First Posting of Coordinate Operations SAR Summary of Comments and their Consideration, Organized by Question Number

There were over 50 sets of responses to the first posting of this SAR. The comments submitted with these responses are addressed in this document. The comments can be viewed in their original format at:

http://www.nerc.com/~filez/sar-approved.html

In this document the comments have been 'cut and pasted' and organized by central themes. None of the comments submitted by interested industry participants have been omitted.

The SAR DT's consideration of each of the comments submitted follows that comment or suggestion. In cases where there were several comments submitted that made the same or a very similar suggestion, a single response has been provided. The comments submitted by industry participants served as the basis for revising this SAR.

If you feel that your comment has been overlooked, please let us know immediately. Our goal is to give EVERY comment serious consideration in this process! If you feel there has been an error or omission, you can contact Tim Gallagher in the NERC office. Tim can be reached at 609-452-8060 or at tim.gallagher@nerc.com.

Contents:

Is there a reliability-related need for a standard to be developed on this topic?	3
Is there a reliability-related need for a standard to be developed on this topic? - No	5
The scope of the SAR should be expanded to include all aspects of operations:	7
Remove or refine description of Planning Horizon.	7
Work on this SAR should focus solely on reliability.	8
Suggested changes to the Functions Section of the SAR	9
Suggested changes to the Purpose/Industry Need:	10
Suggested changes to the Brief Description:	10
Caution – avoid overlap with other SARs:	11
SAR not specific enough:	12
General Comments in Support of SAR:	13

Is there a reliability-related need for a standard to be developed on this topic?

Yes		
Allegheny Power		
Ameren Services -Energy Delivery Technical Services		
American Electric Power		
American Transmission Company		
Arizona Public Service		
Bonneville Power Administration - Power Business Line		
BPA		
Bulk Power Operations Southern Company		
Bulk Power Operations Southern Company (Griffith)		
California ISO		
Calpine		
Cinergy		
Dairyland Power Cooperative		
Dominion Virginia Power		
Duke Power		
Dynegy, Inc.		
ECAR		
Electricity Consumers Resource Council (ELCON)		
Entergy Services		
ERCOT		
FirstEnergy Corp		
FirstEnergy Solutions		
Hoosier Energy REC, Inc.		
Independent Electricity Market Operator (IMO)		
Indianapolis Power & Light		
Interconnected Operations Services Subcommittee, NERC		
MAAC		
MAPP Reliability Council		
Michigan Electric Coordinated Systems (MECS)		
Mirant Americas Energy Marketing		
NEPOOL Compliance Working Group (NCWG)		
NIPS (Northern Indiana Public Service Co		
NorthWestern Energy		
Nova Scotia Power Inc.		
Ohio Valley Electric Corporation		
Pacific Gas and Electric Company		
Powerex		
Progress Energy - Carolina Power & Light Company and Florida Power Corp.		

Consolidated Comments and Considerations on First Posting of Coordinate Operations SAR

SERC Compliance Subcommittee
Southeastern Power Administration
Southern Company (Piatt)
SRP
Tenaska
TXU Energy
WECC Technical Studies Subcommittee
Westar Energy

Is there a reliability-related need for a standard to be developed on this topic? – No or Not Right Now

Daltimanna	The manufaction for comment of these CADs is manufacture. The industry "standard making
Baltimore	The promulgation for comment of these SARs is premature. The industry "standard making
Gas &	process" is in a transition phase and it is overly burdensome to devote resources at this time.
Electric	Once legislation or FERC firmly determines which entiy(ies) is responsible for standards it
	will make sense to move forward with said entity.
	Even if NERC wants to cover reliability standards, almost all standards have a reliability and
	commercial impact; thereby, necessitating developing a single process that incorporates both
	commercial and reliability aspects of standards development. The current NERC process
	risks being changed soon, discounts commercial aspects, and is not part of a finalized overall
	industry process.
	Waiting a short while to move forward on a new standards setting process is acceptable and
	prudent given that NERC standards are currently in place and the industry can continue to use
	these standards until the new process and standards setting organization(s) are firmly set.
	T directed NERC to proceed with the development of reliability standards and this SAR DT is
	h that directive. It is the intent of the NERC Standards process and this SAR DT to focus on
	elated aspects of this topic, not the commercial aspects. The SAR DT encourages parties to
	hat specific aspects of the SAR are reliability-related and what specific aspects of the SAR are
	d. The SAR DT also encourages parties to specifically comment on what specific aspects of the
SAR may have	an adverse impact on the market.
TTI CAD	CH 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	fully developed, will go to the NERC/NAESB JIC to determine if the associated standard will
	s a Business Practice by NAESB or as a Reliability Standard developed by NERC.
Electricity	The establishment of this SAR is premature. All commercial implications of the SAR should
Consumers	be identified and mitigated prior to the drafting.
Resource	
Council	
(ELCON)	fully developed and an inter-section of the NIEDO/NAEOD HO to determine if the consist of the developed and an inter-section of the consist o
	fully developed, will go to the NERC/NAESB JIC to determine if the associated standard will
	s a Business Practice by NAESB or as a Reliability Standard developed by NERC.
Energy	HL&P sees no value in a NERC standard addressing this issue. NERC regions and RTOs
HL&P	already have rules addressing this – requiring regions to do what they already do is fixing a
	problem that does not exist. The requirement for entities within a region to coordinate among
Tria	themselves is a matter for regional governance, not NERC.
	of the comments submitted by the industry indicates that there is a need to develop a standard
to address this	
	This SAR is not addressing reliability in and of itself and is therefore not within the scope of
Corporation	NERC defined role to develop reliability policies. Other SARs address reliability-specific
The construction	areas.
	of the comments submitted by the industry indicates that there is a need to develop a standard
to address this	
Public	It is premature to continue development of this SAR until FERC has specified the
Service	organization to be responsible for the development of wholesale electric standards.
Electric &	
Gas	CALL A LA L
	fully developed, will go to the NERC/NAESB JIC to determine if the associated standard will
be developed a	s a Business Practice by NAESB or as a Reliability Standard developed by NERC.

Consolidated Comments and Considerations on First Posting of Coordinate Operations SAR

Reliant	It is unclear what the reliability objective of this SAR is. Though clearly the coordination of	
Resources	operations in an interconnected system is a necessary part of operations, it is unclear what this	
	SAR proposes to define. Are not the requirements stated, "data sharing, system conditions,	
	procedures and studies." already captured as possible requirements in other SARs? This SAR	
	must identify a distinct reliability need that is measurable, otherwise it is more suited as a	
	procedure, with reliability considerations, to be developed with the NAESB process.	
This SAR was	intended to require that entities coordinate their activities so that one entity did not have an	
adverse impact on its neighbor's reliability as defined within this SAR. This concept is not addressed in other		
SARs. The rev	vised SAR adds more definition and should show more clearly how this SAR builds on other	
SARs without duplication. If you still feel that this SAR, as revised, duplicates requirements addressed in		

other SARs, please submit specific comments to let us know which requirements you feel are duplicated.

The scope of the SAR should be expanded to include:

Progress Energy – CP&L	
and Florida Power Corp	All aspects of operations
SERC Compliance	
Subcommittee	

(The commenter was contacted to gain a better understanding of what was meant by this comment – per the commenter, this was a suggestion to combine all SARs that address various aspects of coordinated operations) The consensus of the comments received is that separate standards are needed to address the various aspects of coordinated operations.

Remove or refine description of planning horizon and associated activities:

Summary Consideration: The planning addressed in this SAR was meant to be near-term operations planning, not long-term planning. The SAR has been revised to reflect this clarification. The SAR called, "Assess Transmission Needs and Develop Transmission Plans" addresses long-term planning.

American Transmission	In the Brief Description, this SAR states that it includes the coordinated "planning"
Company	but SAR #1 doesn't cover this. It should be removed here and added there.
Bonneville Power	Separate standard for longer-term coordination and short-term "operational"
Administration - Power	coordination.
Business Line	
Bonneville Power	Need to be more specific as to time frame. Planning beyond what is normally
Administration - Power	considered the operational time frame (pre-schedule through real time) might have
Business Line	different measurement criteria and if so, should be in a separate standard.
BPA	The requirement to coordinate planning is inappropriate here and should be deleted.
California ISO	In the description, "planning" and "studies" should be removed as these have already
	been addressed in the SAR "Assess Transmission Needs and Develop Transmission
	Plans".
Dairyland Power Coop	References to planning coordination should be removed. Planning coordination
MAPP Reliability	requires its own standard.
Council	
Mirant Americas	Reference to establishment of requirements for the coordinated planning and
Energy Marketing	maintenance of the bulk electric system
Pacific Gas and Electric	Planning should not be included in the description of the SAR
Company	(The author was contacted and confirmed that in WECC's view, planning is a long-
WECC Technical	term issue)
Studies Subcommittee	
Progress Energy -	
Carolina Power & Light	Planning, i.e., separate the Planning and Operating horizons
Company and Florida	
Power Corp.	
SERC Compliance	
Subcommittee	

Work on this SAR should focus solely on reliability.

Summary Consideration: The intent of this SAR was to address coordination between RA's and their ability to operate within operating limits predefined to protect the bulk electric system from instability, uncontrolled separation or cascading outages. This SAR was intended to address the protection of the bulk electric system, not commercial practices.

Allegheny Energy	Certain coordinated operations amongst interconnected systems will have market	
Supply	implications. If FERC SMD is implemented, congestion management on one system	
	would impact the other. These issues should be addressed in a process which takes	
	into account market and reliability interests.	
The SAR, once fully developed, will go to the NERC/NAESB JIC to determine if the associated standard will		
be developed as a Business Practice by NAESB or as a Reliability Standard developed by NERC. We		
encourage you to review the revised SAR and identify anything in the SAR that you feel is not needed for		
reliability of the intercon	nected North American grid.	
Calpine	Any aspect that goes beyond establishing specific reliability criteria to be	
	incorporated into the standard on Coordination of Operations.	
Calpine	The resulting standard should only catalog what are expected to be the minimum	
	necessary reliability related data to be communicated and coordinated.	
Entergy Services	We agree the SAR "Coordinate Operations" should be a "core reliability"	
	Organization Standard. The industry presently has a high degree of coordination	
	which is one of the main contributing factors to the existing high degree of	
	reliability.	
	The industry already has and should continue to:	
	? Develop the criteria for this core reliability Organization Standard,	
	? Establish measures for measuring conformance to the criteria, and	
	? Monitor for conformance to the criteria.	
	This Organization Standard should establish the "what" this SAR means but should	
	not establish "how" the coordination is accomplished.	
Exelon Corporation	This SAR is not addressing reliability in and of itself and is therefore not within the	
	scope of NERC defined role to develop reliability policies. Other SARs address	
TI	reliability-specific areas.	
	nments submitted by the industry indicates that there is a need to develop a standard to	
address this issue.	The CAD may be in violation of Market Interface Dringinles 4 and 5	
Mirant Americas	The SAR may be in violation of Market Interface Principles 4 and 5.	
Energy Marketing	(4. An Organization Standard shall not preclude market solutions to achieving compliance with that Standard	
	5. An Organization Standard shall not require the public disclosure of commercially	
	sensitive information. All market participants shall have equal opportunity to access	
	commercially non-sensitive information that is required for compliance with	
	reliability standards)	
Sensitive information sho		
Sensitive information should not be published. The SAR is not intended to hinder market solutions. The		
revised SAR attempts to clarify this – please let us know if you see something in the revised SAR that contains anything you feel will impact market solutions.		
Powerex	Coordination of generation outage schedules is a commercial process. This should	
1 6 Welen	be removed from the scope.	
Recent FERC rulemaking	gs regarding standard generator interconnection and operating agreements have	
addressed the obligation of generators to provide planned maintenance schedules to their transmission provider.		
These FERC rulemakings also state that a transmission provider may request a generator to reschedule its		
maintenance as necessary to maintain the reliability of the transmission system.		
Aspects of generation outage coordination are reliability-related. We will ask the industry for feedback on this		
SAR's application to both transmission and generation. (See "Detailed Description" Section of revised		
Coordinate Operations SAR)		

Suggested changes to the Functions Section of the SAR.

Summary Consideration: The functions have been modified so that the only function listed is the Reliability Authority since the RA is the only function that will have compliance requirements if this is developed as a standard. This SAR focuses on the coordination that takes place between RA's; other aspects of coordination that involve other functions are addressed in other SARs. For example, the coordination of interchange (data and activities) is addressed in the Coordinate Interchange SAR.

-	ed in the Coordinate Interchange SAR.
American Transmission	It's not clear why the PSE is listed under the Reliability Functions. If the
Company	Transmission Service Provider, Generator and Load-Serving Entity is listed, why
	would the PSE be listed? The PSE mainly deals with the TSPs, generators and LSEs.
Bulk Power Operations	Balancing Authority should be included in the functions the standard will apply.
Southern Company	
California ISO	Add Balancing Authority, Interchange Authority, and Transmission Owner to the list
	of Reliability Functions that this SAR applies to.
Hoosier Energy REC,	The Transmission Owner functional area should be included in this Standard since it
Inc.	will be the provider of much of the communications infrastructure necessary to carry
	out this Standard. Also, the Distribution Provider functional area should be removed
	from this Standard since NERC standards should continue to focus on regional or
	larger scale reliability issues. To reach down to the distribution level will broaden
	the scope significantly and unnecessarily.
Illinois Power	In Reviewing the Distribution Provider, Load Serving Entities, and Generator
	responsibilities in the Functional Model, none has any responsibility indicated for the
	activities identified in the SAR. This standard should not be applied to them.
Illinois Power	The SAR indicates that this standard would apply to Generators, Load Serving
Company	Entitites, and Distribution Providers. Today NERC Policy and Standards do not
	apply to these Functions. For example, NERC has no authority to require its
	standards to be applied to determine connection requirements for distribution
	facilities. And the application of NERC standards to Independent Generators are
	carried out by transmission owners through interconnection agreements. Is NERC
	proposing that this will change and they will begin to impose standards directly on
	distribution providers and generators?
Manitoba Hydro	The Reliability Functions that would need to comply with this Standard as listed in
	the SAR are not correct. The Balancing Authority Transmission Authority and the
	Transmission Owner should be included in the list whereas the Planning Authority
	should not.
MAPP Reliability	Include Balancing Authority, Interchange Authority, Transmission Owner.
Council	
Dairyland Power Coop	
Pacific Gas and Electric	This SAR should not be applicable to the Planning Authority.
Company	
WECC Technical	
Studies Subcommittee	
Progress Energy -	Coordinated Operations should point to all the policies and be restricted to
Carolina Power & Light	Operations. This SAR should include "Coordinate Interchange". This standard
Company and Florida	should also apply to the Interchange and Balancing Authorities.
Power Corp.	
SERC Compliance	
Subcommittee	

Suggested changes to the Purpose/Industry Need:

Summary Consideration:

The Purpose/Industry Need section of this SAR has been modified to add distinction to identify that 'planning' is near-term or operational planning, rather than long-term planning. The revisions also clarify that this SAR's focus is on the coordination between Reliability Authorities, rather than between a Reliability Authority and its lower level functions.

Allegheny Power	The two sentences in the Purpose are contradicting. ('To ensure thatwill not have an adverse impact on the reliability' and 'To ensure thatwhose reliability is adversely
	impacted.')
Dynegy, Inc.	The purpose/industry need section should start with: The purpose of this standard is to
	ensure that a consistent, uniformly applied standard is developed for
This is the intention of having standards and it isn't necessary to re-state this.	
MAPP Reliability	In the Purpose/Industry Need, replace "to ensure that each entity's operating
Council	information is shared with other entities whose reliability is or could be adversely
	impacted." with "to ensure that each entity's operating information is shared with other
	entities who are responsible for planning and operating bulk electric systems reliably."

Suggested changes to the Brief Description:

ouggested thanges to the Brief Beschiption.		
American Electric	To the extent that this SAR is transitioning an existing standard from the old world to	
Power	the new world (Functional Model), then the standard should not go beyond the original	
	scope. Consistent with our general comments, once the clarity is achieved on Standard	
	Market Design and RTO formations, then this standard should be revisited and	
	reevaluated.	
	Additionally, in the "Brief Description" the first sentence should be rewritten to clearly	
	distinguish operations from long term planning as follows: "Establish requirements for	
	the coordinated operational planning, real-time operations, and maintenance of the	
	bulk electric system."	
The NERC Board of Trustees directed us to move forward in developing reliability standards. At this point, it		
isn't clear when the SMD will be finalized, and we believe that the functions in the SMD will align very closely		
with the Functions described in the NERC Functional Model. The functions defined by the NERC Functional		
Model are not dependent upon market functions, operations or organizations.		
The Brief Description of the SAR has been revised to incorporate the suggested language.		
California ISO	Re-write description to "Establish requirements for the coordinated operations and	
	maintenance of the bulk electric system. This standard will include items such as data	
	sharing, system conditions, and procedures."	
The Brief Description has been revised to clarify that the planning being addressed is 'operational' rather than		
long-tern and to identify that study results, rather than studies, will be shared.		

Duke Power	Description should clarify what information should be coordinated. For example, does	
	this SAR address SCADA data, Maintenance schedules, etc.	
The revised SAR conta	The revised SAR contains a detailed description that identifies the information that should be coordinated.	
Manitoba Hydro	The description for this SAR should be modified such that "the coordinated planning" in line one should be "the coordinated planning of operations". This suggested change	
	is related to our recommendation that planning and operations planning be addressed in separate SARs.	
The SAR has been modified to clarify that this SAR is addressing 'operational planning rather than long-term		
planning.'		

Caution – avoid overlap with other SARs:

Summary Consideration: The revised SAR identifies associated SARs and Standards that have requirements that interface with this SAR. There should not be any overlap in requirements between the SARs. (See the assumptions provided at the beginning of the SAR Comment Form for the second posting of this SAR.)

MAAC	Issue will be to avoid duplication and overlap with the proposed transmission standard.
Reliant Resources	It is unclear what the reliability objective of this SAR is. Though clearly the coordination of operations in an interconnected system is a necessary part of operations, it is unclear what this SAR proposes to define. Are not the requirements stated, "data sharing, system conditions, procedures and studies." already captured as possible requirements in other SARs? This SAR must identify a distinct reliability need that is measurable; otherwise it is more suited as a procedure, with reliability considerations, to be developed with the NAESB process.

SAR not specific enough:

Summary Consideration: Additional details have been added to the SAR.

Ameren Services –	The scope is too general
Energy Delivery	
Technical Services	
Cinergy	The description is very broad so it is difficult to determine exactly what this standard is
	supposed to include and it is difficult to envision how one would measure this for
	compliance. How does one effectively measure "coordination"?
FirstEnergy Solutions	The scope is vague, overly broad. The "need" is described as operational, but the
	description takes in all manner of data coordination. Requirements like "this standard
	will includesystem conditions" are not clear. Exactly what "procedures and
	studies"? These requirements would be more appropriately addressed as specific
	responsibilities under other SARs.
Illinois Power	There is inadequate detail in the SAR to determine if the scope of the SAR is
Company	appropriate and adequate. This Standard should only define the specific requirements
	related to WHAT things must be coordinated to ensure reliable operation of the
	system. The references to HOW these objectives will be met should be removed. This
	SAR is so inadequate that it cannot be effectively commented upon.
Nova Scotia Power	The scope is too broad, more detail is required.
Inc.	Proceedures, (defined as "step-wise instructions", in the Organization Standards
	Process Manual), should not be included in an Organization Standard. Focus should be
	at a results oriented level.
Southern Company	As with many of these SAR's, this SAR's scope is entirely too broad and unclear.
	Furthermore, we fail to see the need for this standard. In general, we should combine
	parts of SAR#8 and SAR#1 and use the resulting information as a starting point to
	define the set of minimum reliability requirement needed for our transmission grid. At
	times, there may be a necessary need to share information with other entities, but the
	need for this data should be decided as a regionalissue. To the extent there needs to be
	an independent coordination operations standard, the impacts that transmission system
	operation's have on plant startup, operation and safety with particular emphasis on
	nuclear plant grid reliability requirements, should be considered in this standard.
	If the intent is that this SAR provide the standard that defines the function of the
	Reliability Authority then it needs to be written accordingly.
SRP	Insufficient information to make a judgement

Consolidated Comments and Considerations on First Posting of Coordinate Operations SAR

General Comments in Support of SAR:

Bulk Power	Coordinated operation on an interconnection basis is essential to reliability.
Operations Southern	
Company	
Bulk Power	Coordinated operation on an interconnection basis is essential to reliability.
Operations Southern	
Company	
ERCOT	This SAR and the other posted SARs provide an appropriate framework for transitioning existing NERC Operating Policies and Planning Standards into new, NERC Organization Standards. Multiple compliance measures may be defined and developed for each of the eleven proposed Organization Standards. The Organization Standards and related compliance measures should focus on what functions must be performed for reliability, on who is responsible for each compliance measure for each required function and not, on how the compliance measure is achieved. The compliance measure must be measurable or demonstrable to ensure compliance. It is critical that entities operating and planning the multitude of components of the electric system share the data, on a timely basis and in a usable form as needed by each other to fulfill their reliability function. A Standard requiring this exchange is needed. Compliance measures addressing this need must recognize that some of data may be considered market sensitive and appropriate confidentiality safeguards may be necessary as part of the Standard.
FirstEnergy Corp	The need to have coordinated operations is becoming increasingly more applicable. The development on RTO's, ISO's, and TRANSCO's emphasize the need for additional operational protocol.
The IMO	The need for co-ordination is an essential element but it seems that in a new <u>unbundled</u> "Functional Reliability Model", the requirement for the coordinated planning among various entities may be too strongly stated or implied or over generalized. Basic and specific criteria for design and operations of the interconnected bulk electric system should be established and coordinated.