BP Wind Energy’s Perspective on Internal Controls

Carla Holly, Regulatory Compliance Manager
October 8, 2013
BP Wind Energy

- BP Wind Energy is a principal owner and operator of wind power facilities with interests in 16 wind farms across the US in 9 states.
- Two of those wind farms are located in the SPP RE footprint.
- BP Wind Energy has a gross installed capacity of nearly 2,600 MW.
- Enough electricity to power over 775,000 average American homes.
Compliance Program

- Program is grounded on the following principles
  - promotion and maintenance by BP Wind Energy’s senior management of a management culture that encourages compliance
  - utilization of effective preventive measures to help ensure compliance
  - employment of measures to help ensure prompt detection, cessation, and reporting of events of non-compliance
  - use of measures to help ensure prompt remediation of compliance violations
How does BP Wind Energy define and implement Internal Controls?

- Constant work in progress – mixed approach of proactive and reactive
  - Focus on continuous improvement
  - Learn from mistakes and past experiences
- Initially developed NERC Compliance Program in early 2008 at completion of first wind farm in response to FERC Order 693
- In 2011, formalized Electric Regulatory Compliance program for BP’s wind business based upon FERC’s Policy Statements of Compliance
- Today - Considering NERC’s RAI initiative
  - RAI Internal Controls Working Guide document
Internal Controls used by BP Wind Energy

- Compliance Task Manager
- NERC Compliance Program and Procedures
- Training
  - Initial
  - Refresher
- Status Notifications
Compliance Task Manager

- system generates automatic work orders, reminders, and alarms to proactively notify each wind farm of upcoming requirements and tasks
- helps ensure that tasks are performed according to schedule, enhances compliance measures and prevents reoccurrence of the failure to perform tasks in accordance with established intervals set forth in the Electric Regulatory Compliance Program
- Used for simple tasks, such as a reminder to perform a review on a particular procedure up for review, or complex tasks, such as performing testing and maintenance on Protection System
- Very effective for PRC-005
Compliance Task Manager – user task list

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<th>Status</th>
<th>Task ID</th>
<th>Description</th>
<th>Due Date</th>
<th>Completed Date</th>
<th>Completed By</th>
<th>Site Test</th>
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Compliance Task Manager – task example
Internal Control: NERC Compliance Program

- NERC Compliance Program Procedures
  - Formal document created for each applicable NERC Reliability Standard that lists each requirement and how the wind farm will meet compliance with the particular requirement
  - Provides procedure for all personnel for actions that will be taken for event-driven standards or actions already taken
  - References supporting evidence such as external documents, attachments, or applicable protocols, etc.
  - Makes preparing for audits and completing the RSAWs much simpler
BP Wind Energy provides initial in-person training to Facility staff on applicable NERC Reliability Standards during the construction phase of a facility.

Responsibilities and task action items are reviewed.

Operators in the Remote Operations Center, who monitor all BP’s wind farms on a 24 hour basis, are also provided training separately on an annual basis.

Other compliance contributors, such as Engineers, are trained at a high-level in order to provide a “big picture” perspective and knowledge base.
Additional refresher trainings are provided quarterly on high profile Standards or on topics requested by the Operations staff.

Company training on other non-NERC Regulatory Compliance matters, such as RTO/ISO and FERC, are conducted every 18 months.

Training is also communicated, and made available, to facility, asset management, and other personnel involved in NERC compliance efforts regarding reliability compliance training webinars, workshops and seminars on NERC and Regional Entity related matters.

Each direct compliance contributor is required to attend at least one Regional Entity Compliance Workshop a year.

Operations personnel also participate in a rigorous safety and accident prevention program as well as receive additional training in regards to the facility’s substation and other high voltage equipment.
Internal Control: NERC 101 Agenda

Discussion Topics

- A (Very) Brief History of Reliability Regulation
- The Reliability Trinity: FERC, NERC, and Regional Entities
- NERC Reliability Functional Model
- NERC/Regional Compliance Registry
- Overview of Reliability Standards
- NERC/Regional CMEP (Compliance Monitoring and Enforcement Program)
- Penalties for Reliability Violations
- Effective Internal Compliance Programs
- NERC Informational Resources
- NERC Reliability Priorities
- Overview of BP Wind Energy’s Reliability Compliance Processes
BP Wind Energy uses a software to track training for all employees, which includes emergency operations training, NERC training, and any relevant ISO trainings.

Each employee is expected to report training to the company Training Lead so that the appropriate hours can be entered and tracked.

The software allows you to generate and view reports that show completed courses and hours for each operator, which was beneficial during the last Winter Storm investigation.

Excel spreadsheets are also used for simplicity purposes.
## Internal Control: Tracking Training - example

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**Total Hours:** 49.50
**Total EOP Hours:** 49.50
**Total Simulation Hours:** 0.00
**Total Standards Hours:** 28.00
• Very effective for VAR-002
• To proactively monitor voltage at the Point of Interconnection, BP Wind Energy has created tags in the Plant Interface system that monitors and records the voltage on a real-time basis
• Status notification alarms are generated when voltage goes outside of the voltage schedule parameters. The voltage box on the console flashes red.
• Remote Operations Center personnel acknowledge notification and follow internal procedure to verify reactive resources are in/out of service before making phone call to TOP to notify change in reactive resources
BP Wind Energy recently experienced a successful GO/GOP audit by SPP RE.

Internal controls currently in place proved to create the proper framework to have all compliance contributors properly prepared and knowledgeable of the standards and audit process, including the SMEs.

No findings – however, there is always room for improvement!
- Create flowcharts for various procedures
- Conduct table top exercises/drills
Green Country Energy, LLC.

NERC Compliance & Internal Controls

Dan Kueker
October 8, 2013
Internal Controls

• Compliance Program structure
• Internal Compliance Committee Meetings
• NERC “Preventative Maintenance” work orders
• Challenges of existing historical controls
• Goals for the near term guided by NERC’s Reliability Assurance Initiative
Reliability Compliance
Internal Controls

October 8, 2013
Topics

- Internal Controls (IC) examples
  - Ownership matrix
  - Roadmap updates (RSAWs)
  - Assessments
  - Implementation plans for new standards

- Activity tracker

- Internal Controls pilot
Ownership Matrix

- Assign ownership and responsibility for compliance to standards
  - Standard Owner
  - Requirement Owner
  - Responsibility Owner
Roadmap Updates

- Roadmap (similar to RSAW)
- Annually for all standards
- Approved electronically
  - Standard Owner
  - Requirement Owner(s)
  - Responsibility Owner(s)
  - Standard Owner’s Director
Assessments

- Review and assessment of reliability processes
- Six Ops / Plng and four CIP assessments per year
- Selected based on risk
Implementation Plans

- New or changed standards
- Performed after NERC Board approval – 30-60 days to draft
- Review and approval
- Elements
  - Procedure/policy assessment
  - Reporting requirements
  - Data collection/development
  - Physical equipment assessment
  - Non-equipment resource requirements
  - Training requirements
  - Schedule and milestones
Activity Tracker

- Reliability compliance milestones
- Measures program “health”
- Managed manually today
  - Excel spreadsheet
  - GRC tool expected in 2014

- Monthly reporting process
  - Send out e-mail reminders
  - Results reported
  - Verify completion
  - Update monthly report
## Activity Tracker Sample

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**On Target**  **Slightly Off Target**  **Off Target**

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NERC Alert on Facility Ratings July-Dec 2012 update
NERC Alert on Facility Ratings Jan-June 2013 update
Verify Facility Rating Methodology is current
Quarterly report to SPP 4th Qtr 2012
Quarterly report to SPP 1st Qtr
Quarterly report to SPP 2nd Qtr
Quarterly report to SPP 3rd Qtr
Scheduled item - LZOP’s
Update roadmap
Complete checklist for standard
Complete implementation plan items for 2013
Internal Controls Pilot

Internal controls approach

- Identify all risks
- Identify controls
- Rank risks
  - Likelihood (scale 1-5)
  - Impact (scale 1-5)
- Develop action plan
- Develop control tests

Piloted with six standards
Questions?