

## Minutes Resources Subcommittee

January 30–31, 2008  
Scottsdale, Arizona

A meeting of the North American Electric Reliability Corporation (NERC) Resources Subcommittee (RS) was held on January 30–31, 2008 in Phoenix, Arizona. The meeting announcement, agenda, and attendance list are attached as **Exhibits A, B, and C**, respectively. Individual statements and minority opinions are affixed as **Exhibits D and E**. There were none.

Subcommittee Chair Terry Bilke presided and a quorum was present.

### **Antitrust Compliance Guidelines**

Secretary Vandervort acknowledged the NERC Antitrust Compliance Guidelines.

### **Alan Oneal Acknowledgement**

Chair Terry Bilke acknowledged Alan Oneal's contribution and commitment to the RS through the years. Alan retired from MidAmerican Energy Company on January 4, 2008. The RS congratulates Mr. Oneal on his retirement and thanks him for all that he has done in support of the subcommittee's activities and development of control performance policies and standards.

### **Working Group Reports**

#### **Control Criteria Working Group – Chair Alan Oneal**

Chair Oneal submitted the Performance Standard Reference Document (PSRD) to the RS for review prior to posting. On January 7, 2008 the PSRD was posted on the NERC RS Web site. The subcommittee agrees that a disclaimer was needed on the introduction section of the PSRD stating that this document was written by the RS to help the industry understand the control performance standards.

#### **Frequency Working Group – Chair Raymond Vice**

Chair Vice reported that a number of oscillatory events have occurred over the last few months. The phasor data may help to analyze the events.

#### **Inadvertent Interchange Working Group – Chair Don Badley**

Chair Badley explained to the subcommittee that the inadvertent interchange application is still a monthly process. Balancing authorities are required to enter their inadvertent interchange data on a monthly routine but may enter their data on a more frequent basis, i.e., hourly, daily, weekly, or monthly.

Other inadvertent interchange items were addressed outside of the working group report and can be found in the minutes.

### **Operating Reserves Working Group – Chair Larry Akens**

Chair Akens reported that the Balancing Authority Control Standard Drafting Team will revise BAL-002, BAL-004, BAL-005, and BAL-006, which include operating reserves requirements. The standard drafting team has been formed, although it has not met as of this subcommittee meeting.

### **2008 CPS2 Bounds and Frequency Bias Report**

The 2008 CPS2 Bounds and Frequency Bias Report has been distributed to the RS and to the RS survey contacts for implementation on February 1, 2008. A couple of non-technical corrections will be made for accuracy, which include:

- Change the footnote reference from “Control Area” to “Balancing Authority Area.”
- Send the CPS2 Bounds and Frequency Bias Report to the Resources Subcommittee and to the RS survey contacts in Excel format. However, the version posted on the NERC Web site should be in PDF format.
- Change the BA name Cinergy to Duke Energy West, however, the acronym will remain CIN.
- Add a column on the 2008 CPS2 Bounds and Frequency Bias Report after the BAs’ names that will define the BAs’ 3 or 4 letter acronyms.

The subcommittee will work with the Consortium for Electric Reliability Technology Solutions (CERTS) to revise the resource adequacy application with the data found in the report.

### **NERC Reliability Standards**

#### **Frequency Response SDT**

#### **Reliability-based Control SDT**

#### **Balancing Authority Control SDT (BAL-002, 004, 005, 006 Revisions)**

Numerous RS members are on the listed standard drafting teams. These standards began as RS-sponsored standard authorization requests. Each standard drafting team is either just beginning its tasks or has just been formed. Each standard drafting team is developing new or revised standard, and will post all the documents for industry comment. The goal for each standard drafting team is to make significant progress towards the next comment posting.

### **Generator Verification**

There are no RS members on the Generator Verification Standard Drafting Team. However, because of the close relations of MOD-024, Generator Performance During Frequency and Voltage Excursions, and MOD-027, Verification of Generator Unit Frequency Response, to the RS’s responsibilities, the subcommittee is recommended by Chair Bilke to monitor and comment on the standards when they are posted for industry comment.

### **Performance Standard Reference Document**

See the Control Criteria Working Group summary.

## **NERC Active Resources Subcommittee Applications**

### **Resource Adequacy Application**

To coincide with the 2008 CPS2 Bounds and Frequency Bias Report, CERTS will incorporate the new data into the resources adequacy application. In addition, new balancing authority jurisdictions, L<sub>10</sub> will be incorporated.

### **Inadvertent Interchange Application**

The RS discussed the inadvertent interchange application and determined that the application needs special attention to attain the correct inadvertent interchange balances. The problem dates back to 2006 and 2007. Since that time good data has been added onto the balances that were not verified to be accurate, thus carrying forward balances that are questionable or are inaccurate. The RS will start with the following known facts:

- All WECC balancing authorities have entered their scheduling data up to December 2007.
- Through December 2007 twelve Eastern Interconnection balancing authorities are missing inadvertent interchange data.
- All WECC Balancing Authorities have good 2006 “carry forward” inadvertent interchange data.
- December 2006 – 56 Eastern Interconnection balancing authorities need to enter their “carry forward” inadvertent interchange data.
- November 2006 – 55 of the above 56 Eastern Interconnection balancing authorities need to enter their “carry forward” inadvertent interchange data.

Chair Terry Bilke asked the Eastern Interconnection RS members and the Eastern Interconnection RS survey contacts to prompt the respective BAs noted above that are in their respective region, to enter the accurate inadvertent data and to determine their good “carry forward” data. Accurate inadvertent interchange data going forward is added onto the previous data. The needed data is necessary to validate the “carry forward” numbers.

### **AIE Monitoring Application**

The RS called an Area Interchange Error (AIE) Survey in the Eastern Interconnection, for the hours of May 12, 2007, HE 0200 CDT, May 12, 2007, HE 0600 CDT, and June 17, 2007, HE 0600 CDT. The AIE Survey data was to be submitted electronically utilizing the AIE Monitoring application. All Eastern Interconnection balancing authorities have entered their survey data for the three surveys requested. Chair Bilke and Mr. Martinez reported that the survey data needs to be reviewed before conclusions and recommendations can be made. Actions to support the AIE Monitoring application include:

- CERTS will notify 13 Eastern Interconnection balancing authorities that have questionable AIE Survey data.
- Designated members of the RS will review and evaluate the three requested AIE Surveys.
- Draft and final reports will be forthcoming from the review team.
- When the AIE Monitoring application is verified and validated (based on the AIE Survey data), the application will be placed into production and it will be ready for the next AIE Survey.

### **Frequency Monitoring and Analysis Application**

The RS anticipate the Frequency Monitoring and Analysis (FMA) application will be ready for field testing in the second quarter of 2008. RS-designated field testers and the field test process will be defined and implemented between now and then. The subcommittee will continue to discuss related frequency events archiving, frequency response calculations, and analysis capabilities associated with the FMA application.

### **Pump Storage – Load Study**

Mike Potishnak is beginning to compile data to document a Pump Storage – Load Study. Mr. Potishnak presented his conceptual idea to the RS as a work in progress. It was noted by Bill Herbsleb that pump storage is handled by the market system. The pump storage is on a clock. The operators have a specific window to pump up water to use the next day. The subcommittee encouraged Mr. Potishnak to continue his work on this study and to bring back his conclusions and recommendations to the subcommittee.

### **DOE North American SynchroPhasor Initiative (NASPI)**

Chair Bilke gave a presentation on the DOE-sponsored North American SynchroPhasor Initiative (NASPI). Mr. Bilke stated that the functions of the phasor data and processes give the following benefits:

- NASPI provides wide-area views of the respective interconnection.
- NASPI provides sub-SCADA visibility, allowing the monitoring entities to see dynamics not visible in the SCADA environment.
- In the future, NASPI may offer “Smart Grid” applications.
- Angular or dynamic interconnection perturbations may eventually be used as warning signs for operators to take precautionary or emergency actions.

A NASPI meeting will be held in New Orleans on March 6–7, 2008. Additional information can be found on following Web sites:

<http://www.naspi.org/>

<http://www.powerit.vt.edu/Fnet.htm>

### **Event Analysis Process and Catalogue of Event Analysis Tools**

The subcommittee began the discussion by looking at the various disturbance event analytical applications and monitoring tools that are available and accessible to the subcommittee, see agenda item 5.h. The discussion progressed to a discussion on the need to develop a procedure or process to consistently analyze an event from the initial event notification to the conclusion phase. As a result of this discussion and general consensus by the subcommittee for the need for such a procedure, Raymond Vice and the Frequency Work Group will write a white paper on how to analyze a disturbance. The white paper will lead to a guide or procedure that can be used to analyze a disturbance or an event by following the respective step-by-step analytical procedure, using the available event analytical applications and monitoring tools, communicating with the correct individuals, and attaining expert technical assistance from the industry, academia, vendors, and from other expert contributors and sources.

**Frequency Archiving/Frequency Repository**

Mike Potishnak recommended to the RS that it consider sponsoring a frequency data repository or a frequency data archive. Mr. Potishnak emphasized the importance of storing and archiving frequency data for historical purposes and for analysis purposes. Mr. Martinez and CERTS staff will look at the feasibility of creating a frequency repository associated with the FMA application.

**NERC Operating Committee Directives to the Resources Subcommittee  
 Reliability Concepts Document**

The NERC Operating Committee asked the RS to write a comprehensive chapter on load-generation balancing. The RS has a similar action item on the RS Action Item List. The subcommittee will begin this action. The subcommittee members are asked to share their historical documents, operational guides, and technical papers with the subcommittee to form a basis for the proposed chapter(s).

**Time Error Monitor**

The NERC Operating Committee asked the RS to work with the Reliability Coordinator Working Group (RCWG) to develop a short procedure for time monitors. Recommended topics include:

- The interconnection time monitor’s duties.
- Requirements for serving as an interconnection time monitor.
- The procedure for the OC’s interconnection time monitor selection.
- Time correction procedures (including references to NAESB business practice standards for time error corrections).

Chair Bilke drafted an Interconnection Time Error Monitor document that was forwarded to the RS and to the RCWG for review as the initial draft to complete the assignment. See **Exhibit F**. RS members are asked to share their comments on this document with the Resources Subcommittee.

**Integration of Renewable Generation (Wind and Solar)**

A joint NERC Operating Committee and NERC Planning Committee task force is being formed to study and recommend actions for reliably integrating variable generation into the interconnections. If any subcommittee member is interested in working with the OC-PC Integration of Renewable Generation Task Force, they should inform Secretary Vandervort.

**Time Error Monitoring**

The subcommittee reported the following time error monitoring statistics:

<b>2007 Interconnection Time Error Totals</b>			
	Fast Time Error	Slow Time Error	Total Time Error
Eastern Interconnection	215	0	215
Western Interconnection	72	34	106
ERCOT	44	14	58
Hydro Québec	-----	-----	-----

## Performance Monitoring

### CPS1 Review

The Resources Subcommittee members will be requested to sign a NERC Confidentiality Agreement prior to being allowed to review and discuss the monthly and 12-month rolling average CPS1 reports.

The NERC compliance program determines CPS1 violations, penalties, and monitors corrective actions. The RS reviews the CPS1 report for performance analysis purposes. The subcommittee reviews the data to identify generic problems, inform subcommittee regional representatives when balancing authorities' scores are close to violation, and to assess why balancing authorities have scores below or near the acceptable 100% score.

### CPS2 Review

The Resources Subcommittee members will be requested to sign a NERC Confidentiality Agreement prior to being allowed to review and discuss the monthly and 12-month rolling average CPS2 reports.

The NERC compliance program determines CPS2 violations, penalties, and monitors corrective actions. The Resources Subcommittee reviews the CPS2 report for performance analysis purposes. The subcommittee reviews the data to identify generic problems, inform subcommittee regional representatives when balancing authorities' scores are close to violation, and to assess why balancing authorities have scores below or near the acceptable 90% score.

## Resources Subcommittee Action Item List

Tom Vandervort reviewed and updated the action item list, which is affixed as **Exhibit G**.

## Dates and Locations of Future Meetings

Wednesday, April 30, 2008	8 a.m.–5 p.m.	Washington D.C.
Thursday, May 1, 2008	8 a.m.– noon	Alt: Miami/Ft. Lauderdale
Wednesday, July 30, 2008	8 a.m.–5 p.m.	Victoria, BC
Thursday, July 31, 2008	8 a.m.– noon	Alt: Minneapolis
Tuesday, October 28, 2008	8 a.m.–5 p.m.	San Antonio
Wednesday, October 29, 2008	8 a.m.– noon	Alt: Albuquerque
Wednesday, January 28, 2009	8 a.m. – 5 p.m.	San Diego
Thursday, January 29, 2009	8 a.m. – noon	Alt: New Orleans
Wednesday, April 30, 2009	8 a.m. – 5 p.m.	Charleston, SC
Thursday, May 1, 2009	8 a.m. – noon	Tulsa, OK
Wednesday, July 30, 2009	8 a.m. – 5 p.m.	To Be Determined
Thursday, July 31, 2009	8 a.m. – noon	
Wednesday, October 29, 2009	8 a.m. – 5 p.m.	To Be Determined
Thursday, October 30, 2009	8 a.m. – noon	

Respectfully submitted,

*Tom Vandervort*

Thomas J. Vandervort, Resources Subcommittee Secretary

**Angie Nicastro**

**From:** Cheri Thompson  
**Sent:** Tuesday, February 12, 2008 10:33 AM  
**To:** Angie Nicastro  
**Subject:** FW: MEETING: January 2008 Resources Subcommittee  
**Attachments:** NERC Resources Subcommittee .vcs; header; footer

**Exhibit A**

Cheri A. Thompson  
 Administrative Assistant  
 North American Electric Reliability Corporation  
 116 - 390 Village Boulevard  
 Princeton, New Jersey 08540  
 (609) 452- 8060 - Phone  
 (609) 452 - 9550 - Fax

**From:** Cheri Thompson [mailto:Cheri.Thompson@nerc.net] **On Behalf Of** Tom Vandervort  
**Sent:** Wednesday, December 19, 2007 10:31 AM  
**To:** Cheri Thompson  
**Subject:** MEETING: January 2008 Resources Subcommittee

**NERC**  
 NORTH AMERICAN ELECTRIC  
 RELIABILITY CORPORATION



## Meeting Announcement: Resources Subcommittee

January 30-31, 2008 | Scottsdale, AZ

Register online today: <http://www.nerc.net/meetingregistrations/Committee.aspx?meetingdate=1/30/2008&meetingtype=RS>

Meeting Group and Dates	
Group Name	Resources Subcommittee
Dates	1/30/2008 8:00:00 AM 5:00:00 PM 1/31/2008 8:00:00 AM 12:00:00 PM
Hotel	
Hotel	Chaparral Suites Resort
Address	5001 N. Scottsdale Road
City	Scottsdale
State	AZ
Phone	480-949-1414
Fax	480-947-2675
Cut Off Date	1/8/2008
Attending Staff	
Staff	Tom Vandervort
Miscellaneous	
Notes	<p><b>PLEASE CALL IN TO BOOK RESERVATIONS</b></p> <p><a href="#">Hotel Location- map</a></p> <ul style="list-style-type: none"> <li>Room rate: \$189 single/double occupancy</li> <li>Room block: Nights of January 29-30, 2008 - There are a limited amount of rooms are</li> </ul>

2/12/2008

available

- Check-in: 4 p.m., Check-out: noon
- Hotel cut off date: January 8, 2008 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
- Dress code: Business casual

*When making your hotel reservation, please be sure to mention the "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 Cheri Thompson, Administrative Assistant, at [Cheri.Thompson@nerc.net](mailto:Cheri.Thompson@nerc.net) or at (609) 452-8060.*

Attached please find an outlook meeting invitation. If you would like to add it to your schedule, just double click on the attachment, select "Open" from the pop up screen, and then hit the "Save & Close" button at the upper left hand of the meeting screen to add to your calendar.

North American Electric Reliability Corporation  
116-390 Village Blvd.  
Princeton, NJ 08540  
609.452.8060 | [www.nerc.com](http://www.nerc.com)

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## **Resources Subcommittee Meeting**

Chaparral Suites Resort  
5001 North Scottsdale Road  
Scottsdale, AZ  
Phone: (480)949-1414

Wednesday, January 30, 2008 — 8 a.m.–5 p.m.  
Thursday, January 31, 2008 — 8 a.m.–noon

### **Agenda**

- 1. Administrative**
  - a. Membership and Guests — Chair
  - b. Arrangements — Secretary
  - c. Approval of Meeting Minutes
    - i) None — Chair
  - d. Procedures
    - i) Parliamentary Procedures — Chair
    - ii) Antitrust Compliance Guidelines — Chair
  - e. Resources Subcommittee Action Items List (Review prior to the meeting) — Chair
  - f. Resources Subcommittee Charter — Chair
  
- 2. Work Group Reports**

Work Group Meetings, Conference Calls, or Action since the last RS Meeting

  - a. Control Criteria Work Group — Alan Oneal
  - b. Frequency Work Group — Raymond Vice
  - c. Inadvertent Interchange Work Group — Don Badley
  - d. Operating Reserves Work Group — Larry Akens
  
- 3. 2008 Frequency Bias Requirements**
  - a. 2008 Frequency Bias Values — Terry Bilke, Raymond Vice, Tom Vandervort
  
- 4. NERC Reliability Standards**
  - a. Frequency Response SDT — Bill Herbsleb
  - b. Reliability-based Control SDT — Doug Hils, Raymond Vice
  - c. Balancing Authority Control SAR (BAL-002, 004, 005, 006 Revision) — Larry Akens
  - d. Generation Verification — Tom Vandervort
  - e. Performance Standards Reference Document — Alan Oneal

**5. Active RS NERC-CERTS Applications**

- a. Resources Adequacy (ACE-Frequency) Application System — Carlos Martinez, Terry Bilke
- b. Intelligent Alarms — Carlos Martinez, Terry Bilke
- c. AIE Monitoring Application (Project 2000-4) — Carlos Martinez, Don Badley
- d. CPS1 & BAAL Monitoring Application (Project 2001-38) — Carlos Martinez, Doug Hils, Raymond Vice
- e. Frequency Monitoring and Analysis Application (Project 2005-6) — Carlos Martinez, Raymond Vice, Terry Bilke
- f. Inadvertent Interchange Application (Project 2001-37) — Carlos Martinez, Don Badley
- g. DOE North American Synchronous Phasor Initiative (NASPI) — Terry Bilke, Carlos Martinez
- h. Combination of Event Analysis Tools — Tom Vandervort
- i. WECC Interchange Tool (WIT) for Eastern Interconnection — Tom Vandervort

**6. Frequency and Control Performance**

- a. Western Interconnection Frequency Trends and Events — Bart McManus
- b. Eastern Interconnection Frequency Trends and Events — Raymond Vice
- c. ERCOT Interconnection Frequency Trends and Events — Sydney Neimeyer
- d. Hydro Quebec Interconnection Frequency Trends and Events — Mike Potishnak
- e. CPS1, CPS2, BAAL Data Trends — Terry Bilke
- f. DCS Data Trends — Terry Bilke
- g. Inadvertent Interchange Balances — Don Badley
- h. Determining Frequency Events to Analyze in 2008 — Raymond Vice
- i. Over-generation — Raymond Vice
- j. AIE Survey — Terry Bilke, Don Badley, Raymond Vice, Carlos Martinez
- k. August 4, 2008 Frequency Event, Risk Analysis — Don McInnis

**7. Time Error**

- a. Eastern Interconnection — Bill Herbsleb
- b. Western Interconnection — John Tolo
- c. ERCOT Interconnection — Sydney Niemeyer
- d. Hydro Quebec Interconnection — Mike Potishnak

**8. NERC Operating Committee Directives to the Resources Subcommittee**

- a. Reliability Concepts Document — Terry Bilke
- b. Time Error Monitor Procedures — Terry Bilke
- c. Integration of Renewable Generation (Wind and Solar) — Terry Bilke

**9. Future Meetings**

- a. April 30–May 1, 2008 Washington, D.C.
- b. July 30–31, 2008 Victoria, BC, Alternate Location: Minneapolis
- c. October 29–30, 2008 San Antonio, Alternate Location: Albuquerque
- d. January 28–29, 2009 New Orleans, San Diego, or Ft. Lauderdale
- e. April 29–30, 2009 To Be Determined
- f. July 29–30, 2009 To Be Determined
- g. October 28–29, 2009 To Be Determined

## Attendance List Resources Subcommittee

January 30-31, 2008  
Scottsdale, Arizona

<u>Name of Participant</u>	<u>Organization</u>
Terry Bilke, RS Chair	Midwest ISO
Don Badley, RS Vice-chair	WECC – Northwest Power Pool Corp.
Larry Akens	TVA – SERC
Gerry Beckerle	Ameren
Bob Cummings	NERC
William Herbsleb	PJM RTO
Larry Kezele	NERC
Carlos Martinez	CERTS
Mahmood Mirheydar	FERC
Sydney Niemeyer	NRG – Texas
Alan Oneal	MRO
Mike Potishnak	ISO – NE – NPCC
Robert Rhodes	SPP
John Swez	Duke Energy - RFC
John Tolo	TEP – WECC
Tom Vandervort	NERC
Raymond Vice	Southern Co.

**Individual Statements  
Resources Subcommittee Meeting  
January 30–31, 2008**

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There were none.

**Minority Opinions  
Resources Subcommittee Meeting  
January 30–31, 2008**

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There were none.

## **Time Monitoring Procedure**

### **Introduction**

This procedure outlines responsibilities of Reliability Coordinators fulfilling the responsibility of Time Monitor in the North American Interconnections. Changes to this procedure will be at the direction of the NERC Operating Committee (OC) with the participation of the NERC Resources Subcommittee (RS) and the Operating Reliability Subcommittee (ORS).

This document applies to current and future frequency or time related procedural responsibilities assigned to the Time Monitor in NERC standards or NAESB business practices.

### **Designation of Time Monitor**

There will be one Time Monitor designated within each Interconnection. Should an existing Time Monitor be no longer willing or able to fulfill its responsibilities, the NERC Operating Committee will direct the NERC ORS to nominate a replacement and communicate the transition plan.

If a Time Monitor fails to fulfill its responsibilities, the NERC ORS will work with the Time Monitor to resolve the problem. The NERC ORS will submit a report to the NERC OC either identifying corrective measures taken or provide a recommendation for a new Time Monitor.

The NERC RS will report to the NERC OC and ORS any frequency or Time Error issues that may have been caused or aggravated by the Time Monitor or TEC practices.

### **Responsibilities of the Time Monitor**

The Time Monitor will start and stop Time Error Corrections (TEC) as outlined in NERC standards and NAESB business practices.

The Time Monitor will terminate any TEC believed to be negatively impacting reliability. Requests for termination may come from any Transmission Operator or Balancing Authority Operator to its respective Reliability Coordinator, who will notify the respective Interconnection's Time Monitor.

The Time Monitor will provide a mechanism and process to assist BAs in periodically validating the BAs' Time Error and frequency devices.

Links to each Time Monitor's local procedures to meet this procedure will be posted at the NERC RS website (<http://www.nerc.com/~filez/rs.html>).



**Resources Subcommittee  
January 30-31, 2008 Meeting  
Open Action Item List**

Action Figure	Subject	Action Item/Assignment	Due Date	Completion Date
Terry Bilke and Resources Subcommittee	Load-Generation Balancing Technical Paper	013108, NERC Operating Committee Chair, Gayle Mayo asked the RS to <b>write a comprehensive Reliability Concepts Document chapter on load-generation balancing. The chapter must state what must be done to ensure balance.</b>  In conjunction with the OC request, Don Benjamin requests the RS to contribute chapters to the OC Reliability Concepts Document – Balance Resources and Demand, Frequency Trends, Frequency Profile, Time Error Correction, ACE, Bias, Inadvertent Interchange, AIE, etc.  The RS is asked to circulate their draft technical papers as an initial start to this project	043008	
Terry Bilke and Resources Subcommittee	Frequency Event Repository	013108, The RS requests a frequency event repository be initiated. Possibly visit with CERTS, NASPI, VTech, Bill Herbsleb/PJM, Sydney mentioned the August 4 event appendix that may be relevant to this effort, etc., to determine what frequency retention is already taking place.	043008	
Raymond Vice and Frequency Work Group	Disturbance Analysis Procedure	013108, After a discussion on consolidating the various industry tools used to monitor and analyze disturbances, Raymond Vice volunteered the Frequency Work Group to write a white paper on how to analyze a disturbance. The goal is to write a generic set of actions that can be used to analyze events and disturbances in a consistent manner.  <b>The RS is available to assist Raymond and the FWG.</b>	043008	
Don Badley and Inadvertent Interchange Work Group	Inadvertent Interchange Balances	013108, Don and the Inadvertent Interchange Work Group are working with Joe Emde, Chris Scheetz, Bill Herbsleb, CERTS, and others, to address and resolve the inadvertent interchange data discrepancies for 2006 and 2007.  013108, HIGH PRIORITY	043008	

Action Figure	Subject	Action Item/Assignment	Due Date	Completion Date
		<p>CERTS will make Inadvertent Interchange changes by the middle of Feb, 2008.</p> <p>Coordinated effort is necessary to attain and incorporate the proper 2006 and 2007 carry-forward inadvertent interchange data.</p> <p>RS members that have BAs that have not input data into the Nov and Dec, 2006 II tool, need to actively contact and engage those BAs to bring their accounts up to date.</p>		
Alan Oneal and Control Criteria Work Group	Rewrite Performance Standards Reference Document	013108, Contact each open SAR drafting team or standard drafting team to request that they write or plan to write a module for each SDT specific requirement and how to achieve technical results for the PSRD.	043008	
Tom Vandervort	Performance Standards Reference Document Disclaimer	013108, Insert a disclaimer into the PSRD to the effect that this is not a standard but rather a reference document that gives background information on the BAL standards requirements and concepts.	043008	
Tom Vandervort	2008 CPS2 Bounds and Bias Report	<p>013108, A couple of non-technical corrections will be made to the CPS2 Bounds and Frequency Bias REport for accuracy, which include:</p> <ul style="list-style-type: none"> <li>• Change the footnote reference from "Control Area" to "Balancing Authority Area."</li> <li>• Send the CPS2 Bounds and Frequency Bias Report to the Resources Subcommittee and to the RS Survey Contacts in Excel format. However, the version posted on the NERC website should be in PDF format.</li> <li>• Change the BA name Cinergy to Duke Energy West, however, the acronym will remain CIN.</li> <li>• Add a column on the 2008 CPS2 Bounds and Frequency Bias Report after the BAs' names that will define the BAs' 3 or 4 letter acronyms.</li> </ul> <p>020408, TV sent the requested changes to Chris Scheetz</p>	021508	020408
Don Badley	Inadvertent Interchange Application Revision	<p>102307, Don Badley will contact Brian Nolan to determine what needs to be done to secure and commit funds for the 8 enhancements on the Inadvertent Interchange application enhancement list.</p> <p>013108, In progress, to be closed when Don acknowledges his commitment from Brian.</p>	022808	
Don Badley and Inadvertent WG	AIE Field Test and initial AIE Survey	013108, In progress - evaluate the AIE Field Test and the automated electronic initial AIE Survey (May 12, 2007, HE 0200 CDT; May 12, 2007, HE 0600 CDT; and June 17, 2007, HE 0600 CDT).	030108	

Action Figure	Subject	Action Item/Assignment	Due Date	Completion Date
Tom Vandervort	NERC – Compliance-RS Confidentiality Agreement	013108, Tom V to follow up with NERC Compliance and legal counsel to <b>develop a NERC RS NDA to review and analyze control performance data</b> and to include the ability to convey the RS analysis with affected BAs in their respective footprint.	030108	
	<b>NERC-CERTS Project Review</b>			
Terry Bilke	Resources Adequacy Application Review Team	021007, Resources Adequacy Application (NERC Project 2000-03) – A small Resources Subcommittee team will review the issues and address the project parameters. The goal is to recommend expectations, priorities, uses, methodologies, specifications, timelines, and results. Collaboration with ORS, RCWG, NERC Projects, NERC Training Dept, NERC IT, etc. to be initiated as necessary.  Project Review Team: Leader-Terry Bilke, Raymond Vice, Sydney Niemeyer, Robert Rhodes, Bill Herbsleb, John Tolo, Bart McManus, Tom Vandervort  Group recommendations are to be shared with RS, CERTS and NERC Projects.  RS to review the data quality reports – are they appropriate or do they need to be modified.  RS recommends setting the frequency response at 3,000 MW/0.1 Hz  013007, Team available for consultation or action	043008	
Terry Bilke	Develop Resources Adequacy Application Training Documents	021007, Resources Adequacy Application (NERC Project 2000-03) – A small Resources Subcommittee team will review the issues and address the project parameters. The goal is to recommend training lessons content, on-line help application, user friendly training tools. Collaboration with ORS, RCWG, NERC Projects, NERC Training Dept, etc. to be initiated as necessary.  Project Review Team: Leader-Terry Bilke, Robert Rhodes, Tom Vandervort  Group recommendations are to be shared with RS, CERTS, and NERC Projects.  Training – there are a lot of functions that are not easy to know what to do. RCs want additional training. <ul style="list-style-type: none"> <li>• Training sites include NE, SE, and one in the west;</li> <li>• another option is to “train the trainer;”</li> <li>• another option is to have a WebEx session.</li> </ul> 013007, Team available for consultation or action	043008	
Don Badley	AIE Monitoring	021007, AIE Monitoring Application (NERC Project 2000-04) – A small Resources	043008	

Action Figure	Subject	Action Item/Assignment	Due Date	Completion Date
	Application Review	<p>Subcommittee team will review the issues and address the project parameters. The goal is to recommend expectations, priorities, uses, methodologies, specifications, timelines, and results. Collaboration with ORS, RCWG, NERC Projects, NERC Training Dept, NERC IT, etc. to be initiated as necessary.</p> <p>Project Review Team: Leader-Don Badley, Raymond Vice, Bart McManus, John Tolo, Terry Bilke, Don McInnis, Mike Potishnak, Tom Vandervort, Brian Nolan</p> <p>Group recommendations are to be shared with RS, CERTS, and NERC Projects.</p> <p>The following individuals signed the WECC confidentiality agreement and were approved to receive WECC data to support the AIE Monitoring Application development:</p> <ul style="list-style-type: none"> <li>Don Badley, Team Leader</li> <li>Raymond Vice</li> <li>Bart McManus</li> <li>John Tolo</li> <li>Terry Bilke</li> <li>Don McInnis</li> <li>Mike Potishnak</li> <li>Tom Vandervort</li> <li>Brian Nolan</li> </ul> <p>013007, Team available for consultation or action</p>		
Don Badley	Inadvertent Interchange Application Review	<p>021007, Inadvertent Interchange Application (NERC Project 2001-37) – A small Resources Subcommittee team will review the issues and address the project parameters. The goal is to recommend expectations, priorities, uses, methodologies, specifications, timelines, and results. Collaboration with ORS, RCWG, NERC Projects, NERC Training Dept, NERC IT, etc. to be initiated as necessary.</p> <p>Project Review Team: Leader-Don Badley, Inadvertent Task Force, someone from Southwest Power Pool (Robert Rhodes will be the point of contact to identify who this person will be), Tom Vandervort</p> <p>Group recommendations are to be shared with RS, CERTS, and NERC Projects.</p> <p>In progress. Don will recommend additional monthly interconnection inadvertent interchange reporting to Carlos</p> <p>TV to work with Joe Emde to generate monthly inadvertent interchange accounting reports.</p> <p>013007, Team available for consultation or action</p>	043008	

Action Figure	Subject	Action Item/Assignment	Due Date	Completion Date
Raymond Vice	CPS1 & BAAL Monitoring Application Review	<p>021007, CPS1 &amp; BAAL Monitoring Application (NERC Project 2001-38) – A small Resources Subcommittee team will review the issues and address the project parameters. The goal is to recommend expectations, priorities, uses, methodologies, specifications, timelines, and results. Collaboration with ORS, RCWG, NERC Projects, NERC Training Dept, NERC IT, etc. to be initiated as necessary.</p> <p>Project Review Team: Leader-Raymond Vice, Doug Hils, Mark Henry, Sydney Niemeyer, Don Badley, John Tolo, Bart McManus, Tom Vandervort</p> <p>Group recommendations are to be shared with RS, CERTS, and NERC Projects.</p> <p>013007, Team available for consultation or action</p>	043008	
Raymond Vice	Frequency Monitoring and Analysis (FMA) System Project Review	<p>021007, Frequency Monitoring and Analysis (FMA) System Project (NERC Project 2005-06) – A small Resources Subcommittee team will review the issues and address the project parameters. The goal is to recommend expectations, priorities, uses, methodologies, specifications, timelines, and results. Collaboration with ORS, RCWG, NERC Projects, NERC Training Dept, NERC IT, etc. to be initiated as necessary.</p> <p>Project Review Team: Leader-Raymond Vice, Frequency Task Force, Tom Vandervort</p> <p>Group recommendations are to be shared with RS, CERTS, and NERC Projects.</p> <p>013007, Team available for consultation or action</p>	043008	
Brian Nolan	Incorporate ERCOT into ACE-Freq App	<p>092106, Brian Nolan to incorporate the necessary technology to allow ERCOT to send data to the ACE-Frequency monitoring application. Brian will report the progress of this activity to the RS at the January, 2007 meeting.</p> <p>013007, Brian Nolan – In progress.</p>	043008	
Carlos Martinez	CERTS-NERC Contact Person	<p>102307, Carlos needs an individual within NERC that is designated to interface and be the point of contact for each application to support the product and promote its reliability and availability.</p>	043108	