

# Draft Minutes Planning Committee

March 6, 2012 | 1-5 p.m. MST

March 7, 2012 | 8-noon MST

Phoenix Convention Center-North Building

100 N. 3rd Street

Phoenix, AZ 85004

Planning Committee (PC) Chair Jeff Mitchell presided over the meeting. The meeting notice, amended agenda, and list of attendees are **Exhibits A, B, and C** respectively. Meeting presentations and the complete agenda package are posted at <http://www.nerc.com/filez/pcmin.html>.

## 1.0 Administrative Matters

Chair Mitchell convened the Planning Committee (PC) meeting at 1:00 p.m. MST and welcomed the PC members and guests. Attendees were introduced. The following proxies were noted:

- Michael Goggin for Kris Zadlo
- Maggie Powell for Scott Helyer

Of the PC's 28 total voting member positions available, the PC has two vacancies in the large end-use customer sector and one vacancy in the electricity marketer sector, leaving 25 active voting members. The meeting quorum (two-thirds of 25) was satisfied by 22 voting members or their proxies being present. John Moura, secretary of the PC, declared a quorum was present.

PC membership was discussed and the secretary requested changes to membership be brought to the committee's attention (**Presentation 1.3**). No changes were solicited at this time.

Future meeting schedule was reviewed with the committee and is presented below.

2012 Meeting Dates	Time	Location	Hotel
May 18	3PM to 4PM (Eastern)	Webinar	n/a
June 19	1PM to 5PM (Eastern)	Toronto, Ontario, Canada	Toronto Airport Marriott
June 20	8AM to 12PM (Eastern)		
September 18	1PM to 5PM (Central)	Saint Louis, Missouri, USA	Hotel TBA
September 19	8AM to 12PM (Central)		
October 24	3PM to 4PM (Eastern)	Webinar	n/a
November 19	3PM to 4PM (Eastern)	Webinar	n/a
December 11	1PM to 5PM (Eastern)	Atlanta, Georgia, USA	Hotel TBA
December 12	8AM to 12PM (Eastern)		

The agenda was reviewed by Chair Mitchell. Item 4 (Committee Matters) was moved up in order to follow Item 2 (Consent Agenda). The minutes reflect the order of the original agenda. A motion was made and the agenda was approved by the committee. Upon reconvening the committee on March 7, Chair Mitchell requested PC agreement to modify the agenda to include an additional agenda item—“Consideration of a Protection System Misoperations Task Force.” This item was added to the end of the agenda.

## 2.0 Consent Agenda

Items on the consent agenda to be considered by the PC for approval were:

- 2.1. **Approve** – December 2011 Meeting Minutes\*
- 2.2. **Approve** – February 2012 Conference Call Minutes\*
- 2.3. **Approve** – Reliability Assessment Data Working Group (RADWG) Scope\*
- 2.4. **Approve** – Model Validation Working Group (MVWG) Scope\*
- 2.5. **Approve** – System Analysis and Modeling Subcommittee (SAMS) Scope\*

A motion by Christine Ericson to amend the three scopes on the consent agenda. The change requested was in reference to the *Order of Business* section of the scopes. The intent of the amendment is to ensure minority opinions developed within PC subgroups would be forwarded to the PC for information, not just to the Chair. The amendment was set forth as:

Change *Order of Business* section “forwarded to Planning Committee Chair” to “forwarded to the [subcommittee chair, if a subcommittee presides over a task force or working group] and Planning Committee members for future meeting consideration”

The motion was seconded and approved unanimously through voice vote.

A motion was made by Noman Williams to amend the three scopes on the consent agenda. The change requested was in reference to the *Order of Business* section of the scopes. The amendment was set forth as:

Strike *Order of Business* section “NERC staff advice should be about what the ERO needs to be successful”

The motion was seconded and approved unanimously via voice vote.

Noman Williams made a motion to approve the consent agenda. The motion as amended by the committee was seconded and approved unanimously via voice vote.

### 3.0 Discussion Items

#### 3.1 Cyber Security Order 706 Standards Drafting Team\*

Steve Noess presented two divergent views on how CIP version 5 standards affect blackstart resources. A concern shared with the drafting team is that if standards are too imposing, then existing blackstart units may decide to opt out of providing that capability which may diminish the amount of blackstart units available. Even within the existing CIP standards, there have been existing blackstart units that have “withdrawn” because of the additional cost/risk associated with meeting standards associated with blackstart units.

The question of principle to be resolved is whether blackstart resources should be given special consideration in NERC Reliability Standards due to the risk of reduction in the number of such blackstart resources resulting from additional cost and compliance risk. The drafting team requests input from the committee on this matter.

Stuart Nelson noted that connectivity is extremely pivotal in its function and it appears that the drafting team is mixing cyber and non-cyber issues. Standards exist already that address critical items that are not cyber related.

Mark Kuras noted this trend is already apparent in PJM. Further, Mr. Kuras noted one TO has no blackstart units as of today. PJM has to reconsider the way they do restoration and develop creative solutions to accommodate the trend.

Brian Keel echoed Mr. Nelson’s comments and questioned why this is moving so fast. Steve Noess responded that this drafting team has been at work for 3 ½ years and wants to wrap up the project.

Jason Marshall stated that these requirements are an additional risk that may force units to retire or eliminate blackstart capability. Additional study and vulnerability assessment needs to continue.

Dan Woodfin asked why blackstart resources are more targeted than other resources. Steve Noess stated that at the direction of the drafting team chair, the impact on the restoration of the system, if it’s been compromised by a cyber attack, is a serious concern and maintaining a resilient grid is key to the CIP standards.

The PC agreed that individual comments should be submitted through the SAR process during the comment period—likely in early April (40-day comment period).

#### 3.2 Providing Technical Expertise to Reliability Standards Development\*

PC leadership received requests from the NERC Standing Committee for research on topics used to support the Standard Development Process (in particular, prioritization). John Moura

summarized the discussions held at the PC ExCom meeting. To respond to the Standards Committee request, the PC ExCom made the following assignments:

- **Project 2010-05.2 – SPS Misoperations**  
An SPCS whitepaper currently under development will support this request. PC approval is expected at the December 2012 meeting.
- **Project 2012-04 – Protection System Commissioning**  
Research is requested to support the SAR submitted on protection system commissioning. The SPCS and NERC staff will provide this research. Jonathan Sykes, SPCS Chair, discussed this with SPCS Vice Chair and NERC Staff and recommended completion by the end of the year.
- **Project 2012-06 – Generator Capabilities**  
Work has already been done on this through various standard development activities. NERC Staff will consolidate existing reports and submit to the PC ExCom. The PC ExCom will review and share with the PC after their review.

### 3.3 **BES Definition Request from SDT\***

Chair Mitchell summarized the request for technical justification received from the BES SDT. Written technical justification is needed by the end of the year. Mr. Mitchell appointed the PC ExCom as the lead for project and summarized the discussion at the ExCom regarding how to tackle the project. Mr. Mitchell noted that all technical justifications must be at the engineering judgment level and focus strictly on proof, experience, facts, and data—not opinions. Targeted completion is by the end of this year, with approvals from the committee at its December 2012 meeting. The following assignments were appointed to support the completion of the technical justification.

- **Transmission Voltage Threshold** – PC ExCom, with SAMS review
- **Generator Threshold** – RAS
- **Reactive Resource Threshold** – SAMS
- **Power Flow out of Local Networks** – SAMS

All technical justifications will require NERC Staff, PC ExCom, and BES SDT liaisons as necessary. Progress reports should be provided by the appropriate groups at each PC meeting until completion.

### 3.4 **NERC BOT Update – Assignments from NERC BOT from February Phoenix Meeting**

Chair Mitchell provided a summary of assignments given to the PC by the NERC Board of Trustees at its February meeting. The two assignments are:

- Review variable generation integration in more detail for reliability assessments - RAS
- Release the annual performance analysis report from the PAS by summer - PAS

The RAS and PAS will ensure these assignments are completed for 2012.

### **3.5 PC to Provide Review and Technical Expertise to Compliance Application Notice Development and Prioritization**

Valerie Agnew, NERC Staff, provided an overview on technical committee expectations for input into the CAN development and prioritization process. Ms. Agnew pointed out the purpose of CANs are to create consistency and provide transparency of the compliance process. Comments from PC are requested before the CAN begins the development and drafting stages.

The PC ExCom reviewed the CANs to be prioritized focusing only on those that are relevant to planning standards and within the PC purview. The prioritization schedule developed by the PC ExCom was sent to the PC and will be submitted to the NERC.

Upon future requests, the PC ExCom will be assigned to prioritize CANs in order to provide a quick turnaround.

### **3.6 Update on Status of FERC Order 754: Assessment of Protection System Single Points of Failure\***

Jonathan Sykes, SPCS Chair, provided a presentation updating the efforts of NERC in preparing an informational filing as directed in FERC Order No. 754 (**Presentation 3.6**). The filing is due March 15, 2012 and provides a status report on the three approaches identified at the FERC Technical Conference:

- Request for Interpretation
- Data Request
- Reliability Standard Project 2009-07: Reliability of Protection Systems

The commission approved the project interpretation of TPL-002-0b, R1.3.10 –PacifiCorp (project 2009-12).

Ben Crisp, PC Vice Chair, recognized the group for their close coordination with FERC on this matter.

### **3.7 NASPI Update**

Bob Cummings provided a status report of the latest NASPI meeting in February. Mr. Cummings discussed the challenges of increasing the use of PMUs into actual planning and operations. It is important for the industry to move from academic and research stage to a commercial stage. While efforts are moving forward with over a thousand PMUs in operation within the next year as well as digital relays having the capability of reporting data at 30 samples per second, the integration of PMUs into commercial planning and operations is the next challenge. Most of the work will continue in the IEEE environment upon NERC's discontinuation of funding the NASPI effort. Research groups will also be tasked with developing long-term brainstorming.

### 3.8 Eastern Interconnection Reliability Assessment Group (ERAG) Update - Work Plan

John Odom, ERAG Chair, provided a presentation outlining the ERAG's short- and long-term work plan for enhancing the Eastern Interconnection Model (**Presentation 3.8**). Mr. Odom described the activities the group will be performing over the next year:

- Change-management process for dynamic data
- Address generation netting and other equivalence issues
- Develop process to keep ERAG abreast of Standards relating to ERAG (primarily TPL and MOD) and to provide input to NERC
- Develop and deliver training to TPs, GOs, vendors, and consultants
- Validate dynamic models of generators
- Improve generation and load models
- Enhanced Interconnection-wide Assessments (such as frequency, small signal, and transient stability)

### 3.9 Analysis of Eastern Interconnection Frequency Response\*

John Odom, ERAG Chair, presented a summary of the "Analysis of Eastern Interconnection Frequency Response" report (**Presentation 3.9**). The report has already been approved by the ERAG Management Committee. The major conclusion from the report is that interconnection-wide models need to be enhanced to be able to use them to simulate frequency response. As a parallel, Mr. Odom referenced the efforts from WECC, which took four to five years of concerted effort to improve their models.

The report concludes that simulations are generally consistent with practical experience in that:

- Effectively 1/3 of the connected capacity contributes to the primary control of frequency
- A large fraction of the plant capacity that contributes to primary control response in the short-term does not sustain this response beyond the first few seconds of a frequency excursion.
- Simulations indicate that the emphasis in frequency response analysis needs to change
- The past approach has been to focus on the models for turbines and governing equipment in detail
- There is a need to also represent the effect of those "outer loop" controls and account for operational practices of power plants

Mark Kuras asked if this is really a concern when spinning reserves change since generators disconnect their governors because they expect the Balancing Authorities to provide these

functions. Mr. Odom responded that from a planning perspective it is necessary that a system provide sufficient frequency response. The question then becomes can you properly model a disturbance and understand the response and determine needed capabilities.

Dan Rochester indicated that generators need to provide better information on their governor response so that accurate models can be developed.

### **3.10 Event metrics and Emerging Reliability Risks, Performance Analysis Identified Risks, and Long-Term Reliability Assessment Risk Identification\***

Earl Shockley, NERC Staff, gave a presentation on System Events (**Presentation 3.10**). Mr. Shockley presented an analysis of events by category developed from consolidated data from the field trial (qualifying event are category 1 and above). Qualified events by quarter were reviewed and emerging reliability risks were identified by trending—15 occurrences where equipment was inadvertently left in an abnormal state following regular maintenance.

Mr. Shockley also presented 27 category 2b events (over the last 15 months) where a complete loss of SCADA/EMS lasted more than 30 minutes. Based on the analysis, software failure was a major contributing factor in 60% of the events. Additionally, individual operator error has attributed less than 10% of the events and the testing of the equipment has shown to be a factor in over 50% of the failures.

Mr. Shockley presented the *Drifting to Failure* Concept.

Bob Cummings stated that it is possible to avoid a lot of little impact events, but a big event may occur due to unknown circumstances. Mr. Shockley responded that one can only address the “visible” events and we can never have “no” events, but we can reduce their occurrence.

Jessica Bian, NERC Staff, gave a presentation on performance analysis and observed metrics and trends (**Presentation 3.10.1**). The following topics were presented:

- Risk Control Model
- Integrated Data Sources
- Common and Dependent Mode Transmission Outages
- TADS Events by Quarter
- Correlation with Categories 1-5
- Automated Outages by Initiating Cause Codes
- PRC-005 Violations by Failed protection System Equipment – no correlation – very few PRC-005 violations – but many failures (but we only have two quarters of data)
- Trends in Relay Misoperations



- Misoperations by Category
- Variable Generation Integration\Peak Day – Load vs. Wind
- Reserves, Wind, and Demand Response
- Objectives – avoid cascading outages, measure and report bulk power system equipment and performance

Finally, John Moura, NERC Staff, gave a presentation on the LTRA Risk Identification and Emerging Issues provided in the agenda package (**Presentation 3.10.2**). RAS will request feedback (in terms of ranking emerging issues) prior to the June PC Meeting.

### **3.11 Future Request from Functional Model Working Group to Review and Provide Feedback on *Assessing the Need for Introducing Demand Response Functions and Entities to the NERC Reliability Functional Model Final Report*\***

John Moura reviewed the materials provided in the agenda package (**Presentation 3.11**). NERC staff will be providing their comments through the formal public comment period. The final report was included in the agenda package.

Once all comments from public comment period are considered and incorporated into the final report, the FMWG will seek comments from the NERC Standing Technical Committees (OC, PC, CIPC). PC Members will be requested to provide comments prior to June PC Meeting.

This project requires some PC review volunteers to review before it comes back to the PC, and provide a summary.

- PC Reviewers:
  - Kenneth Donohoo
  - Stuart Nelson
  - Jason Marshal
  - Mark Westendorf

### **3.12 ERO-RAPA Update – Joe Spencer**

Joe Spencer provided an update of the ERO-RAPA activities (**Presentation 3.12**). The ERO-RAPA reports to the ERO-EMG.

## **4.0 Committee Matters**

### **4.1 Approve—[Event Driven Index \(EDI\) Whitepaper](#)**

Bill Adams, PAS Chair, gave the presentation provided in the agenda package (**Presentation 4.1**). The PAS has received a lot of feedback on developing “one” reliability metric and are now working on moving forward with three indices: EDI, CDI (Condition Driven Index) and SDI



(Standards/Statute Driven Index); CDI and SDI are yet to be proposed. EDI is the inverse of the SRI and EDI gets larger when there are fewer (count and magnitude) events. The whitepaper follows trends over a quarterly basis which is easier to observe the trends as they develop. The ultimate goal will be to calculate EDI quarterly with data collection on an annual basis.

Brian Keel suggested that the group should consider normalizing based on weather events. Jessica Bian responded with recognition that the group needs to carve-out the non-controllable events (like weather) out of the metric—a future effort.

Dan Rochester made the motion to approve the whitepaper. The motion was seconded and approved unanimously via voice vote by the committee.

#### 4.2 **Approve — [Severe Impact Resilience Task Force Report](#)**

Stuart Brindley gave the presentation provided in the agenda package (**Presentation 4.2**).

Jason Marshall discussed the need for NERC to consider compliance during a severe event and back off the enforcement of certain standards during a catastrophic event. Mr. Brindley noted that the report does say that some Standards may be violated for these catastrophic events, but that the entities should “do the right thing” without worrying about compliance consequences.

Noman Williams made the motion to approve report. The motion was seconded and approved unanimously via voice vote by the committee.

#### 4.3 **Review and Provide Feedback—[Integrating Variable Generation Task 1-3 Report](#)**

Eric Rollison provided a presentation to request PC review and feedback on the IVGTF Task 1-3 report (**Presentation 4.3**). The IVGTF Task 1-3 report was released recently and the task force is looking for PC help in reviewing and providing feedback on the report.

- PC Reviewers for this report are:
  - Noman Williams
  - Dan Rochester
  - Dan Woodfin
  - Michael Goggin
  - Bing Young

In relation to other IVGTF activities (Task 1-1), Bob Zavadil provided the PC with an update on model validation for the modeling of bulk wind resources (**Presentation 4.3a**). Mr. Zavadil noted that testing is needed to see if generic models are valid for the cases we want to validate. Validation of generator models, especially wind turbines was further discussed. The general

premise is that over time, PMU data will help validate existing models; however, there are no current standards to do this, nor is there a “standard” method.

## 5.0 Subcommittee Reports

5.1 Reliability Assessments Subcommittee chair, Vince Ordax, provided a presentation to the PC on RAS recommendations to enhance demand response treatment in reserve margin calculations (**Presentation 5.1.1**). For 2012 and beyond, the RAS will implement a revised reserve margin calculation that will use Net Internal Demand (excluding DR) as the primary demand statistic. This will allow additional granularity for the data collection of DR to include both:

- Demand-Side CCDD – DR treated as load reduction
- Supply-Side CCDD – DR treated as a resource

The use of DR is dependent on how DR resources are used in both system planning and operations. Assessments must take into account the differences in which DR is implemented and accommodate these differences when developing resource adequacy metrics.

Mr. Ordax also presented the RAS recommendations for probabilistic assessment based on the pilot activities performed in 2011 (**Presentation 5.1.2**). RAS is requesting review and comment on the probabilistic assessment pilot, which includes the format of assessment results and the recommendations for periodic assessment. Comments should be sent to [assessments@nerc.net](mailto:assessments@nerc.net) by April 27, 2012. RAS will seek endorsement of the recommendations to proceed at the June PC meeting.

John Moura provided a summary of the Reliability Assessment Guidebook and requested PC reviewers to provide feedback on the enhancements to the 3.0 version of the Reliability Assessment Guidebook included in the agenda package. RAS will seek approval at the June PC meeting.

- PC Reviewers for the Guidebook are:
  - Tom Reedy
  - Russ Schussler
  - Christine Ericson

John Moura also requested PC reviewers for the upcoming 2012 Summer Reliability Assessment.

- PC Reviewers are:
  - Parveen Baig
  - David Weaver

John Moura provided a status of the environmental regulations reliability assessment **(Presentation 5.1.4)**. At the direction of NERC management, the Phase III study of environmental rules was ceased. Instead, announced retirements and ongoing industry developments will be monitored in the seasonal and long-term assessments. In the development of the updated questions and structure for the 2012 assessments, special attention will be paid to the impact of environmental rules on both a seasonal and long-term basis.

Finally, the status of Reliability Assessment Database (RAD) was discussed. With the approval of the Reliability Assessment Data Working Group (RADWG) scope, this working group will operate at the direction of the Reliability Assessment Subcommittee (RAS). These efforts will include collaborative enhancements to the data collection processes, including consideration for the development of a Reliability Assessment Database.

The RADWG meeting is scheduled for March 19, 2012 (at NPCC). The RAS will continue to provide the PC with status updates regarding the development of a database.

## 5.2 Performance Analysis Subcommittee\*

Bill Adams provided an update on the Performance Analysis Subcommittee **(Presentation 5.2)**. Jeff Mitchell requested PC reviewers for the upcoming State of Reliability Report.

- PC Reviewers for this report are:
  - Brian Keel
  - Branden Sudduth
  - Pedro Modia
  - Jay Farrington

## 5.3 System Analysis and Modeling Subcommittee

Mark Byrd presented a status update for the SAMS **(Presentation 5.3)**. Internal projects include review of MOD standards MOD-010 through MOD-015, which are all related to the Model Improvement Initiative. This activity includes model validation (MVWG), long-term and mid-term dynamics modeling, and finally continuing outreach to the NATF for collaborating on modeling improvements.

## 5.4 System Protection and Control Subcommittee\*

Jonathan Sykes provided an update on the SPCS activities **(Presentation 5.4)**. Jonathan listed the high priority items as:

- Special Protection System Assessment
- Assessment of single points of failure

- Protection System Commissioning Request for Research

Additionally, the SPCS is working to respond to FERC Order 758 in addressing protection system maintenance. Further, analysis of protection system misoperations remains as a medium priority item.

Other lower priority items include a paper on response of protective relays to power swings and review standards under development.

Jeff Mitchell raised the issue that the work plan for the SPCS is heavily loaded. Chair Mitchell thought that the analysis of protection system misoperations should be a higher priority item.

Chair Mitchell proposed development of a Protection System Misoperations Task Force with the objective of analyzing root causes of misoperations and identify mitigating solutions for minimizing misoperations.

Ben Crisp motioned for the formation of a task force and a scope to be developed and considered for approval by the committee via e-mail in the near future. Dale Burmester shared concerns about staffing resources from industry. The PC should start probing for membership opportunities. The motion was seconded and approved via voice vote by the committee. NERC staff in coordination with stakeholders will develop a draft scope and distribute the scope to the PC within the next two weeks.

### **Adjournment**

Chair Mitchell adjourned the meeting at 11:50 a.m. MST.

Respectfully submitted,



John N. Moura, Committee Secretary

*\*background materials included*

**From:** Wanda Peoples  
**Sent:** Friday, February 03, 2012 3:38 PM  
**To:** Wanda Peoples  
**Subject:** Standing Committee announcement March 2012

## Meeting Announcement: Standing Technical Committee's Meetings March 6-8, 2012 | Phoenix, AZ

Meeting Location  
 Phoenix Convention Center & Venues  
 100 N 3rd Street  
 Phoenix, AZ 85004

Lodging – [Hotel Reservation Link](#) or call 888-421-1442  
 Hyatt Regency Phoenix Hotel  
 122 N 2nd Street  
 Phoenix, AZ 85004  
 602-252-1234

Room Block Code: NERC - \$189/night group rate + tax  
 Hotel cut-off date: February 15, 2012 NOTE: After the cut-off date the hotel will release this block of rooms and only accept reservations on a space-available basis at the prevailing room rate  
 Room block available from: 3/5 – 3/7/2012 (with limited guest rooms available from 3/2-3/10/2012)  
 Check-in: 3 p.m., Check-out: Noon - Check with the hotel directly for early cancellation/departure fees  
 Dress Code: Business Casual

Group Name	Registration Link	Monday, March 5 Convention Center	Tuesday, March 6 Convention Center	Wednesday, March 7 Convention Center	Thursday, March 8 Convention Center
EAWG	<a href="#">EAWG Registration</a>	EAWG 1 p.m. – 5 p.m. Room: West 105 C			
OC/PC Executive Joint Meeting			OC/PC Working breakfast 7 a.m. – 8:30 a.m. Room: North 122 C		
REMG			REMG 11 a.m. – Noon Room: North 122 C		
Cyber Incident Handling Training	<a href="#">Cyber Incident Handling Training</a>			Cyber Incident Handling Training 7:30 a.m. - Noon Room: North 128 B	
Operating Committee	<a href="#">OC Registration</a>		OC Exec Committee 9 a.m. – 11 a.m. Room: North 122 C  OC Working lunch Noon. – 1 p.m.  OC 1 p.m. – 5 p.m. Room: North 124 A-B	OC 8 a.m. – Noon Room: North 124 A-B	
			PC Exec Committee		

Planning Committee	<a href="#">PC Registration</a>		9 a.m. – 11 a.m. Room: North 123  PC Working lunch Noon – 1 p.m.  PC 1 p.m. – 5 p.m. Room: North 129 A- B	PC 8 a.m. – Noon Room: North 129 A- B	
Critical Infrastructure Protection Committee	<a href="#">CIPC Registration</a>		CIPC Exec Committee 5 p.m. – 8 p.m. Room: North 123	CIPC Working lunch Noon – 1 p.m.  CIPC 1 p.m. – 5 p.m. Room: North 124 A-B  CIPC Exec Committee 5 p.m. – 8 p.m. Room: North 128 B	CIPC 8 a.m. – Noon Room: North 124 A-B

NERC will provide a working lunch for OC and PC on 3/6 and a working lunch for CIPC meeting on 3/7 at noon, prior to their respective committee meeting. Schedule includes other associated NERC meetings.

*When making your hotel reservation, please be sure to mention "NERC" to get the preferred rate and ensure your reservation is credited to the NERC room block. The hotel will charge NERC a penalty if the total rooms blocked for this event are not picked up. Also, if you use a travel agency for your travel plans, please make sure the agency mentions NERC. For more information or assistance, please contact Wanda Peoples.*

Wanda Peoples  
 North American Electric Reliability Corporation  
 3353 Peachtree Road NE  
 Atlanta, GA 30326  
 404.446.2560 | [www.nerc.com](http://www.nerc.com)  
[wanda.peoples@nerc.net](mailto:wanda.peoples@nerc.net)

Sincerely,

*Wanda B. Peoples*  
 Manager, Meeting Planning &  
 Facilities Services

North American Electric Reliability Corporation (NERC)  
 3353 Peachtree Road NE  
 Suite 600 - North Tower  
 Atlanta, GA 30326  
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[wanda.peoples@nerc.net](mailto:wanda.peoples@nerc.net)

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**Attendees**  
**Planning Committee Meeting**  
**Phoenix, AZ - March 6-7, 2012**

**PC Officers**

Chairman Jeffery Mitchell  
Vice Chairman Ben Crisp  
Secretary John Moura

**Voting PC Members**

Investor-owned Utility - David Weaver  
Investor-owned Utility – Kenneth Donohoo  
State/municipal Utility - Stuart Nelson  
State/municipal Utility - Brian Keel  
Cooperative Utility -  
Cooperative Utility – Jay Farrington  
Federal/Prov. Utility -  
Federal/Prov. Utility - Ron Mazur  
Federal/Prov. Utility – Bing Young  
Federal/Prov. Utility - Gayle Nansel  
Trans. Dependent Utility - Kevin Koloini  
Trans. Dependent Utility - Tom Reedy  
Merchant elec. Generator – Maggy Powell (P)  
Merchant elec. Generator – Michael Goggin (P)  
Small end-use customer –  
Small end-use customer –Darryl Lawrence  
ISO/RTO - Mark Westendorf  
ISO/RTO - Dan Rochester  
RRO/ERCOT – Dan Woodfin  
RRO/FRCC – Pedro Modia  
RRO-MRO - Dale Burmester  
RRO-NPCC – Phil Fedora  
RRO-RFC - Paul Kure  
RRO-SERC - Russell Schussler  
RRO-SPP -  
RRO-WECC - Branden Sudduth  
State government - Christine Ericson  
State government – Parveen Baig  
Electricity Marketer – Jason Marshall

**Non-Voting Members**

U.S. Federal – Alfred B. Corbett, FERC

**PC Subgroup Chairs**

Bill Adams, Chair PAS  
Mark Kuras, Chair RAS & DCS  
Vince Ordax, Chair RAS  
Jonathan Sykes Chair SPCS

**Guests**

Jonathan Hayes, Southwest Power Pool  
Ray Kershaw ITC Holdings  
Joe Spencer, SERC  
Kevin Berent, SERC  
David Grubbs, City of Garland  
Robert Enriken, EPRI  
John Seidel, Quanta Technology  
Alan Wahlstrom, SPP-RE  
K. R. Chakravarthi, Southern Company  
Nathan Mitchell, APPA  
Mike Paktis, CNP  
Don Holdsworth, PSEG  
Bob Collins Texas RE  
John Odom, FRCC  
Michael Forte, ConEdison of NJ  
Mark McCulla, Entergy  
Bob Zavadil, EnerNex

**NERC Staff**

Mark Lauby  
Michelle Marx  
Bob Cummings  
Eric Rollison`  
Scott Mix  
Jessica Bian  
Earl Schockley  
Steven Noess



# Amended Planning Committee Agenda

March 6-7, 2012  
Phoenix Convention Center-North Building  
100 N. 3rd Street  
Phoenix, AZ 85004  
602-262-6225

## Introductions and Chair's Remarks

## NERC Antitrust Compliance Guidelines and Public Announcement

### Agenda

#### 1. Administrative - Secretary

- 1.1. Arrangements
- 1.2. Declaration of Quorum
- 1.3. Planning Committee Membership (2011-2013)\*
- 1.4. Planning Committee Roster\*
- 1.5. Agenda Approval
- 1.6. Future Meeting Schedule

2012 Meeting Dates	Time	Location	Hotel
May 18	3PM to 4PM (Eastern)	Webinar	n/a
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December 12	8AM to 12PM (Eastern)		

## 2. Consent Agenda

- 2.1. Approve – [December 2011 Meeting Minutes](#)\*
- 2.2. Approve – [February 2012 Conference Call Minutes](#)\*
- 2.3. Approve – Reliability Assessment Data Working Group (RADWG) Scope\*
- 2.4. Approve – Model Validation Working Group (MVWG) Scope\*
- 2.5. Approve – System Analysis and Modeling Subcommittee (SAMS) Scope\*

## 3. Discussion Items

- 3.1. Cyber Security Order 706 Standards Drafting Team\* – Steve Noess, NERC Staff
  - 3.1.1. Planning Committee Expertise and Support Requested
  - 3.1.2. Identification of Black Start Resources at Risk for Deregistration due to NERC CIP Version 5 Standards
- 3.2. Providing Technical Expertise to Reliability Standards Development\* – John Moura, NERC Staff
  - 3.2.1. Requests for Research from NERC Standards Committee
    - 3.2.1.1. Project 2010-05.2 – SPS Misoperations
    - 3.2.1.2. Project 2012-04 – Protection System Commissioning
    - 3.2.1.3. Project 2012-06 Generator Capabilities
- 3.3. BES Definition Request from SDT\* – Issues to Address – Jeff Mitchell, ReliabilityFirst
  - 3.3.1. 100 kV voltage level
  - 3.3.2. 20/75 MVA Generator threshold
  - 3.3.3. Reactive resource threshold level
  - 3.3.4. Power flow out of Local Networks
- 3.4. NERC BOT Update – Assignments from NERC BOT from February Phoenix Meeting
  - 3.4.1. Review variable generation integration in more detail for reliability assessments
  - 3.4.2. Release the annual performance analysis report from the PAS in the second quarter
- 3.5. PC to Provide Review and Technical Expertise to Compliance Application Notice Development and Prioritization – Valerie Agnew, NERC Staff

Update on Status of FERC Order 754: Assessment of Protection System Single Points of Failure\* – Mark Byrd (SAMS Chair) and Jonathan Sykes (SPCS Chair)

3.6. Eastern Interconnection Reliability Assessment Group (ERAG) Update - Work plan - John Odom, ERAG Chair

3.7. Analysis of Eastern Interconnection Frequency Response\* – John Odom, ERAG Chair

3.8. Event metrics and Emerging Reliability Risks\* – Earl Shockley, NERC Staff

3.8.1. Performance Analysis Identified Risks – Jessica Bian, NERC Staff

3.8.2. Long Term Reliability Assessment Risk Identification – John Moura, NERC Staff

3.9. Future Request from Functional Model Working Group to Review and Provide Feedback on *Assessing the Need for Introducing Demand Response Functions and Entities to the NERC Reliability Functional Model Final Report\** – John Moura

3.9.1. Assign PC reviewers for this report

3.10. ERO-RAPA Update – Joe Spencer

#### 4. Committee Matters

4.1. Approve—[Event Driven Index \(EDI\) Whitepaper](#), Bill Adams, PAS Chair

4.2. Approve —[Severe Impact Resilience Task Force Report](#)

4.3. Review and Provide Feedback—[Integrating Variable Generation Task 1-3 Report](#)

4.3.1. Assign PC Reviewers for this report

4.4. **AMMENDMENT:** Discussion on new task force to address protection system misoperations (Added by Jeff Mitchell)

#### 5. Subcommittee Reports

5.1. Reliability Assessments Subcommittee\*

5.1.1. Review and Provide Feedback—RAS Recommendations to Enhance Demand Response Treatment in Reserve Margin Calculations

5.1.2. Review and Provide Feedback—RAS Recommendation for Probabilistic Assessment

5.1.3. Review and Provide Feedback—Reliability Assessment Guidebook\*

5.1.4. Identification of Planning Committee Subject Matter Experts for upcoming assessments

- 5.1.5. Summer Assessment – May 2012 Approval Webinar
- 5.1.6. Long Term Reliability Assessment – October 2012 Approval Webinar
- 5.1.7. Winter Assessment – November 2012 Approval Webinar
- 5.1.8. Status of environmental regulations reliability assessment
- 5.1.9. Status of Reliability Assessment Database (RAD)
- 5.2. Performance Analysis Subcommittee\*
  - 5.2.1. Status Update Items
  - 5.2.2. PAS Annual Report
  - 5.2.3. Data Collection and Risk Measures Update
  - 5.2.4. EIA's Statistical Method Recommendations
  - 5.2.5. Sandia National Labs Recommendations
  - 5.2.6. GADS, TADS, and DADS Updates\*
  - 5.2.7. Transmission outage data collection
- 5.3. System Analysis and Modeling Subcommittee
- 5.4. System Protection and Control Subcommittee\*
  - 5.4.1. Workload and Prioritization of Tasks
  - 5.4.2. Misoperations Tracking Template – Joe Spencer, SERC – Chair of ERO-RAPA
  - 5.4.3. SPCS Work Plan for Misoperation Analysis Associated with Revised Scope

\*background materials included