



NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL

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

Resources Subcommittee Meeting

September 20–22, 2006
Quebec City, Quebec, Canada

Minutes

A regular meeting of the North American Electric Reliability Council (NERC) Resources Subcommittee (RS) was held on September 20–22, 2006 in Quebec City, Quebec. 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 was one individual statement.

Resources Subcommittee Chairman Terry Bilke presided. The secretary announced that a quorum was present.

Antitrust Compliance Guidelines

Secretary Vandervort acknowledged the NERC Antitrust Compliance Guidelines.

Minutes of the Previous Meeting

The subcommittee approved the May 3–5, 2006 meeting minutes.

Task Force Reports

Control Criteria Task Force — Chairman Alan Oneal

Performance Standard Reference Document

The Control Criteria Task Force reviewed and incorporated changes to the Performance Standards Reference document. Mr. Oneal will edit the changes and distribute the reference document to the subcommittee for additional review.

Frequency Task Force — Chairman Raymond Vice

BAL-005-1, Automatic Generation Control SAR

The Frequency Task Force reviewed the SAR industry comments. Chairman Vice will generate and distribute initial responses to the subcommittee for review. Mr. Vice's preliminary review of the comments suggests that the SAR will be presented to the NERC Standards Authorization Committee with a recommendation to forward the SAR to the standard drafting phase of the process.

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Inadvertent Interchange Task Force — Chairman Don Badley

BAL-004-1, Time Error Correction SAR

The Inadvertent Interchange Task Force reviewed the SAR industry comments. SAR sponsor Bart McManus will generate and distribute initial responses to the subcommittee for review. Mr. McManus believes that from his review of the initial comments, the SAR will need to be enhanced and posted again for industry comments.

BAL-006-1, Inadvertent Interchange SAR

SAR initiator Don Badley generated initial responses to the SAR industry comments. The task force reviewed and enhanced the responses. Mr. Badley will edit the changes and distribute the enhanced SAR, comments and responses to the subcommittee for additional review. Mr. Badley believes that comments will generate significant changes to the SAR and will require another industry posting.

Operating Reserves Task Force — Chairman Larry Akens

Operating Reserves Requirements

The Operating Reserves Task Force (ORTF) recommended that the investigation and development of an Operating Reserve SAR be postponed until after the Frequency Response Standard and Balance Resources and Demand Standard are implemented and evaluated to determine if an Operating Reserve Standard with requirements and measures are necessary for reliability. The RS concurred.

The ORTF will develop a technical paper that will review the *operating reserves* technical definitions and terms that are in the NERC Glossary of Terms. The intent is to review the terms and definitions for accuracy, redundancy, and to ensure the definitions are crisp and clear.

Resources Subcommittee/Operating Reliability Subcommittee Joint Meeting

Frequency Issues

Frank Koza from the ORS, and Bill Herbsleb from the RS combined to make a presentation on the frequency excursions in the Eastern Interconnection. Both subcommittees will continue to monitor, trend, and look for methods to significantly reduce frequency excursions and to smooth the frequency trends throughout each day.

Balance Resources and Demand Field Trial Frequency Analysis

The RS Frequency Task Force hosted the September monthly Balance Resources and Demand Standard Field Test conference call during the joint meeting since the majority of the monthly participants are from the Reliability Coordinator Working Group (RCWG), RS, and Balance Resources and Demand Standard Drafting Team members. Doug Hils presented data for the entire field test that started on July 6, 2005, with specific data from August 2005. As in the past, there were no field test reliability coordinators that had negative comments or that could identify any significant negative behavior during any frequency event that occurred during the field test.

MISO to Become a Balancing Authority

Dave Zwergel and Tony Jankowski made a presentation to the joint meeting explaining the proposed functional assignments and how the proposed MISO balancing authority will align with the NERC and regional reliability organizations. The creation of local balancing areas (LBA) is

a significant component to the MISO-to-balancing authority transition. The proposed LBA is defined as an operational entity responsible for compliance to a defined subset of NERC balancing authority reliability standards for their local area within the MISO balancing authority area.

Resources Subcommittee Interface with the NERC Reliability Assessment and Performance Analysis Program

Reliability Assessment and Performance Analysis

Bob Cummings, NERC director of reliability assessment and performance analysis, informed the subcommittee that NERC will reformulate the Disturbance Analysis Working Group (DAWG) which will use some of the phasor analysis products to identify and analyze the disturbances. The Reliability Assessment and Performance Analysis group will investigate any outage over 1,000 MW, unless there is an obvious reason for the outage such as weather (e.g., hurricane). The investigation teams will consist of NERC staff member(s), a regional representative(s), nonregional representative(s), and optional outside technical experts. The RS needs to be prepared to assist the group as requested.

Phasor Project

Mr. Cummings gave an update on the phasor projects sponsored by the Department of Energy and initiated by commercial power industry utilities. Applications for the phasor network analysis and diagnostic capabilities can address the following:

- Placing phasors on both ends of a long path to monitor operations
- Large or repeating frequency excursions
- Loss of generation or load greater than 1,000 MW
- System separation
- Protection system misoperations
- Inter-area oscillations
- Cascading outages
- Catastrophic nonweather related outages

The NERC Reliability Assessment and Performance Analysis program will work with the RS to analyze and model the events using phasor data and products. As the program progresses, the RS will be appraised of the developments and will either request RS assistance or will feed information or data to the RS for its analysis purposes.

NERC Standards Review

Frequency Response SAR

The RS addressed and responded to the SAR industry comments. RS Chairman Bilke is the sponsor of the Frequency Response SAR and will discuss the proposed SAR with the Standards Committee on September 28, 2006. Mr. Bilke will recommend to the committee that the SAR be moved to the standard drafting team phase.

BAL-001-0 through BAL-006-0 Reference Documents

The subcommittee reviewed the BAL reference documents. These include the Performance Standards Reference document, Area Interchange Error Survey Training document, the Frequency Response Characteristics Survey, and Inadvertent Interchange Accounting Training document. When the Balance Resources and Demand standards are approved, these reference

documents will be revised again. Rather than create unnecessary work, the subcommittee will delay revisions to any of these reference documents until the Balance Resources and Demand standards are balloted and approved.

Projects

ACE-Frequency Application, Project 2000-03

Version 4.0 is anticipated to be released in the fourth quarter of 2006.

ERCOT has agreed to submit data to be included in the ACE-Frequency application. Brian Nolan, NERC projects manager, will report on the progress to include ERCOT into the ACE-Frequency Monitoring program at the November, 2006 RS meeting.

CPS1 & BAAL Monitoring Application, Project 2001-38

During the development phase of the CPS1 & BAAL Monitoring application, Consortium for Electricity Reliability Technology Solutions (CERTS) identified negative frequency trends but could not identify if the trends are a problem. CERTS proposed independent research be performed to determine if a problem exists. By general consensus, the RS gave CERTS approval to move forward with its intent to determine the criticality of the frequency trends, to validate the application calculations, and to determine the periodicity of the frequency collection.

Inadvertent Interchange Application (SPP Inadvertent Tool Migration), Project 2001-37

AIE Monitoring Application, Project 2000-04

The subcommittee is sponsoring a field test of both the Inadvertent Interchange application and the AIE Monitoring application. The Inadvertent Interchange application field test will begin immediately.

John Tolo motioned that the RS not require a NERC Data Confidentiality Agreement (DCA) from either the Inadvertent Interchange project field test participants or the AIE project field test participants. The motion was passed.

The RS determined that when the Inadvertent Interchange application goes into the production phase a DCA will not be required. However, before the AIE application goes into the production phase, the RS will determine if a DCA is required based on the confidentiality of the data.

Performance Monitoring

CPS1 Review

The subcommittee reviewed and discussed 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 reviewed and discussed the monthly 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.

Time Error Corrections

The following interconnection time error corrections from January 1 through December 31, 2005 and the first quarter of 2006 were reported:

2006	Fast TEC	Slow TEC	Total TEC
Eastern Interconnection, January–August	74	6	80
Western Interconnection, January–August	56	17	73
ERCOT, January–June	17	5	22

Resources Subcommittee Action Item List

The subcommittee reviewed and updated the action item list, which is affixed as **Exhibit F**.

Dates and Locations of Future Meetings

- | | |
|--------------------------------|---------------------|
| 1. November 15–17, 2006 | Fort Lauderdale, FL |
| 2. January 31–February 1, 2007 | San Diego, CA |
| 3. April 25–26, 2007 | Denver, CO |
| 4. July 18–19, 2007 | Calgary, Canada |
| 5. October 24–25, 2007 | Portland, OR |

Respectfully submitted,

Tom Vandervort

Thomas J. Vandervort
Resources Subcommittee Secretary

Karol Lane

From: Rocio Wong
Sent: Thursday, August 17, 2006 10:54 AM
To: 'rcwg_plus@nerc.com'; 'ors_plus@nerc.com'; is_plus@nerc.com; 'rs_plus@nerc.com'
Cc: Nan Whiting; Lori Chances; Karol Lane
Subject: ANNOUNCEMENT: Reliability Coordinator Working Group, Operating Reliability Subcommittee, Interchange Subcommittee, and Resources Subcommittee September 19-22, 2006 meetings
Importance: High

**TO: RELIABILITY COORDINATOR WORKING GROUP
 OPERATING RELIABILITY SUBCOMMITTEE
 INTERCHANGE SUBCOMMITTEE
 RESOURCES SUBCOMMITTEE**

Ladies and Gentlemen:

I have listed the RCWG/ORS, IS and TS September 19–22, 2006 meetings logistics and registration link in the table below. The meeting will be held at the Delta Quebec, 690 Boulevard Rene Levesque East, Quebec City, Quebec G1R 5A5, Canada (Phone: 418-647-1717).

EVERYONE must register online by clicking below or at the following Web site: <http://www.nerc.net/meetings/>

<i>Date & Time</i>	<i>Group</i>	<i>Staff</i>	<i>City</i>	<i>Registration Link</i>
<i>9/19/2006: 8:00 AM - 5:00 PM 9/20/2006: 8:00 AM - 5:00 PM</i>	<i>RCWG/ORS</i>	<i>Larry Kezele</i>	<i>Quebec City</i>	<i>Register</i>
<i>9/20/2006: 8:00 AM - 5:00 PM 9/21/2006: 8:00 AM - 5:00 PM 9/22/2006: 8:00 AM - 5:00 PM</i>	<i>IS</i>	<i>Bill Blevins</i>	<i>Quebec City</i>	<i>Register</i>
<i>9/20/2006: 8:00 AM - 5:00 PM 9/21/2006: 8:00 AM - 5:00 PM 9/22/2006: 8:00 AM - 12:00 PM</i>	<i>RS</i>	<i>Tom Vandervort</i>	<i>Quebec City</i>	<i>Register</i>

Meeting logistics:

- Room rate: C\$149 single/double occupancy
- Room block: Nights of September 18-21, 2006
- Check-in: 3 p.m., Check-out: noon
- Hotel cut off date: **August 28, 2006**
- 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.
- Jean Lesage International Airport (YQB): Approximate driving time to Delta Quebec is 15 minutes and distance is 16 km (10 miles).
- There is no airport shuttle so the best way is by car. Taxi fare is C\$26–\$35. Rental cars, luxury sedans, and limousines are more than C\$36.
- Dress code: Business casual


When making your hotel reservation, please be sure to mention the "NERC/North American Electric Reliability Council" meeting to get the preferred rate and to ensure your reservation is credited to the NERC room block. The hotel may 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.

Please let me know if you have any questions regarding the registration process.

Sincerely,

9/25/2006

Rocio Wong
Meeting Planner
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Resources Subcommittee Meeting

Resources Subcommittee Task Force Meetings
Wednesday, September 20, 2006 — 8 a.m.–5 p.m.

Resources Subcommittee Meeting
Thursday, September 21, 2006 — 8 a.m.–5 p.m.
Friday, September 22, 2006 — 8 a.m.–noon

Delta Quebec
690 Boulevard Rene Levesque East
Quebec City, Quebec G1R 5A5, Canada
Phone: 418-647-1717

Agenda

1. Administrative

- a. Membership and Guests — Chair
- b. Arrangements — Secretary
- c. Approval of May 3-5, 2006 Meeting Minutes — Chair
- d. Procedures
 - i) Parliamentary Procedures — Chair
 - ii) Antitrust Compliance Guidelines — Chair
- e. Resources Subcommittee Action Items List — Chair

2. Task Force Reports

Task Force Meetings to be Held on Wednesday, September 20, 2006

- a. Control Criteria Task Force — Alan O Neal
- b. Frequency Task Force — Raymond Vice
- c. Inadvertent Interchange Task Force — Don Badley
- d. Operating Reserves Task Force — Larry Akens

3. NERC Reliability Standards

- a. Standard BAL-004-1 SAR, Time Error Correction — Bart McManus
- b. Standard BAL-005-1 SAR, Automatic Generation Control — Raymond Vice
- c. Standard BAL-006-1 SAR, Inadvertent Interchange – Don Badley
- d. Reference Document –
 - i) Performance Standards Reference Document — Alan O Neal
 - ii) Training Document – Area Interchange Error Survey Training Document — Don Badley
 - iii) Training Document – Frequency Response Characteristic Survey — Raymond Vice
 - iv) Training Document – Inadvertent Interchange Accounting Training Document — Don Badley
- e. Balance Resources and Demand Draft Standard Update — Raymond Vice

- i) Pre-ballot Posting
- ii) Implementation Plan
- iii) September Monthly Field Test Conference Call
- f. Frequency Response SAR – Terry Bilke

4. NERC Active Resources Subcommittee Projects

- a. ACE-Frequency Application System — Carlos Martinez
- b. AIE Monitoring Application Project (Project 2000-4) — Carlos Martinez
- c. CPS1 & BAAL Monitoring Application Project (Project 2001-38) — Carlos Martinez
- d. Frequency-Phasor Monitoring Application Project (Project 2005-6) — Terry Bilke, Carlos Martinez
- e. Inadvertent Interchange Application Project (SPP inadvertent interchange tool migration) (Project 2001-37) — Carlos Martinez
- f. DOE Eastern Interconnection Phasor Project (EIPP) — Terry Bilke, Carlos Martinez, Bob Cummings

5. Frequency Performance

- a. Western Interconnection Frequency Trends and Events
- b. Eastern Interconnection Frequency Trends and Events
- c. ERCOT Frequency Trends and Events
- d. CPS1, CPS2, BAAL Data Trends
- e. DCS Data Trends
- f. Inadvertent Interchange Balances — Joe Emde, Don Badley, Terry Bilke
- g. Resources Subcommittee Proposed Frequency Monitoring and Response Process — Terry Bilke

6. Time Error

- a. Eastern Interconnection — Bill Herbsleb
- b. Western Interconnection — John Tolo
- c. ERCOT Interconnection — Sydney Niemeyer

7. Future Meetings

- a. November 15–17, 2006 — Ft. Lauderdale, FL

**Resources Subcommittee
Meeting Attendance
September 20-22, 2006
Quebec City, Canada**

Resources Subcommittee Member/Guest	Organization
Terry Bilke (Chairman)	MISO
Don Badley (Vice Chairman)	NWPP
Larry Akens	TVA/SERC
Gerry Beckerle	Ameren
Bill Herbsleb	PJM
Bart McManus	BPA (via phone)
Sydney Niemeyer	NRG Texas, LP
Mike Potishnak	ISO-NE
Robert Rhodes	SPP
John Tolo	Tucson Electric Power
Raymond Vice	Southern Company
Tom Vandervort	NERC
GUESTS	
Howard Illian	Energy Mark (via phone)
John Simonelli	ISO-NE
Larry Goins	TVA
Jim Hartwell	NPCC
Carlos Martinez	Electric Power Group
Brian Nolan	NERC
Bob Cummings	NERC

Individual Statements
Resources Subcommittee Meeting
September 20–22, 2006

Mike Potishnak on behalf of ISO-NE and NPCC

Mike Potishnak, on behalf of ISO-NE and NPCC voices objection to the Balance Resources and Demand standards implementation plan's statement that there is no technical rationale for retention of the Disturbance Control Standard (DCS).

The NPCC has seen the feedback that BAAL limits provide during DCS events and are concerned about the impact on unscheduled flows.

**Minority Opinions
Resources Subcommittee Meeting
September 20–22, 2006**

There were none.

**Resources Subcommittee
September 22, 2006 Meeting
Open Action Item List**

Action Figure	Subject	Action Item/Assignment	Due Date	Completion Date
Terry Bilke and Resources Subcommittee	Frequency Profile Technical Paper	<p>021006, The Resources Subcommittee will document in a technical paper:</p> <ul style="list-style-type: none"> • The recent and historical frequency trends • The root causes behind significant frequency excursions and identifiable frequency fluctuations • The reliability implications behind the frequency events • The state of the interconnection's frequency profiles • Make recommendations to capture, identify, and record the magnitude of frequency excursions for each frequency event <p>050406, RS will break up the technical paper into different components.</p> <ul style="list-style-type: none"> • Terry will work on the frequency component of the paper. • Raymond to look at Combustion Turbines and Governor Response • Larry to generate an "Operating Reserves" white paper including definitions <p>092106, In progress</p>	092106	
Raymond Vice and FTF	Analysis of how Balance Resources and Demand Field Test has impacted the Eastern Interconnection Frequency Profile	<p>021006, The Balance Resources and Demand standard drafting team recommends the Resources Subcommittee determine how the Balance Resources and Demand field test has impacted the frequency performance of the Eastern Interconnection. Average frequency, standard deviation and number of significant outliers needs to be evaluated. The BRD SDT expectation was that small, short frequency excursions (around the frequency trigger limits but for less than T_v) would increase but that the duration of large, long frequency excursions would decrease.</p> <p>The Frequency Task Force will determine how the BRD field test has impacted the frequency performance of the Eastern Interconnection.</p> <p>050406, Bill Herbsleb is working on a frequency profile summary of the BRD field test. time period. The summary should use Bill's data and the CERTS data. Shoot for posting this summary on May 15 with the BRD posting – or – point the visitors to a URL site that contains the summary data.</p> <p>092106, Carlos' main observation is that the reports are presented on a monthly or</p>	092106	092106

Action Figure	Subject	Action Item/Assignment	Due Date	Completion Date
		weekly basis, but should be presented on an hourly basis. This item is closed.		
Don Badley and Review Team	AIE Project	<p>021006, Don Badley and AIE Project review team are to review the AIE project application and then forward comments and recommendations to Carlos Martinez. AIE Project review team members are:</p> <p>Don Badley, Team Leader Raymond Vice Bart McManus John Tolo Terry Bilke Don McInnis Mike Potishnak Tom Vandervort Brian Nolan</p> <p>The review is to be completed by April 1, 2006.</p> <p>050406, Don Badley will compare WECC actual data to the CERTS data for accuracy. In approximately 2-3 weeks, Carlos will provide to the RS a prototype of the AIE project. The RS will evaluate it and then it will be released to the BAs and RCs.</p> <p>092106, CERTS focused its efforts on the web-based application. The current application is ready for volunteer data to populate the application. Carlos will populate the AIE application with historical data to compare the results with the test application results. Carlos will supply the January 2003 data to Don Badley.</p>	092106	
Don Badley and IITF	Review BAL-004, BAL-006, Ref Docs, Training Docs, Operations Guidelines, NERC Glossary of Terms, etc.	<p>120805, 1) The Operating Committee (OC) asked the subcommittees to review the use of words such as "shall" in reference documents that implies a requirement. 2) The OC asked the subcommittee to develop operating guidelines that complement the reliability standards for which they are custodians.</p> <p>021006, Don Badley and Inadvertent Interchange Task Force are to review BAL-004 and BAL-006 reference documents (i.e. training documents, all reference documents, operational guidelines, NERC Glossary of Terms, etc.). Goals are:</p> <ul style="list-style-type: none"> • Revise reference documents for accuracy, applicability, etc. • Evaluate all "shall" statements. Requirements need to be incorporated into the appropriate standard(s); change non-requirements statements to "should" or "may" language. • Identify and summarize all operational guidelines (including "should" statements in reference documents). Operational guidelines will be brought to the RS and then to the OC. • Review NERC Glossary of Terms definitions of "BAL" terms for 	092106	

Action Figure	Subject	Action Item/Assignment	Due Date	Completion Date
		<p>accuracy.</p> <p>Reference Documents:</p> <p>Training Document – Area Interchange Error Survey Training Document</p> <p>Don – In the AIE Training Document, RS recommends separating the manual AIE survey in one section and then incorporate the automatic AIE survey in another section.</p> <p>Training Document – Inadvertent Interchange Accounting Training Document</p> <p>Others: ?</p> <p>092106, Don Badley, In progress (look at March 16 e-mail from Terry on “Glossary of Terms”)</p>		
Don Badley	Review Freq Monitoring Guide (Triggers and Actions Guide)	<p>072905, RS reviewed and revised the RS Frequency Monitoring and Response Process (Triggers and Action Guide) for the Western Interconnection.</p> <p>102705, Don presented it to WECC and it will be addressed by the WECC Performance Criteria WG.</p> <p>092106, In progress. – Don Badley, WECC subcommittees are working on implementing this or something like this guide in the west. The WECC draft is with the performance work group.</p>	092106	
Mike Potishnak	Review Freq Monitoring Guide (Triggers and Actions Guide)	<p>072905, RS reviewed and revised the RS Frequency Monitoring and Response Process (Triggers and Action Guide) for the Quebec Interconnection.</p> <p>050306, TV sent the triggers and actions guide to Mike</p> <p>092106, Mike Potishnak, presented the Frequency Monitoring Guide to Hydro Quebec for their consideration and action. HQ has told Mike how they will address events when the frequency reaches FTL. Does the RS want ERCOT’s guide to match the East and West Interconnections’ guides?</p>	092106	
Larry Akens and ORTF	Review Glossary of Terms	<p>120805, 1) The Operating Committee (OC) asked the subcommittees to review the use of words such as “shall” in reference documents that implies a requirement. 2) The OC asked the subcommittee to develop operating guidelines that complement the reliability standards for which they are custodians.</p> <p>021006, Larry Akens and Operating Reserves Task Force are to review BAL-002 reference documents (i.e. training documents, all reference documents, operational guidelines, NERC Glossary of Terms, etc.). Goals are:</p> <ul style="list-style-type: none"> • Revise reference documents for accuracy, applicability, etc. • Evaluate all “shall” statements. Requirements need to be incorporated into the appropriate standard(s); change non-requirements statements to “should” or “may” language. 	092106	092106

Action Figure	Subject	Action Item/Assignment	Due Date	Completion Date
		<ul style="list-style-type: none"> Identify and summarize all operational guidelines (including “should” statements in reference documents). Operational guidelines will be brought to the RS and then to the OC. Review NERC Glossary of Terms definitions of “BAL” terms for accuracy. <p>Reference Documents: Performance Standard Reference Document (applicable sections) Others: ?</p> <p>092106, Larry Akens and ORTF will address the “Reserves” terms in the NERC Glossary of Terms and evaluate them to determine if they are adequate, redundant, and to ensure the definitions are crisp and clear. Are there any terms missing?</p>		
Larry Akens and ORTF	Operating Reserves White Paper	092106, Larry and ORTF to review the “reserves” terms in the NERC Glossary of Terms and create a “reserves” white paper. Larry Akens and ORTF will address the “Reserves” terms in the NERC Glossary of Terms and evaluate them to determine if they are adequate, redundant, and to ensure the definitions are crisp and clear. Are there any terms missing?	092106	
Alan Oneal and CCTF	Review BAL-001, Ref Docs, Training Docs, Operations Guidelines, NERC Glossary of Terms, etc.	<p>120805, 1) The Operating Committee (OC) asked the subcommittees to review the use of words such as “shall” in reference documents that implies a requirement. 2) The OC asked the subcommittee to develop operating guidelines that complement the reliability standards for which they are custodians.</p> <p>021006, Alan Oneal and the Control Criteria Task Force are to review BAL-001 reference documents (i.e. training documents, all reference documents, operational guidelines, NERC Glossary of Terms, etc.). Goals are:</p> <ul style="list-style-type: none"> Revise reference documents for accuracy, applicability, etc. Evaluate all “shall” statements. Requirements need to be incorporated into the appropriate standard(s); change non-requirements statements to “should” or “may” language. Identify and summarize all operational guidelines (including “should” statements in reference documents). Operational guidelines will be brought to the RS and then to the OC. Review NERC Glossary of Terms definitions of “BAL” terms for accuracy. <p>Reference Documents: Performance Standard Reference Document Others: ?</p>	092106	

Action Figure	Subject	Action Item/Assignment	Due Date	Completion Date
		092106, Alan Oneal , in Progress		
Raymond Vice and Frequency TF	Review BAL-003, BAL-005, Ref Docs, Training Docs, Operations Guidelines, NERC Glossary of Terms, etc.	<p>120805, 1) The Operating Committee (OC) asked the subcommittees to review the use of words such as “shall” in reference documents that implies a requirement. 2) The OC asked the subcommittee to develop operating guidelines that complement the reliability standards for which they are custodians.</p> <p>021006, Raymond Vice and Frequency Task Force are to review BAL-003 and BAL-005 reference documents (i.e. training documents, all reference documents, operational guidelines, NERC Glossary of Terms, etc.). Goals are:</p> <ul style="list-style-type: none"> • Revise reference documents for accuracy, applicability, etc. • Evaluate all “shall” statements. Requirements need to be incorporated into the appropriate standard(s); change non-requirements statements to “should” or “may” language. • Identify and summarize all operational guidelines (including “should” statements in reference documents). Operational guidelines will be brought to the RS and then to the OC. • Review NERC Glossary of Terms definitions of “BAL” terms for accuracy. <p>Reference Documents: Performance Standard Reference Document (applicable sections) Frequency Response Characteristics Survey Reference Document Others: ?</p> <p>092106, Raymond Vice, in progress</p>	092106	
Raymond Vice and Freq TF	Combustion Turbine Governor Response	<p>050505, The Combustion Turbine Governor Response issue only occurs when gas turbines are operating at maximum output limited by blade temperature as indicated by exhaust gas temperature and only limits response to low frequency deviations. It is not clear what percentage of gas turbines operate in this mode at any given time. In addition, the mass flow of air through the compressor of a gas turbine varies geometrically with frequency (speed of the compressor). This may reduce the ability of the turbine to respond to frequency deviation. The Frequency Task Force will continue to investigate these issues and determine if a NERC Reliability Standard requirement(s) is necessary.</p> <p>102705, TF proposes changes to the “BAL” standards for RS concurrence and then submittal of a SAR(s) to the NERC standards process manager. See meeting agenda. The problem is that most BA combustion turbine generators operate such that there are no reserves to allow for governor response. There simply is no room for a higher response.</p> <p>Raymond to resurrect his white paper and create combustion turbine bullet points in</p>	092106	

Action Figure	Subject	Action Item/Assignment	Due Date	Completion Date
		<p>order to allow John Undrill to address the RS issues.</p> <p>020806, Raymond may contact Mr. Undrill to address the RS at the May, 2006 Baltimore RS meeting on combustion turbine governor response.</p> <p>092106, Raymond sent out a technical paper for RS comments. Possibly add this paper to the RS library (with IEEE permission) for additional comments and insight.</p>		
Raymond Vice and Freq TF	Balance Resources and Demand Implementation Plan	<p>021006, The Frequency Task Force needs to interface with the Balance Resources and Demand standard drafting team to ensure the RS assists the drafting team in implementing the standards' requirements and measures. Actions may include:</p> <ul style="list-style-type: none"> • Training recommendations for the reliability coordinators and balancing authorities. • Assistance with installation of and testing of the Balance Resources and Demand required EMS algorithms. • General assistance to the reliability coordinators and balancing authorities regarding all aspects of the Balance Resources and Demand standards. • Support and Assist the Balance Resources and Demand standards drafting team's implementation plan and timeline. <p>Note: BRD Proposed Implementation plan is included in the May, 2006 agenda.</p> <p>050406, Raymond Vice, in Progress – the BRD Implementation Plan will be posted on May 15 along with the other BRD documents.</p> <p>090505, BRD Implementation plan, standards, and supporting documentation are posted for pre-ballot for 30 days and will be followed by a ballot posting.</p>	090506	090505
Sydney Niemeyer	Review Freq Monitoring Guide (Triggers and Actions Guide)	<p>072905, RS reviewed and revised the RS Frequency Monitoring and Response Process (Triggers and Action Guide) for the Eastern Interconnection.</p> <p>102705, Sydney is working with ERCOT staff to address this item.</p> <p>092106, Sydney, in progress - Sydney received a letter from ERCOT this week. Sydney to share a revised document with the RS. ERCOT has told Sydney how they will address events when the frequency reaches FTL. Does the RS want ERCOT's guide to match the East and West Interconnections' guides?</p>	092106	
Bill Blevins	Coordinate NERC – NAESB Collaboration on TEC, II, ACE standards	<p>050406, Bill Blevins will coordinate the RS's collaborative interaction with NAESB to process the Bal-004, 005, and 006, standard revisions as well as the revisions to the respective NAESB time error correction, ACE special cases, and inadvertent interchange payback, business practices. The subcommittee will make itself available for conference calls or meetings with NAESB at Mr. Blevins request.</p> <p>070106, Close this item and track it by the item below</p>	070106	070106
Resources	Coordinate NERC – NAESB Collaboration	<p>050406, RS to compile ideas and subjects to discuss with NAESB on the three reliability standards revisions and the three respective business practices standards</p>	092106	

Action Figure	Subject	Action Item/Assignment	Due Date	Completion Date
Subcommittee	on TEC, II, ACE standards	that Bill Blevins, above action item, is addressing. Example: Is there a reliability reason to continue maintaining "on-peak" and "off-peak" scheduling periods? 082506, BAL-004, 005, and 006 SAR comments were compiled and sent to Bart, Raymond and Don for their initial responses. This is the first step in addressing NAESB – NERC requirements.		
Joe Emde	CPS2 Report Accuracy	050406, Joe Emde , to check the math on the CPS2 Report. The RS identified math errors in the report. Joe contact Terry or Don Badley for more details. 051806, Joe Emde, this was a onetime error on the CPS data report not the official CPS Report. Joe fixed the existing report and will make sure no to repeat the error.	070106	051806
Joe Emde	Missing DCS Data	050406, Joe Emde , When it is apparent that RSG or BA DCS data is not submitted, contact either the RSG/BA that is not submitting the data or contact the respective RS regional representative. 051806, Complete	070106	051806
Joe Emde	Missing DCS BAs	050406, Joe Emde , somehow ensure all BAs are shown on the DCS report (either by the BA itself or by the RSG that the BA belongs to). (e.g. Sacramento and MAIN RSG are missing from the DCS report.) Show BA or RSG even if they have not reported their quarterly data. 051806, Complete	070106	051806
Joe Emde	Inadvertent Interchange Report Accuracy	050406, Joe Emde , Verify if the Inadvertent Interchange Report is accurate? Check on inadvertent interchange report to determine why it is not up-to-date. Don Badley says the WECC is balanced through Feb, 2006. The report shows it is balanced through Nov, 2005. 051806, In Progress. Joe Emde, Inadvertent Interchange accuracy has been a struggle since the inception of RFC. The data dump from SPP has not been accurate since January , 2006. Joe will continue to acquire the correct data and will sort it all out once the CERTS tool is activated.	092106	
	NERC-CERTS Project Review			
Terry Bilke	ACE-Frequency Application Review Team	021006, ACE-Frequency 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	092106	

Action Figure	Subject	Action Item/Assignment	Due Date	Completion Date
		<p>Rhodes, Bill Herbsleb, John Tolo, Bart McManus, Tom Vandervort</p> <p>Group recommendations are to be shared with RS, CERTS and NERC Projects.</p> <p>050406, RS to review the data quality reports – are they appropriate or do they need to be modified.</p> <p>RS recommends setting the frequency response at 3,000 MW/0.1 Hz</p> <p>092106, Team available for consultation or action</p>		
Terry Bilke	Develop ACE-Frequency Application Training Documents	<p>021006, ACE-Frequency 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.</p> <p>Project Review Team: Leader-Terry Bilke, Robert Rhodes, Tom Vandervort</p> <p>Group recommendations are to be shared with RS, CERTS, and NERC Projects.</p> <p>050406, Training – 3.5 there are a lot of functions that are not easily to know what to do. RCs want additional face-to-face (on-site) training.</p> <ul style="list-style-type: none"> • Training sites include NE, SE, and one in the west; • another option is to “train the trainer;” • another option is to have a WebEx session. <p>092106, Team available for consultation or action</p>	092106	
Don Badley	AIE Monitoring Application Review	<p>021006, AIE Monitoring Application (NERC Project 2000-04) – 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, 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>050406, In progress</p> <p>092106, Team available for consultation or action</p>	092106	
Don Badley	Inadvertent Interchange Application Review	<p>021006, 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>	092106	

Action Figure	Subject	Action Item/Assignment	Due Date	Completion Date
		<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>050406, 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>092106, Team available for consultation or action</p>		
Raymond Vice	CPS1 & BAAL Monitoring Application Review	<p>021006, CPS1 & 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>050406, In progress</p> <p>092106, Team available for consultation or action</p>	092106	
Raymond Vice	Frequency-Phasor Monitoring Application Review	<p>021006, Frequency-Phasor Monitoring Application (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>050406, In progress</p> <p>092106, Team available for consultation or action</p>	092106	
Raymond Vice	Eastern Interconnection Phasor Project	<p>021006, ACE-Frequency 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.</p> <p>Project Review Team: Leader-Raymond Vice, Frequency Task Force, Tom Vandervort</p>	092106	

Action Figure	Subject	Action Item/Assignment	Due Date	Completion Date
		<p>Group recommendations are to be shared with RS, CERTS, and NERC Projects.</p> <p>050406, RS recommends continuing to use the FDCAS specs to acquire the frequency data from the EIPP frequency database.</p> <p>092106, Team available for consultation or action</p>		
Tom Vandervort	Send Invitation Letter to participate in the II Field Test	092106, TV to send an invitation letter to RS members and RS survey contacts to participate in the Inadvertent Interchange Application Field Test. The volunteer BAs will be from either the Eastern or Western Interconnections.	092806	092506
Brian Nolan	Incorporate ERCOT into ACE-Freq App	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 November meeting.	111506	