other Government Entities				

Group Comments (Complete this page if comments are from a group.)

Group Name: NPCC CP9, Reliability Standards Working Group

Lead Contact: Guy V. Zito

Contact Organization: Northeast Power Coordinating Council

Contact Segment: 2

Contact Telephone: 212-840-1070
Contact E-mail: gzito@npcc.org

Additional Member Name	Additional Member Organization	Region*	Segment*
David Kiguel	Hydro One Networks	NPCC	1
Peter Lebro	National Grid	NPCC	1
Ralph Rufrano	New York Power Authority	NPCC	1
David Little	Nova Scotia Power	NPCC	1
Robert Pelligrinni	United Illuminating	NPCC	1
Kathleen Goodman	ISO-New England	NPCC	2
Greg Campoli	New York ISO	NPCC	2
William Shemley	ISO-New England	NPCC	2
Ron Falsetti	The IESO	NPCC	2
Al Adamson	New York State Reliability Coun.	NPCC	2
Guy Zito	Northeast Power Coor. Council	NPCC	2
Shashi Parekh	Mass. Dept of Tel. and Energy	NPCC	9

^{*} If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background

with this SAR?

Please review the consideration given to the comments on the first draft of the Resource Adequacy Assessment SAR as well as the revisions made to the SAR before answering the questions on this comment form.

Please Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1.	Do you agree with the scope of the revised SAR? In particular, does the substitution of the word "framework" for "criterion" in the first detailed element broaden the scope sufficiently for all manner of resource adequacy arrangements in the Regions to be accommodated in the regional methodologies to assess resource adequacy?
	☐ Yes ☑ No
	Comments: Participating members of NPCC believe Region specific resource adequacy criterion be required for each Region. We note that the proposed definition of Resource Adequacy includes the requirement to meet "a specified degree of reliability", which is a criterion. We also note that Part 2 of the SAR refers to "the resource criterion of the Region". It is unclear why the need for a Regional criterion has been removed from Part 1, but retained in Part 2. Use of the term framework is unclear, and subject to interpretation and it is recommended that it should be removed.
2.	Do you agree with the addition of the LSE as an entity that should be required to comply with proposed reporting requirements (to be defined in the Standard Drafting Process) to allow regional resource adequacy assessments to be performed?
	⊠ Yes
	□ No
	Comments:
3.	Do you agree with the proposed definition of Resource Adequacy?
	∐ No
	Comments:
4.	Do you agree with the language added requiring the regional resource adequacy framework to include a probability-based evaluation of whether projected resources will be sufficient to meet forecasted load taking into account relevant uncertainties?
	☐ Yes
	⊠ No
	Comments: Although we agree that a probability-based evaluation should be required, the SAR should further say, as in the previous draft, that this evaluation should determine whether the applicable resource adequacy criterion (such as LOLE or LOLP) shall be satisfied. (See our comment under Question 1.)

5. Are you aware of any associated NAESB Business Practices that should be developed to coordinate

Comment Form for Draft Two of the Resource Adequacy Assessment SAR ☐ Yes ☐ No Comments:

Comments:

	⊠ No	
	Comments:	
6.	Please provide any other comments on this SAR that you haven't already provided.	
	Comments: No additional comments.	

Please use this form to submit comments on the Resource Adequacy SAR Drafting Team's second draft of the Resource Adequacy Assessment SAR. Comments must be submitted by **March 30**, **2006**. You must submit the completed form by e-mailing it to <a href="mark-leaf-edge-newdown-new

ALL DATA ON THIS FORM WILL BE TRANSFERRED AUTOMATICALLY TO A DATABASE.

DO: <u>Do</u> enter text only, with no formatting or styles added	DO:	Do enter	text only,	with no	formatting	or styles	added.
---	-----	-----------------	------------	---------	------------	-----------	--------

 $\underline{\textbf{Do}}$ use punctuation and capitalization as needed (except quotations).

<u>Do</u> use more than one form if responses do not fit in the spaces provided.

<u>Do</u> submit any formatted text or markups in a separate WORD file.

DO NOT: **<u>Do not</u>** insert tabs or paragraph returns in any data field.

<u>Do not</u> use numbering or bullets in any data field. **Do not** use quotation marks in any data field.

(Complete this page for comments from one organization or individual.)	
Name	
Name:	
Organization:	
Telephone:	
E-mail:	
NERC Region Registered Ballot Body Segment	
☐ ERCOT ☐ 1 — Transmission Owners	
FRCC 2 — RTOs, ISOs, Regional Reliability Councils	
☐ MAPP ☐ 3 — Load-serving Entities	
RFC 4 — Transmission-dependent Utilities	
SERC 5 — Electric Generators	
☐ SPP ☐ 6 — Electricity Brokers, Aggregators, and Marketers	
☐ WECC ☐ 7 — Large Electricity End Users	
Applicable 8 — Small Electricity End Users	
9 — Federal, State, Provincial Regulatory or other Government Entities	

Group Comments (Complete this page if comments are from a group.)

Group Name: Midwest Reliability Organization (MRO)

Lead Contact: Dennis Florom
Contact Organization: MRO (LES)

Contact Segment: 2

Contact Telephone: 402-473-3384
Contact E-mail: dflorom@les.com

Additional Member Name	Additional Member Organization	Region*	Segment*
Terry Bilke	MISO	MRO	2
Robert Coish	MHEB	MRO	2
Alan Boesch	NPPD	MRO	2
Ken Goldsmith	Alliant Energy	MRO	2
Todd Gosnell	OPPD	MRO	2
Wayne Guttormson	SPC	MRO	2
Jim Maenner	WPSC	MRO	2
Darrick Moe, Chair	WAPA	MRO	2
Pam Oreschnick	XEL	MRO	2
Dave Rudolph	BEPC	MRO	2
Tom Mielnik	MEC	MRO	2
Dick Pursley	GRE	MRO	2
Joe Knight, Secretary	MRO	MRO	2
27 Additional MRO Members	Companies not named above	MRO	2

^{*} If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background

Please review the consideration given to the comments on the first draft of the Resource Adequacy Assessment SAR as well as the revisions made to the SAR before answering the questions on this comment form.

Please Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1.	Do you agree with the scope of the revised SAR? In particular, does the substitution of the word "framework" for "criterion" in the first detailed element broaden the scope sufficiently for all manner of resource adequacy arrangements in the Regions to be accommodated in the regional methodologies to assess resource adequacy?
	☐ Yes
	⊠ No
	Comments: It's not necessary to include the word "framework" within this SAR as it does not define it more clearly. Each RRO can establish criteria which satisfy the eventual standard. It could be simplified and reworded to say "Each NERC Regional Reliability Organization (Region) shall establish a methodology to assess the resource adequacy of the region. This methodology shall include local/state/province or multi-state/province requirements, where they exist. The methodology should include a probability-based evaluation (taking into account defined, relevant uncertainties) of whether projected resources will be sufficient to meet forecasted load".
2.	Do you agree with the addition of the LSE as an entity that should be required to comply with proposed reporting requirements (to be defined in the Standard Drafting Process) to allow regionaresource adequacy assessments to be performed?
	□ No
	Comments:
3.	Do you agree with the proposed definition of Resource Adequacy?
	□ No
	Comments: The definition is good. However, the term "specified" should be more detailed to describe where the specifications come from (standards and/or the RRO).
4.	Do you agree with the language added requiring the regional resource adequacy framework to include a probability-based evaluation of whether projected resources will be sufficient to meet forecasted load taking into account relevant uncertainties?
	□ No
	Comments: The addition of probability-based evaluation is a good one. However, there needs to be more definition to what "relevant uncertainty" means. Language should be added that suggests that the RRO will define what "relevant uncertainty" means.

the regions.

	with this SAR?
	☐ Yes
	⊠ No
	Comments:
6.	Please provide any other comments on this SAR that you haven't already provided.
	Comments: It's necessary that along with the requirements for the Planning Authority, Resource Planner, and LSE to provide this information, that there is a corresponding standard for the Reliability Authority to perform the necessary analysis to consider transmission constraints to assure that alternate supplies can be delivered for generation contingencies.
	The term "periodically assess" in paragraph 3, should be more clearly defined. A term stating, for example, "every 3 years" would be more specific and provide greater consistency among

5. Are you aware of any associated NAESB Business Practices that should be developed to coordinate

Overall, the SAR is loosely defined and should be tightened up somewhat. During the standard development phase, it should be tightened further. As an industry, where practical, the regions should work together to create consistency among the methodologies.

Please use this form to submit comments on the Resource Adequacy SAR Drafting Team's second draft of the Resource Adequacy Assessment SAR. Comments must be submitted by **March 30**, **2006**. You must submit the completed form by e-mailing it to <a href="mark-leaf-edge-newdown-new

ALL DATA ON THIS FORM WILL BE TRANSFERRED AUTOMATICALLY TO A DATABASE.

DO: <u>Do</u> enter text only, with no formatting or styles added	DO:	Do enter	text only,	with no	formatting	or styles	added.
---	-----	-----------------	------------	---------	------------	-----------	--------

 $\underline{\textbf{Do}}$ use punctuation and capitalization as needed (except quotations).

<u>Do</u> use more than one form if responses do not fit in the spaces provided.

<u>Do</u> submit any formatted text or markups in a separate WORD file.

DO NOT: **<u>Do not</u>** insert tabs or paragraph returns in any data field.

<u>Do not</u> use numbering or bullets in any data field. **Do not** use quotation marks in any data field.

(Complete this page for comments from one organization or individual.)	
Name	
Name:	
Organization:	
Telephone:	
E-mail:	
NERC Region Registered Ballot Body Segment	
☐ ERCOT ☐ 1 — Transmission Owners	
FRCC 2 — RTOs, ISOs, Regional Reliability Councils	
☐ MAPP ☐ 3 — Load-serving Entities	
RFC 4 — Transmission-dependent Utilities	
SERC 5 — Electric Generators	
☐ SPP ☐ 6 — Electricity Brokers, Aggregators, and Marketers	
☐ WECC ☐ 7 — Large Electricity End Users	
Applicable 8 — Small Electricity End Users	
9 — Federal, State, Provincial Regulatory or other Government Entities	

Group Comments (Complete this page if comments are from a group.)			
Group Name:	NERC Standards Evaluation Subcommittee		
Lead Contact:	Bill Boiorquez		

Contact Organization: ERCOT

Contact Segment:

Contact Telephone: 512-248-3036

Contact E-mail: bbojorquez@ercot.com

Additional Member Name	Additional Member Organization	Region*	Segment*

^{*} If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background

Please review the consideration given to the comments on the first draft of the Resource Adequacy Assessment SAR as well as the revisions made to the SAR before answering the questions on this comment form.

Please Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1.	Do you agree with the scope of the revised SAR? In particular, does the substitution of the word "framework" for "criterion" in the first detailed element broaden the scope sufficiently for all manner of resource adequacy arrangements in the Regions to be accommodated in the regional methodologies to assess resource adequacy?
	Yes
	⊠ No
	Comments: While the use of "framework" in this context refers to the assessment of resource adequacy, there is no specific resource adequacy requirement at the level of the Region upon which a framework can be established. A number of entities in the Region - but not the region itself - have the option of establishing a resource adequacy requirement as per Paragraph 2. Thus, the Region will, it appears, conduct its analysis without reference to any standard other than those established by a variety of entities in the Region. (Note, also, that the "criterion" language still appears in Paragraph 2.)
2.	Do you agree with the addition of the LSE as an entity that should be required to comply with proposed reporting requirements (to be defined in the Standard Drafting Process) to allow regiona resource adequacy assessments to be performed?
	□ No
	Comments:
3.	Do you agree with the proposed definition of Resource Adequacy?
	□ No
	Comments:
4.	Do you agree with the language added requiring the regional resource adequacy framework to include a probability-based evaluation of whether projected resources will be sufficient to meet forecasted load taking into account relevant uncertainties?
	☐ Yes
	⊠ No
	Comments: The assessment of resource adequacy includes criteria that are inherently probabilistic. However, the language is not clear in that it makes the use of a probabilistic analysis optional, that is, the language states that the region-level analysis "should include a probabity-based evaluation", not "shall." This language ought to require the use of probability-based analysis.

5.	Are you aware of any associated NAESB Business Practices that should be developed to coord with this SAR?	inate
	☐ Yes	
	⊠ No	
	Comments:	

6. Please provide any other comments on this SAR that you haven't already provided.

Comments: The SAR appears to have limited applicability because of contradictions among some of the sections. The SAR requires that a region develop a framework for assessing resource adequacy while a close reading suggests that the existence of the resource adequacy requirements that are to be analyzed is optional.

Paragraph 1, in part, states that each Region "...shall establish a framework by which to assess the resource adequacy of the Region." Paragraph 3 states that "Each Region shall periodically assess, through analysis, the resource adequacy of the Region..." These are requirements.

However, Paragraph 2 states that "RTO/ISO(s), generation reserve sharing pool(s) and/or other appropriate entity(ies) should establish resource adequacy requirements...". This is an "ought" statement, not a requirement. The intent of the rest of this SAR appears to be that there shall be resource adquacy requirements. Accordinly, then the word "should" in the first sentence of Paragraph 2 ought to read "shall."

Also, the language in Paragraph 2 states that "The Region or sub-regions should establish assessment methodologies...". Here, the "ought" statements appears to conflict with the language in other sections, i.e., that there shall be requirements that are analyzed, audited and reported on.

Paragraph 4 appears to establish two distinct requirements for data confidentiality. The first sentence states that data accompanying the publication of assessments may be confidential. The second sentence establishes a clear standard for data that accompanies public reports. It is not clear that the first sentence is needed as long as the second sentence is modiffied to make clear that NERC will use the data aggregated by the Regions.

Paragraph 5 appears to make optional the auditing, "NERC should perform periodic audits...", the validation of compliance, "Such audit should validate the compliance...", and the confirmation of consistent application of assessment methodologies. Again, it appears that these ought to be requirements and the wording ought to be "should", not "shall."

Paragraph 5 indicates that the NERC review of Regional assessment approaches may use "...independent analysis by NERC." It may be intentional that there is no discussion of the methodology NERC will use in this independent analysis. However, it may prevent future confusion if this language reflects that NERC's independent analysis will be based on the Region's framework of analysis.

Paragraph 6 also includes language that does not specifically require the performance of the indicated reviews and ought to be modified to replace "should" with "shall."

Where is the Regional resource adquacy stadard? As a generic concern, this SAR requires that each Region assess its resource adequacy. At the same time, resource adequacy requirements may - it is suggested above, must - be established by a number of different entities within a Region. These entities' requirements are "...to comply with the resource adequacy criterion (or criteria) of the Region." However, nowhere is there a requirement that the Region establish such a criterion or criteria. In practice, without a resource adequacy standard at the level of the Region, the analytical framework, the analysis itself and any NERC review appear to have a only a vague basis.

Please use this form to submit comments on the Resource Adequacy SAR Drafting Team's second draft of the Resource Adequacy Assessment SAR. Comments must be submitted by **March 30**, **2006**. You must submit the completed form by e-mailing it to <a href="mark-leaf-edge-newdown-new

ALL DATA ON THIS FORM WILL BE TRANSFERRED AUTOMATICALLY TO A DATABASE.

DO:	<u>Do</u> enter	text only,	with no	formatting	or styles a	added.
-----	-----------------	------------	---------	------------	-------------	--------

 $\underline{\textbf{Do}}$ use punctuation and capitalization as needed (except quotations).

<u>Do</u> use more than one form if responses do not fit in the spaces provided.

<u>Do</u> submit any formatted text or markups in a separate WORD file.

DO NOT: **<u>Do not</u>** insert tabs or paragraph returns in any data field.

<u>Do not</u> use numbering or bullets in any data field. **Do not** use quotation marks in any data field.

(Complete this page for comments from one organization or individual.)	
Name:	
Organization:	
Telephone:	
E-mail:	
NERC Region Registered Ballot Body Segment	
☐ ERCOT ☐ 1 — Transmission Owners	
FRCC 2 — RTOs, ISOs, Regional Reliability Councils	
☐ MAPP ☐ 3 — Load-serving Entities	
□ A — Transmission-dependent Utilities	
SERC 5 — Electric Generators	
☐ SPP ☐ 6 — Electricity Brokers, Aggregators, and Marketers	
☐ WECC ☐ 7 — Large Electricity End Users	
Applicable 8 — Small Electricity End Users	
9 — Federal, State, Provincial Regulatory or other Government Entities	

Group Comments (Complete this page if comments are from a group.)			
Group Name:	PJM Staff		
Lead Contact:	Mark Kuras		

Contact Organization: PJM

Contact Segment: 2

Contact Telephone: 610-666-8924
Contact E-mail: kuras@pjm.com

Additional Member Name	Additional Member Organization	Region*	Segment*
Bruce Balmat	PJM	RFC	2
Joseph Willson	PJM	RFC	2
Albert DiCaprio	PJM	RFC	2

^{*} If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background

Please review the consideration given to the comments on the first draft of the Resource Adequacy Assessment SAR as well as the revisions made to the SAR before answering the questions on this comment form.

Please Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1.	Do you agree with the scope of the revised SAR? In particular, does the substitution of the word "framework" for "criterion" in the first detailed element broaden the scope sufficiently for all manner of resource adequacy arrangements in the Regions to be accommodated in the regional methodologies to assess resource adequacy?
	⊠ Yes
	□ No
	Comments:
2.	Do you agree with the addition of the LSE as an entity that should be required to comply with proposed reporting requirements (to be defined in the Standard Drafting Process) to allow regiona resource adequacy assessments to be performed?
	☐ Yes
	⊠ No
	Comments: This SAR should only apply to Regional Reliability Organizations (see Purpose). There is no check box on the SAR for them. Otherwise, if this standard is to apply to more than just the RROs, then both resources and load entities must be tasked to comply. Generation Owners or Generation Operators and Transmission Service Providers should be added to the existing checks.
3.	Do you agree with the proposed definition of Resource Adequacy?
	☐ Yes
	□ No
	Comments: Need to mention system losses. Losses need to be planned to be supplied along with customer demand.
4.	Do you agree with the language added requiring the regional resource adequacy framework to include a probability-based evaluation of whether projected resources will be sufficient to meet forecasted load taking into account relevant uncertainties?
	⊠ Yes
	□ No
	Comments:
5.	Are you aware of any associated NAESB Business Practices that should be developed to coordinate with this SAR?
	☐ Yes
	⊠ No

Comments:

6. Please provide any other comments on this SAR that you haven't already provided.

Comments: Requirement 6 states that a review of deliverability must take place but in this SAR no requirements up to that point require the existence of deliverability evaluations. Delete this requirement out of requirement 6. PJM considers load deliverability to be a separate issue from Resource Adequacy and should not be addressed in this SAR.