

Meeting Agenda for Project 2009-02 Real-time Best Practices Standards Study Group

April 14–16, 2009

1. Administrative Items

a. Introductions

The meeting was called to order at 8 a.m. CDT on Tuesday, April 14, 2009 at the Oncor offices in Dallas, TX. Meeting participants were:

Sam Brattini	Francis Esselman	Charles Jenkins
Jack Kerr	Frank Koza	Patti Metro
Mike Oatts	Doug Rempel	Mike Schiavone
James Vermillion	Ed Dobrowolski, NERC	

b. NERC Antitrust Compliance Guidelines — Ed Dobrowolski

No questions were raised on the NERC Antitrust Compliance Guidelines.

c. Review Meeting Agenda and Objectives — Ed Dobrowolski

The goal of this meeting was to reach a resolution for all 40 of the RTBPTF standards recommendations.

2. Overview of RTBPSSG Scope — Ed Dobrowolski

The scope of the RTBPSSG is to review the recommendations of the RTBPTF and make a decision on whether the recommended items are suitable for standards. If not, the SG should document their reasoning for the permanent record. If the SG does feel that a recommendation should become a standard requirement, then they must either find an existing SDT or group that can take the recommendation into their purview or they must write a SAR to handle the situation.

The SG decided that the guidelines, analysis, and issues items in the RTBPTF Report were not within the scope of the SG.

3. Review and Resolution of Recommendations

S1 — Mandate the following reliability tools as mandatory monitoring and analysis tools: alarm tools, telemetry data systems, network topology processor, state estimator, and contingency analysis

- Who would be applicable? The size of the entity would have to be a factor as many smaller entities don't have the manpower or expertise to keep models up to date. But why should a larger entity have problems caused by a smaller entity that didn't have the right tools?
- Need to allow for future innovations in real time tools to be reflected in any current hard requirements.
- The decision of the group is to emphasize functionality and not to cite specific tools.
- TOOF (Transmission Owner Operator Forum — an organization of Transmission Owners) is working on best practices in this area but best practices don't have enforceability.
- The RTBPTF survey showed that larger entities are already doing this.
- The SG decided to write a SAR emphasizing functionality with performance characteristics. The idea is to use the SAR to get wider feedback on this issue from industry. The SAR was drafted and will be sent out via the list server for the group to double check.
- If there is not agreement on the final wording of the SAR, a conference call will be scheduled to resolve the differences.

Action Item — Ed will distribute the draft SAR via the list server by Monday, April 20, 2009. SG members will have 2 weeks to review the document. Comments should be red-lined in the document and sent back to the list server for all to see. Ed will aggregate the comments and send out a clean copy at the end of the review period for a final check prior to submittal.

S2 — Compile and maintain a list of all BES elements within an RC's area of responsibility

- What is an element? What reliability purpose does this serve? Maintaining a list doesn't prove that you still don't have gaps.
- CIP-002 addresses the need for a critical asset list but that isn't what the RTBPTF had in mind.
- This recommendation was made before there was a definition of the BES.
- There is a survey being done currently that at least partially covers this concept.
- No action taken. The SG does not recommend this item for standard referral.

S3 — Add new requirements and measures pertaining to RC monitoring of the BES

- Monitoring requirements are being deleted as unnecessary in standards due to certification procedures and the resultant compliance activities based on certification.
- The group discussed whether the certification process is adequate to meet the spirit of the recommendation and some question the trend toward using certification (a perhaps one time event at one point in time) as being adequate to assess functions ability over time. It was also noted that the FERC has not

endorsed this trend. With this in mind the group agreed that changing the trend toward using certification as a mechanism for guaranteeing that the RC is monitoring may be less than ideal but the issue is currently covered in existing processes.

- No action taken. The SG does not recommend this item for standard referral.

S4 — Develop data exchange standards

- The RTBPTF was only looking at ICCP type data.
- TOOF is looking at best practices for ICCP but this will not have enforceability.
- The SG considered submitting a formal comment on behalf of the group to the TOP standards where there are new requirements being developed for data specifications for TOPs and BAs. However, after further discussion, it was decided that the SG didn't have the proper background to do this.
- The SG contacted DEWG and asked them if they wanted to submit comments on TOP as they are the group that deals with these types of issues and they have the proper background. DEWG agreed to review the proposed requirements and submit formal comments.
- There are similar requirements being developed for the RC but that project is not in comment mode at this time.

Action Item — Ed will contact the facilitator of the RC project to inform them of the activities surrounding the TOP data specification requirements to see how they can be handled within the RC project.

S5 — Develop data availability standards and a process for trouble resolution and escalation

- This item will be included in the resolution of S4.

S6 — Develop a new weather data requirement related to situational awareness and Real-time operational capabilities

- It was generally acknowledged that weather data is required for emergency preparedness and conservative operation decisions.
- It is part of situational awareness.
- Most control rooms already have access to the Weather Channel, Radar, or similar services.
- The SG felt that this was not a standards requirement issue.
- No action taken. The SG does not recommend this item for standard referral.

S7 — Specify and measure minimum availability for alarm tools

- This item was included in the SAR discussed in S1.

S8 — Specify and measure minimum availability for network topology processor

- This item was included in the SAR discussed in S1.

S9 — Establish a uniform formal process to determine the wide area view boundary and show boundary data and results

- The SG discussed whether it was really necessary to define how wide you need to go.
- What do you do with the information once you have it? Can you still use equivalents?
- IRO-003-2 addresses the RC wide area view but it doesn't seem to go far enough and is rather vague.
- What is really needed is a wide area determination process. This is out of scope for the SG and is something that other groups within NERC should be addressing.
- The SG formulated a comment and e-mailed it to Gerry Adamski requesting him to push this issue forward to the correct group within NERC.

S10 — Develop compliance measures for verification of the usage of wide area display visualization tools

- This should be taken up by whatever group handles S1.

S11 — Specify and measure minimum availability for state estimator including a requirement for solution quality

- This item was included in the SAR discussed in S1.

S12 — Specify and measure minimum availability for contingency analysis including a requirement for solution quality

- This item was included in the SAR discussed in S1.

S13 — Specify criteria and develop measures for defining contingencies

- FAC-011 was designed to handle this issue.
- NERC is on record to update FAC and MOD once TPL is finalized.
- The SG decided that the update of FAC should be the mechanism to accomplish this task. However, to ensure that this recommendation isn't lost in the shuffle, an official issue should be entered into the NERC database for FAC-011.

Action Item — Ed will submit the S13 recommendations as issues against FAC-011.

S14 — Perform one hour ahead power flow simulations to assess approaching SOL and IROL violations and corresponding measures

- The SG discussed the need for this if you are already doing real-time contingency analysis.
- Does the TOP even have all of the data needed?

- The SG felt that this was of little practical value due to the uncertainties involved.
- There was some concern about the need for this in areas where there is a large concentration of wind power but it was felt that this was a ‘special’ condition and not worthy of a national standard.
- This is a best practice but not standards material.
- No action taken. The SG does not recommend this item for standard referral.

S15 — Provide Real-time awareness of Load shed capability to address potential or actual IROL violations.

- Does the RC really need to know this or is this just a directive and the TOP needs to follow it and implement it?
- There is already a requirement for the creation of a mitigation plan if there is an IROL.
- The RC has the ability to ask for any data it deems it needs to do its job. Do we really need a requirement that mandates them to ask for it?
- The SG felt that no actions were required for this item.

S16 — Require BA to monitor contingency reserves and calculate contingency reserves at a minimum periodicity of 10 seconds

- The BACSDT is already looking at this.

Action Item — Ed will send a copy of Section 3.1 of the RTBPTF Report to the BACSDT facilitator for consideration in their work.

S17 — Revise the current day operations requirements to delineate specific, independent requirements for monitoring operating and reactive reserves

- The BACSDT is already looking at this.

Action Item — Ed will send a copy of G8 from the RTBPTF Report to the BACSDT facilitator for consideration in their work.

S18 — Establish documented plans and procedures for conservative operations

- Project 2009-03 will look at EOP-001 which is where the SG feels that such requirements would belong.

Action Item — Ed will send a note on S19 to the facilitator of Project 2009-03 so that it can be included in their work.

S19 — Restore system operations from an unknown operating state to proven and reliable limits within 30 minutes

- This requirement has been removed from TOP as part of the current revisions due to the fact that it was considered unmeasurable.

- The SG felt that this is an extremely important concept in operations and needs to be retained.
- The SG formulated an official comment to the TOP team urging them to re-instate this requirement.
- Frank will formally submit the comment on behalf of the SG.

Action Item — SG members need to review the draft comment pertinent to S19 that will be submitted to the TOP team. Due to the imminent comment closing date, this review needs to be completed no later than Friday, April 24, 2009. Comments should be sent back via the list server as red-lines to the document. Ed will aggregate the comments and resolution of any conflicts will be through e-mail due to the timing issues.

S20 — Develop formal operating guides (mitigation plans) and measures for each IROL and any SOL or other conditions having a potential impact on reliability

- IRO-009-1, R1 and R2 cover this item.

Action Item — Ed will contact the facilitator of the IRO project to ensure that the requirements covering S20 don't get inadvertently deleted.

S21 — Review and update operating guides (mitigation plans) when day ahead or current day studies indicate the potential need to implement an operating guide

- The SG considers this a best practice but not standards material.
- No action taken. The SG does not recommend this item for standard referral.

S22 — Provide temporary operating guides (mitigation plans) with control actions for situations that could affect reliability but that have not been defined previously

- The SG considers this a best practice but not standards material.
- No action taken. The SG does not recommend this item for standard referral.

S23 — Develop joint operating guides (mitigation plans) for situations that could require more than one RC or more than one TOP to execute actions.

- IRO-014-2, R1 and TOP-001-2, R4 cover this item.
- No further action required.

S24 — Develop a formal procedure to document the processes for developing, reviewing, and updating operating guides (mitigation plans).

S25 — Incorporate verifiable and traceable elements such as titles, document numbers, revision numbers, revision history, approvals, and dates when modifying operating guides (mitigation plans).

S26 — Write operating guides (mitigation plans) in clear, unambiguous language, leaving nothing to interpretation.

S27 — State the specific purpose of existence for each operating guide (mitigation plan).

S28 — Summarize the specific situation assessment and address the method of performing the assessment in each operating guide (mitigation plan).

S29 — Identify all appropriate preventive and remedial control actions in each operating guide (mitigation plan).

S30 — Develop criteria in operating guides (mitigation plans) to support decisions regarding whether a specific control action should be taken.

S31 — Incorporate on-line tools that utilize on-line data when operating guides (mitigation plans) require calculations.

S32 — Make operating guides (mitigation plans) readily available via a quick access method such as web-based help, EMS display notes, or on-line help systems.

- S24 to S32 are all part of the same general recommendation.
- The SG feels that these are best practices but not standards material.
- Following discussion no action was taken. The SG does not recommend this item for standard referral.

S33 — Provide the location, Real-time status, and MWs of Load available to be shed.

- For automatic mode, i.e., UVLS and UFLS, everything is planned and pre-set so there is nothing to be done. Therefore, no standard is required for PR1 in the report.
- For PR2, most Load shedding is done at the distribution level without SCADA capability so there is very little that can be done by the RC or TOP. However, this recommendation will be passed on the Project 2009-03 which is going to look at EOP-003.
- PR3 will be passed on the Project 2009-03 for their consideration.

Action Item — Ed will pass on S33 to Project 2009-03 which is going to be looking at EOP-003.

S34 — Establish documented procedures for the reassessment and re-posturing of the system following an event.

- The SG considered this as impractical and unmeasurable. It is covered in operations training and not really any different than what is done in normal operations.
- No action taken. The SG does not recommend this item for standard referral.

S35 — Provide information to operators to maintain awareness of the availability and capability of the blackstart generators and transmission restoration paths.

- EOP-005-2, R5 and R7 cover this for generation.
- Cranking paths are known to the TOP and don't require special handling.
- No further action required.

S36 — Plan and coordinate scheduled outages of blackstart generators and transmission restoration paths.

- TOP-001-2, R4 and EOP-005-2, R15 cover this.
- No further action required.

S37 — Maintain a Critical Equipment Monitoring Document to identify tools and procedures for monitoring critical equipment.

S38 — Maintain event logs pertaining to critical equipment status for a period of one year.

S39 — Maintain a Critical Equipment Maintenance and testing Document identifying tools and procedures for maintenance, modification, and testing of critical equipment.

S40 — Monitor and maintain awareness of critical equipment status to ensure that lack of availability of critical equipment does not impair reliable operation.

- S37 to S40 are all part of the same general recommendation.
- IRO-003-3, R2 covers this partially for the RC.
- Handled as part of the SAR developed for S1.

4. Next Steps — Ed Dobrowolski

Resolutions were reached for all 40 items and the next steps all revolve around completing the action items outlined in item #6.

5. Schedule Conference Call and WebEx

No conference call was scheduled at this time although the possibility of a call was left open.

6. Review Action Items & Project Schedule — Ed Dobrowolski

The following action items were developed during this meeting:

- Ed will distribute the draft SAR via the list server by Monday, April 20, 2009. SG members will have 2 weeks to review the document. Comments should be red-lined in the document and sent back to the list server for all to see. Ed will aggregate the comments and send out a clean copy at the end of the review period for a final check prior to submittal.

- Ed will contact the facilitator of the RC project to inform them of the activities surrounding the TOP data specification requirements to see how they can be handled within the RC project.
- Ed will submit the S13 recommendations as issues against FAC-011.
- Ed will send a copy of Section 3.1 of the RTBPTF Report to the BACS DT facilitator for consideration in their work.
- Ed will send a copy of G8 from the RTBPTF Report to the BACS DT facilitator for consideration in their work.
- Ed will send a note on S19 to the facilitator of Project 2009-03 so that it can be included in their work.
- SG members need to review the draft comment pertinent to S19 that will be submitted to the TOP team. Due to the imminent comment closing date, this review needs to be completed no later than Friday, April 24, 2009. Comments should be sent back via the list server as red-lines to the document. Ed will aggregate the comments and resolution of any conflicts will be through e-mail due to the timing issues.
- Ed will contact the facilitator of the IRO project to ensure that the requirements covering S20 don't get inadvertently deleted.
- Ed will pass on S33 to Project 2009-03 which is going to be looking at EOP-003.

There is no hard and fast schedule for this work although the desire is to conclude this task no later than July 15, 2009. With the decisions made this week, there would seem to be no reason why that goal cannot be attained.

7. Adjourn

The meeting was adjourned at noon CDT on Thursday, April 16, 2009. All participants thanked Oncor for their hospitality.