



# Audit the Audit

## FERC Observations

*The views expressed here are those of the FERC staff and do not necessarily represent the views of the Commission*



# Process Observations

- FERC's role
- Subjective nature of the reviews
- Reports success in reflecting differences
- Difficult subjects
- Voluntary process
- Facilitators role
- Process efficiency

# Much is Good



- Necessary to increase reliability
  - identify vulnerabilities
  - Recognizes excellence and best practices
  - Encourages improvement
  - Experienced multidiscipline team reviews
  - Reports are published for public review
- CA/RCS genuinely interested in improving
- Excellent international cooperation (thanks!)
- An evolving process

# FERC's Role



- Provides continuity and consistency
  - FERC Staff has participated on all reliability reviews
    - Several staff have participated on 8 or more reviews
    - Provides overall perspective of the reviewed
- Independence
  - No operational or market involvement

# Without Clear Standards, the Reviews Can Become Subjective or Weak



- **Not really “Audits”**
  - The reviews are voluntary, limited, and are based on standards that are not enforceable
- **Ambiguous standards to audit against**
  - NERC is working on enforceable standards
  - No follow-up, consequences, and/or penalties
- **With ambiguous standards there is no enforced consistency**
  - Examples include – backup center and security
  - This leads to the same grades between minimal and best effort - misrepresenting the review results to the public
- **It is easier to emphasize the quantifiable rather than the unquantifiable items – even if they are more important**
  - Example, Operator Certification vs. Operator Actions
  - Quantifiable can also be important, but isn’t always covered in the standards because of the lack of metrics

# Do The Reports Fully Reflect Differences?



- **There is a vast difference between the best control centers and the worst**
  - NERC “requirements” are not currently an adequate gauge for establishing team recommendations – should use the team’s judgment to identify minimum vs. best practices
  - The process should allow exploration of areas that are not covered by NERC “requirements” to identify the best and worst
- **The full magnitude of the differences is not apparent from the written reports**
  - No one is perfect, all reports contain suggested improvements
  - No one is worthless, all reports contain positive findings

# Comparison Reporting



- **Consider a reporting mechanism that compares all review results and identifies “best practices”**
  - Results arranged in a table would be best
  - Narrative may be required as well
  - Simple-to-follow for public comprehension - report card format?
  - Final report card cannot be altered by the CA/RC
- **Cover the full range of inquiry**
  - Tools
  - Training
  - Shift coverage
  - Operational practices
  - Backup facilities
  - Wide area view
  - Security

# “Difficult” Areas of Consideration for Future Audits



- **Staffing levels**
- **Tools requirements**
- **Costly and/or time-consuming actions**
- **Reluctance to include subjective judgments – especially considering the ambiguous standards (*complacency, inattention, etc.*)**
- **Reluctance to name specific products for fear providing endorsement**
- **Reluctance to pursue topics not covered by NERC “requirements”**

# CA versus RC



- Differing frameworks and splits in CA and RC functions make it difficult to determine if all reliability duties are covered
- Combined CA/RCs are easier to review
  - Combination CA/RCs have predetermined splits in duties and responsibilities
- Split CA and RCs necessitate a method that assures coverage of the reliability
  - FERC has been tracking the functional roles in the audits as reported by John Keuck
- The responsibilities matrix will help identify roles for both circumstances

# Facilitators Role



- **The NERC lead often has the most audit experience**
  - Be prepared
  - Run an efficient process
  - Have control room walkthrough on first day
- **There is a danger the lead will dominate the process and the results**
  - Facilitate rather than lead
  - Draw out all of the participants
  - Provide the pre- and post- support effort
    - Maximize the value and minimize the effort of the volunteers
  - Focus on process
- **Avoid known process errors**
  - Ask open-ended questions and listen more than you talk
  - Never answer a question for the CA/RC from another auditor
  - Never state a conclusion to the CA/RC before its decided with the team

# RC/CA Questionnaire



- **Answers should help the team jump-start the process**
- **The facilitator should pre-review the response**
  - Do not accept yes/no answers when a discussion/description is needed
  - Do not accept “information will be provided during the audit”
  - Distribute the responses to team members prior to the audit
- **Refine the questionnaire**
  - Imprecise questions waste audit time
  - Organize questions by sub-team (management, tools, training, operators, back-up facility)

# Audit Guide



- Should be organized by sub-team (management, tools, training, operators, backup facility)
- There should be check-off lists in several areas (responsibilities/delegation, tools, backup facility characteristics, etc.)
  - Quantities can be filled in (alarm system scan rate, etc.)
- If done correctly this will enhance team member independence by quickly identifying areas requiring judgment and further inquiry

# Team Size and Composition



- **Insure diversity with auditors from both other interconnections (don't let the host region dominate)**
  - Some team members have been concerned that recommendations made to one CA will be applied to their CA
- **Ideally auditors should be independent experts**
- **Diversity of expertise is desirable: operators, planners, tools experts**
  - Size of Team
- **NERC & FERC should encourage participation in teams**
- **Avoid conflicts of interest**
  - Team members should not have consulting or commercial ties

# Follow-up



- **Immediate concerns should be addressed right away rather than wait until the reports are finalized**
- **Establish specific practices to correct deficiencies**
  - Differentiate by severity
  - Identify timelines for completion
  - Include members of the original team
  - Include the results in an interim public report
  - Require compliance with the corrections
- **Capture best practices**
  - Does not have to be a single practice or single CA/RC
  - Needs to come back to a single person/committee to assure consistency
  - Should move towards publication
    - Cover each area of reliable operations

# Conclusions



- **Due to the lack of enforceable standards, the process is subjective by nature**
  - This produces mixed results
  - This must be recognized in the design of the process and the expected product
- **The process identifies reliability concerns as well as areas of excellence and encourages reliability**
  - The reports do not clearly show the range of differences
- **There is room for improvement**
  - Provide structure and support
  - Consistency
  - Objectivity