

North American Electric Reliability Council

Princeton Forrestal Village, 116-390 Village Boulevard, Princeton, New Jersey 08540-5731

Coordinate Operations SAR DT

January 28–29, 2003

Hyatt Regency Tampa Two Tampa City Center Tampa, FL 33602

Agenda

Tuesday, January 28

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0800 - 0815	Welcome and administrative items
0815 - 0830	Review duties and tasks of SAR DT
0830 - 0845	Elect Chair and Vice Chair of the SAR DT
0845 -1000	Discuss comments submitted on SAR & draft consideration of comments
1000 – 1015	Break
1015 - 1200	Complete draft of consideration of comments
1200 – 1300	Lunch
1300 – 1500	Revise Purpose/Industry Need section of SAR
1500 – 1515	Break
1515 – 1700	Revise Brief Description section of SAR
1700	Adjourn

Wednesday, January 29

0800 - 1000	Develop Detailed Description section of SAR
1000 – 1015	Break
1015 – 1145	Revise list of Functions that must comply with proposed standard & develop
	SAR Comment Form for posting
1145 – 1200	Review work completed and identify any action items needed with due dates
1200	Adjourn

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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.
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

Baltimore Gas	The promulgation for comment of these SARs is premature. The industry
& Electric	"standard making process" is in a transition phase and it is overly burdensome to
	devote resources at this time. 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.
Electricity	The establishment of this SAR is premature. All commercial implications of the
Consumers	SAR should be identified and mitigated prior to the drafting.
Resource	
Council	
(ELCON)	
Energy HL&P	HL&P sees no value in a NERC standard addressing this issue. NERC regions
	and RTOs 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 themselves is a matter for regional
Exelon	governance, not NERC. This SAR is not addressing reliability in and of itself and is therefore not within
Corporation	the scope of NERC defined role to develop reliability policies. Other SARs
Corporation	address reliability-specific areas.
Public Service	It is premature to continue development of this SAR until FERC has specified the
Electric & Gas	organization to be responsible for the development of wholesale electric
Electric & Gas	standards.
Reliant	It is unclear what the reliability objective of this SAR is. Though clearly the
Resources	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 measureable, otherwise it is more suited
	as a procedure, with reliability considerations, to be developed with the NAESB
	process.

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	

Remove or refine description of planning horizon and associated activities:

American Transmission	In the Brief Description, this SAR states that it includes the coordinated
Company	"planning" 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
Administration - Power	"operational" coordination.
Business Line	
Bonneville Power	Need to be more specific as to time frame. Planning beyond what is
Administration - Power	normally considered the operational time frame (preschedule through
Business Line	real time) might have 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
MAPP Reliability	coordination requires its own standard.
Council	
Mirant Americas	Reference to establishment of requirements for the coordinated planning
Energy Marketing	and maintenance of the bulk electric system
Pacific Gas and Electric	Planning should not be included in the description of the SAR
Company	
WECC Technical	
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.

Allegheny Energy	Certain coordinated operations amongst interconnected systems will
Supply	have market 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.
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 reliability-specific areas.
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)
Powerex	Coordination of generation outage schedules is a commercial process.
	This should be removed from the scope.
L	

Suggested changes to the Functions Section of the SAR.

A T T	Identification wheath DCE is listed and a dee Delich like Equations (Ed.)
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
Southern Company	will apply.
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
Inc.	Standard since it will be the provider of much of the communications
	infrastruture 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 unneccesarily.
Illinois Power	In Reviewing the Distribution Provider, Load Serving Entities, and
mmois i Owei	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.
III''. D	
Illinois Power	The SAR indicates that this standard would apply to Generators, Load
Company	Serving 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
Council	Owner.
Dairyland Power Coop	
Pacific Gas and Electric	This SAR should not be applicable to the Planning Authority.
Company	71
WECC Technical	
Studies Subcommittee	
Progress Energy -	Coordinated Operations should point to all the policies and be restricted
Carolina Power & Light	to Operations. This SAR should include "Coordinate Interchange".
Company and Florida	This standard should also apply to the Interchange and Balancing
Power Corp.	Authorities.
	Authornics.
SERC Compliance	
Subcommittee	

Suggested changes to the Purpose/Industry Need:

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
MAPP Reliability	In the Purpose/Industry Need, replace "to ensure that each entity's
Council	operating 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:

- 100 - 11 to the total		
American Electric	To the extent that this SAR is transitioning an existing standard from the	
Power	old world to the new world (Functional Model), then the standard should	
	not go beyond the original scope. Consistent with our general comments,	
	once the clarity is achie ved 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."	
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."	
Duke Power	Description should clarify what information should be coordinated. For	
	example, does this SAR address SCADA data, Maintenance schedules,	
	etc.	
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.	

Caution – avoid overlap with other SARs:

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 measureable,
	otherwise it is more suited as a procedure, with reliability considerations,
	to be developed with the NAESB process.

SAR not specific enough:

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
Company	is 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 regional issue. 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 on First Posting of Coordinate Operations SAR

General Comments in Support of SAR:

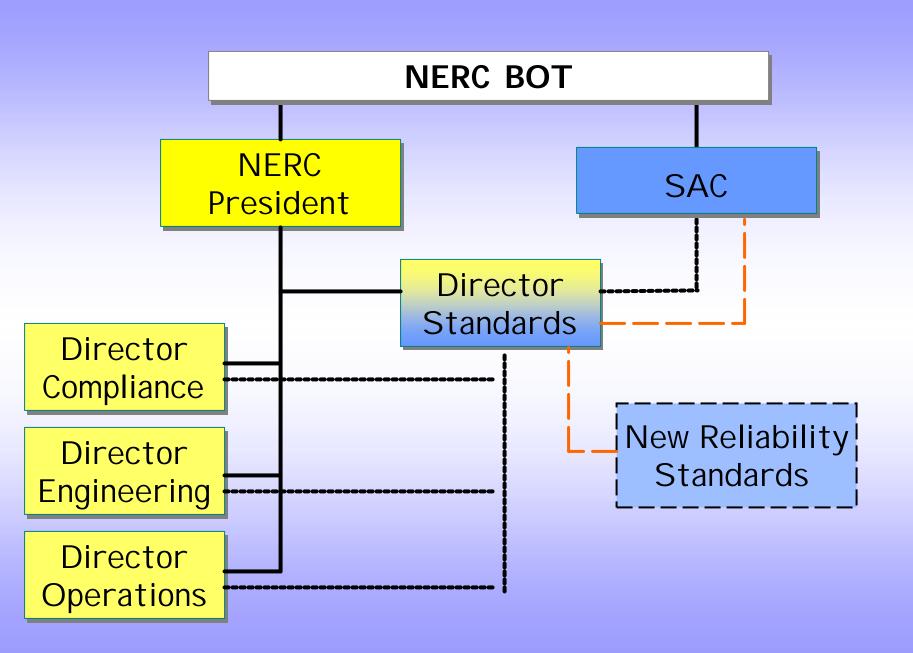
Bulk Power Operations Southern	Coordinated operation on an interconnection basis is essential to reliability.
Company	ichaomty.
Bulk Power	Coordinated operation on an interconnection basis is essential to
Operations Southern	reliability.
Company	
ERCOT	This SAR and the other posted SARs provide an appropriate 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.

SAR Drafting Teams

Getting Started

Resources

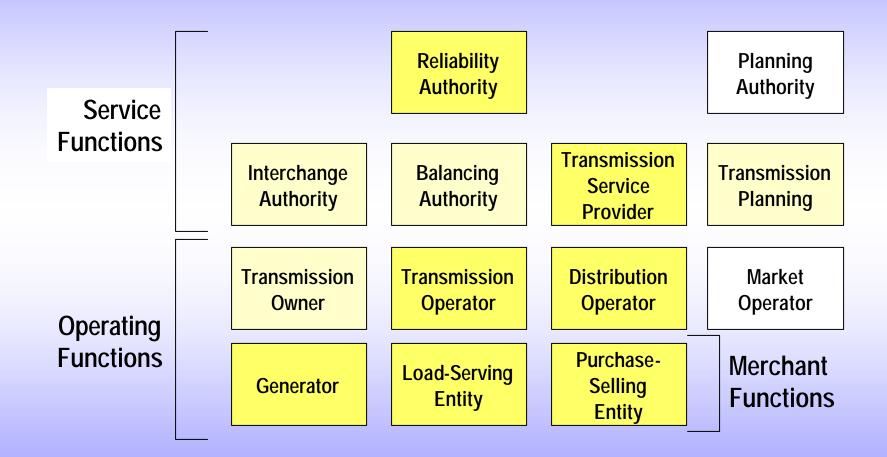
- Reliability Standards Process Manual
- Functional Model
- NERC Staff Directly Involved with Standards
 - Director of Standards Tim Gallagher
 - Director of Compliance Dave Hilt
 - Consultant Maureen Long
 - Staff Support Glenda Rodriguez



Functional Model

- Serves as a basis for all new Reliability
 Standards
- Assigns responsibility for compliance with standards to "Functions" rather than Control Areas
- Assumes each entity now serving as a Control Area will be re-defined as an entity that is responsible for one or more "Functions"
- Currently being refined

Functional Model



Functions:

Functions:

- Reliability Authority
 - Ensures reliability of bulk power transmission system within its Reliability Authority Area
- Transmission Operator
 - Operates and maintains the transmission facilities
 - Executes switching orders

Functions:

- Transmission Service Provider
 - Provides transmission services to qualified market participants under applicable transmission service agreements
- Distribution Provider
 - Provides and operates the "wires" between the transmission system and the customer
- Generator
 - Owns and operates generation units

Purchasing-selling Entity

- Purchasing-selling Entity
 - Purchases or sells energy, capacity and all necessary interconnected operations services
- Load-serving Entity
 - Secures energy and transmission to serve the end user
- Planning Authority

Tasks of SAR Drafting Team

- 1. Assist in the Refinement of a SAR
 - Posted for 30 days on 1st or 15th of month
- 2. Participate in Industry Forums
- 3. Assist in Responding to Posted Comments

Roles of Team Participants

- Chairman
- Secretary
- Compliance Representative
- Industry Representatives

Chairman

- Leads the Team and its work in a neutral capacity
- Ensures the Team makes progress
- Conducts meetings of the Team
- Represents the Team to other bodies
- Reports progress to the SAC

Secretary

- Advises the Team and guides its work in a neutral capacity
- Monitors, reports on, and ensures active progress of the work of the Team
- Provides day to day administration

Secretary

- Prepares and circulates Team documents
- Tracks responses and maintains voting records and compilation of comments
- Maintains membership records
- Prepares for and assists at meetings

Compliance Representative

- Provides advice on compliance issues, based on experience
- Helps assure SAR will be clear for SDT to develop objective:
 - applicable function(s)
 - requirements
 - measures
 - descriptions of performance/outcomes

Industry Representatives

- Provide knowledge and expertise representative of their Industry Segment
- Participate actively in the consensus development process
- Provide contributions, drafts, comments
- Attend meetings
- Vote on documents

Industry Representatives

- Participate in Industry Forums conducted to air widely divergent differences of opinion on the need for a Standards Action
- Provide feedback on Standards Development activities

Voting

- Should work towards consensus without voting
- Voting should be a "last resort" to move forward when discussion isn't working
- Determine at the beginning of a meeting if you have enough participants to vote
- Collect proxies and give them to the secretary as part of the meeting's documentation

Voting

- Quorum
 - 2/3 of voting members
- Approval of any Action
 - 2/3 majority of voting members
- Proxies
 - Notice must be sent in advance of meeting and must be in writing
 - Voting members cannot also vote proxies

Reaching Consensus

- Industry Consensus not SAR DT consensus
 - More than a simple majority but not unanimity
- Industry Comments provide direction
 - Consider & respond to every comment research comments if needed
- Industry Forum if consensus can't be reached through comments

Public Notice

- All schedules, agendas, meeting minutes and voting records on all action items shall be posted
- Give documents to Glenda Rodriguez- she will post on the Web for you

Agendas

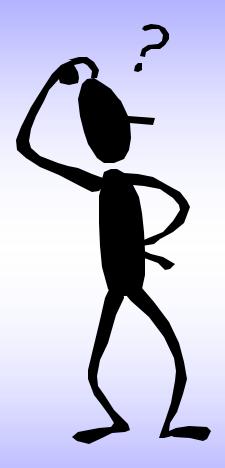
- Must be posted no more than 5 days before the meeting - sooner is better
- Should include background material for items requiring attention

Guests

- Guests are permitted to attend all meetings
- Guests are not allowed to vote, unless they are voting as a proxy
- Chairman has the right to limit the amount of time allocated to participation of guests
- Guests are supposed to pre-register
- NERC staff should provide the Chairman with a list of registered guests

Draft Schedule for Coord Ops SAR

		1st Quarter 2nd Qua					uarter			uarter			uarter		2nd
Task Name	Jan Fe	eb Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Develop a New Standard															\
Solicit Public Comments on the SAR		Į.		\bigvee	ļ										
Post SAR for 30 days															
Consider Comments & Revise SAR															
Post SAR for 30 days															
Consider Comments & Submit SAR to SAC]										
Solicit Participants for Ballot Pool															
Obtain SAC Auth to Proceed & appt SDT				ì											
Draft New Standard											V				
Develop draft standard						-	L								
Solicit Public Comments on Draft															
Consider Comments & Dev Revised draft										L					
Post revised draft															
Analyze Draft Standard												h			
Ballot New Standard															
Conduct 1st Ballot											Ì				
Address Negative Comments														,	
Conduct 2nd Ballot														յ ի	
Adopt Standard															· /
Post approved standard for BOT action															ь
Implement Standard															
														$\overline{}$	



Questions?