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MIDWEST RELIABILITY MATTERS

JAN / FEB 2012

Inside this issue:

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To submit story ideas or other suggestions for Reliability Matters, please contact **Jessie Mitchell** at ***651-855-1733***

FROM THE PRESIDENT

MRO President, Dan Skaar

As 2011 closes, I want to take some time to highlight the year and provide a 2012 outlook.

The Bulk Power System (BPS) is complex and highly integrated with many interdependencies which make technical regulation of reliability and security challenging. Therefore, our regulatory model requires a high level of engagement between the Regional Entities like MRO, regulators, and the industry to meet public demands for reliable and secure electric power.

As an organization, MRO made great strides in 2011 to become more engagement-based. The 2011 strategic initiatives developed by the board of directors guided the organization in this engagement framework - creating more frequent dialogue with stakeholders, a more collaborative approach to compliance, and most importantly, a shared responsibility for BPS reliability in the MRO Region.

First, the MRO Standards Committee continued its initiative to create application guides that provide clarity on the application of existing and emerging reliability standards. These application guides leverage the collective technical expertise of stakeholder subject matter experts in the MRO Region. Although not authoritative, the application guides provide much needed direction on meeting the requirements of reliability standards through strong procedures and internal controls. Existing application guides can be found on our website, and more will be developed in 2012.

Second, the Compliance Committee established a team of subject matter experts to create an internal controls and procedures framework for use by Registered Entities to strengthen their compliance programs and provide on-going assurance of meeting key reliability requirements. More information on this initiative will be released as progress is made in 2012.

Third, both the MRO Operating and Planning Committees also made substantial progress in 2011. The Operating Committee completed is first full year of work in 2011, which included reviewing event analysis reports and providing guidance to staff on the level of analysis and the appropriateness of recommendations and lessons learned. In addition, the Operating Committee recently approved a new MRO guideline for protection systems entitled *MRO Procedure for Analysis of Mis-operations*, which was approved by the board of directors in December. The MRO Planning Committee updated it process for reviewing reliability assessments (now performed on Planning Authority Boundaries), and closely followed the NERC-wide efforts to define Special Protection Systems - an effort initiated by MRO. The Planning Committee will also weigh in on the initiatives to improve power system models in 2012.

Additionally, in an effort to improve communication with our stakeholders, MRO expanded the frequency and content of its newsletter and other publications. While we don't want to contribute to "information overload," we do want to keep our stakeholders informed of important policy matters, and provide useful "tips and lessons learned" to keep you our Registered Entities of the compliance "ditch."

Finally, I want to highlight the work done in 2011 by stakeholders and staff in Event Analysis. Event Analysis is the "low hanging fruit" for improving relia-

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bility. The reason for this is simple. A BPS event is real and concrete, not theoretical or ambiguous, and allows for a practical examination of the application of the standards and concomitant insight into their effectiveness. Hence, Event Analysis is the natural and necessary companion to the development of, and compliance with, reliability standards.

Since 2007, when Section 215 became effective in the United States and through other arrangements in Canada, Registered Entities have conducted reviews of 62 system events within the MRO region. These events were closely examined by industry subject matter experts and technical MRO staff, and through this analysis, MRO has published almost 100 recommendations and lessons learned which are important to improving regional reliability of the bulk power system.

Although most of these events (97%) were small and required less technical review, that does not diminish their importance or the importance of generally studying small events. Just as in baseball, all ground balls have to be fielded. MRO expects that each Registered Entity has strong corrective action programs to exam *each and every* event to place some forensic intelligence around determining any patterns or trends, including human error. MRO staff expects that Registered Entities will complete a thorough compliance assessment of the event to determine if there are any potential violations and self-report these to MRO staff. A complete and thorough compliance assessment after an event analysis is a strong indicator that the Registered Entity "gets" that good compliance is a by-product of a commitment to reliability excellence.

Our efforts to become more engagement-based in 2011 were certainly noticed by our stakeholders, as is evident in the results of the MRO 2011 Satisfaction Survey. The survey results point to improvements in every area surveyed. While we have more work to do, the survey provides us a barometer of whether we are reaching a higher level of engagement with stakeholders and providing value to reliability. More on the survey can be found on page 12 of this newsletter.

Looking forward to 2012, we have some challenges.

Our collective stakeholder and staff efforts to provide more clarity on requirements and assistance on strengthening internal compliance programs should begin to accelerate results across more areas in 2012.

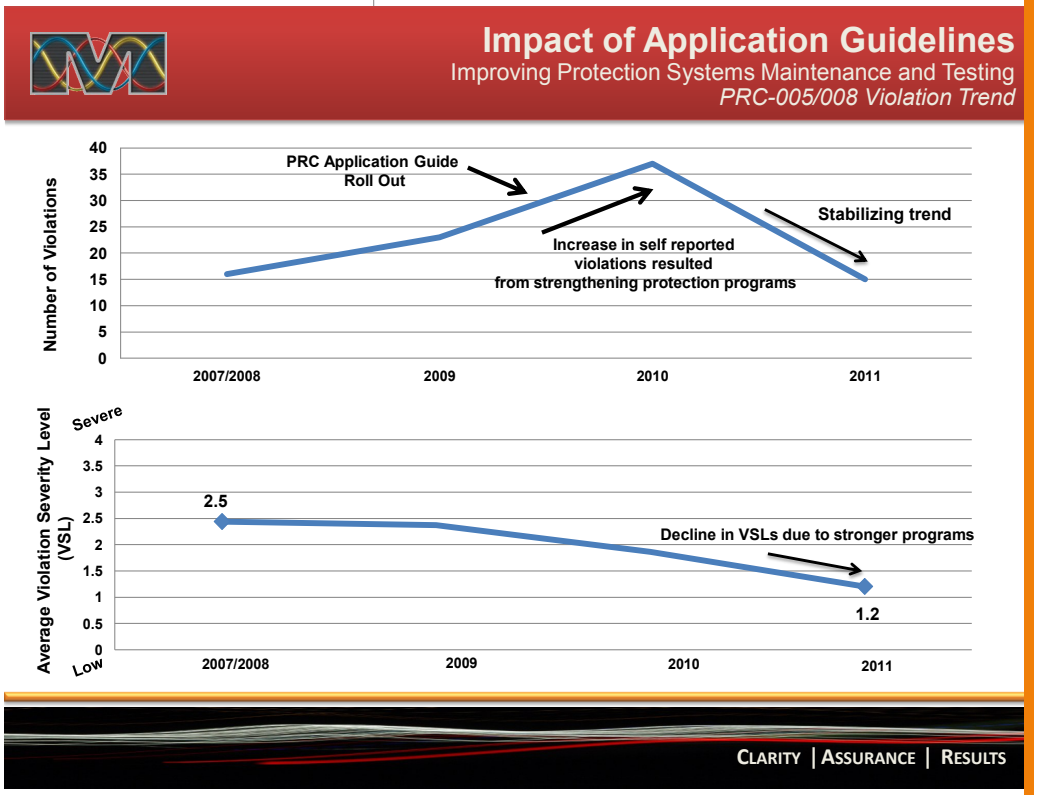
Staff often talks about "operationalizing compliance" into performance. What we mean is that Registered Entities need to weave compliance into their daily operations – it's not about paperwork – it's about getting the job done right on the ground. We are seeing improvements in this area of focus.

For example, MRO stakeholder subject matter experts developed an application guide on protection relay maintenance and testing that was rolled out to stakeholders in 2010.

Soon after, staff saw a dramatic increase in self-reported violations of protection maintenance and testing in 2010. We believe that this was a direct result of stakeholders strengthening their maintenance and testing procedures of protection systems.

In 2011, staff saw a drop in these violations and the severity level of the violation drastically decreased. We believe that this is a direct result of the application guide – a spike in PRC violations as entities self report more violations as a result of strengthening protection maintenance and testing programs followed by less severity of the violations in the subsequent period. This is a good story. It doesn't mean we can't slip off the road, but it's a good story and it's exactly what we expect -- better results through more clarity on what's required.

Let's face it; we all want to do a good job. Application guides and model compliance controls are



an essential part of doing a good job. Leveraging the collective expertise of the region and applying it to reliability is a smart thing to do and it's exactly what is expected of us under the Electric Reliability Organization ("ERO") model. In this way, MRO's performance is directly linked to the industry's performance. Our challenge is to continue to demonstrate the results each year and not slip off the road.

Another challenge is to do more analysis on small system events to connect more dots on the causes of these events. Staff believes that if we can understand and work together to prevent small events; we will decrease the likelihood of larger events in the future. In order to do this, we will again need the assistance of stakeholder experts to unravel patterns and trends and then make meaningful improvement recommendations to the industry. This was emphasized at a recent FERC Technical Conference through MRO comments which can be found at www.midwestreliability.org.

An ongoing initiative in 2012 is MRO's commitment to find ways to reduce the costs of compliance for the Registered Entity. For example, something MRO presented several years ago as "score and record" has matured into NERC's new Find, Fix, Track and Report (FFT) process and is a useful tool to eliminate some of the adminstrivia and anxiety of smaller compliance violations. There is much more that can be done in the future to reduce the cost of compliance, and this will remain an ongoing challenge for NERC and the Regional Entities across North America.

While the FFT and other past mechanisms have been helpful in reducing the administrative costs of compliance, the cost savings have been largely enjoyed by NERC and the Regional Entities rather than the Registered Entities. I believe there are ways to reduce costs to the industry and improve compliance at the same time. Standardization is likely the greatest area for cost savings Regional Entities and NERC should apply the standards in a similar manner, using a disciplined approach with uniform procedures to plan, conduct and report our work. Removing variability across the regions will reduce costs, set expectations and relieve anxiety in the industry.

Second, we need to take a close look at the development of regional standards across the Eastern Interconnection. MRO's position on this matter has been consistent – the industry's resources should be focused on continent-wide and interconnection-wide standards, not on the proliferation of regional standards which are largely supplements to existing continent-wide standards. Today, we have over 1,400 compliance requirements. Some of these requirements should be sunset as they are not needed while other requirements need to be made stronger and clarified. The industry has plenty of work to do in the standards area without adding another layer of costs and complexity.

In summary, 2011 was a solid year of performance for the MRO Region. So much was accomplished by staff and stakeholders in our efforts to become more engaged and in-tune with real reliability improvement. I believe we are on the right track. That said, keep the cards and letters coming – our best ideas come from our stakeholders. I also look forward to continuing on this path in 2012, and on behalf of MRO staff, would like to wish you a safe, healthy and prosperous New Year!

REGULATORY AND ENFORCEMENT MATTERS

Sara Patrick, VP Enforcement and Regulatory Affairs and Miggie Cramblit, General Counsel and External Affairs

BES Definition

On November 18, 2010, the Federal Energy Regulatory Commission (FERC) issued Order 743 (subsequently clarified in Order 743-A) and directed NERC to revise the definition of BES so that the definition encompasses all elements and facilities necessary for the reliable operation and planning of the interconnected bulk power system. Additional directives include the retention of the radial exclusion, the elimination of regional discretion which exists in the current definition and the development of a process for identifying any elements or facilities that should be excluded from the BES.

The Commission has established a filing deadline of January 25, 2012 for all portions of the project.

NERC is working to address these directives with two activities incorporated in Project 2010-17 Definition of Bulk Electric System– the definition of Bulk Electric System (BES) is being revised through the standard development process and a BES Definition Exception Process is

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being developed as a proposed modification to the Rules of Procedure.

This project includes several work products which have been developed in parallel to meet the January 25th deadline:

- A revised *Bulk Electric System definition* developed by the Project 2010-17 Definition of Bulk Electric System standards drafting team (SDT) (Project 2010-17 SDT).
- A BES definition *Implementation Plan* also developed by the Project 2010-17 SDT.
- A new *Appendix 5C* to NERC's Rules of Procedure that addresses the *process for requesting BES exceptions*, drafted by NERC staff and an industry stakeholder team drawn from BES SDT nominees.
- An application form titled *Detailed Information to Support an Exception Request* which identifies potential forms of evidence that can be utilized to support the exception request. This form is referenced in the Rules of Procedure Exception Process and was developed by the Project 2010-17 SDT.

While these two activities comprise Phase 1 of Project 2010-17, NERC posted a Standard Authorization Request (SAR) for Phase 2 of the Project. The Standards Committee and NERC Board of Trustees supported initiation of Phase 2 to provide an opportunity to further evaluate and develop technical justification for refinements to clarify which Elements are necessary for the reliable operation of the interconnected transmission network. ***NERC is soliciting comments on the SAR through 8pm Eastern on Friday, February 3, 2012.***

Status Manitoba Reliability Standards Regulation

Since June of 2008, MRO has been operating under an Interim Agreement on Compliance Monitoring and Enforcement in Manitoba. The Interim Agreement anticipated legislation and the need for future regulations. On June 11, 2009, the Manitoba Hydro Amendment and Public Utilities Board Amendment, Bill 20, was passed. The legislation requires the adoption of regulations for implementation, which were presented in draft form for comment last April. We anticipate the final regulations will be approved early this year. Once the regulations are approved, MRO will be authorized to conduct compliance monitoring and enforce violations for all entities within Manitoba that meet the NERC Registration Criteria.

Summary of FERC Technical Conference on Bulk Power Reliability

On November 29-30, 2011, the Federal Energy Regulatory Commission (FERC) held a Commissioner-led technical conference, chaired by Commissioner LaFleur, to discuss policy issues related to the reliability of the bulk power system. MRO staff attended the first day, which focused on general reliability issues and consisted of two panels that discussed NERC's priorities and how lessons learned are incorporated into those priorities. The second day focused on reliability issues raised by recent Environmental Protection Agency (EPA) regulatory actions and two panels discussed local and regional processes for identifying unit-specific reliability issues in response to final EPA regulations and multi-jurisdictional coordination.

The discussion on the first day highlighted the progress made by NERC in creating the Find, Fix, Track and Report Process while noting that significant work remains to be done to effectively focus NERC's resources on the critical priorities to safeguard the reliability of the bulk power system. The need to define an "adequate level of reliability," a lack of prioritization by NERC on how best to demonstrate compliance, and the absence of compliance cost controls were ongoing concerns addressed by the panelists. The commenters described the work that remains to be done by NERC to prioritize Reliability Standards and compliance enforcement on areas where reliability improvements may be made.

The first panel focused on issues related to the reliability of the bulk power system and the NERC prioritization tool being used to identify reliability compliance oversight and enforcement priorities. The panel included an opportunity for NERC to give an update on the implementation of changes identified in the February 8, 2011 Reliability Technical Conference, and for the panelists to express their views on how NERC is doing.

Several Commissioners and panelists addressed the need to manage the finite resources of FERC and NERC. A number of the panelists discussed the role of a risk-based approach to reliability. Gerry Cauley, President and CEO of NERC, noted that NERC needs to have a culture of learning and accountability when it comes to power disruptions, and to focus on learning the root causes of such events to avoid repeating them. Mr. Cauley further stated that he is not satisfied with the Reliability Standards given the outages that have recently occurred. He noted that publishing "lessons learned" from weather events and other disruptions and pinpointing whether the errors are human based or the result of poor design has been helpful. The Commissioners and the panelists discussed the im-

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portance of collaboration between FERC, NERC and industry.

In the second panel, the panelists and Commissioners recognized and struggled with the tension between conducting effective and timely events analysis and compliance actions. Commissioner LaFleur asked about the tension between effective events analysis and compliance concerns and how best to utilize the peer review functions of the North American Transmission Forum (NATF). The Commissioners approved of and supported the role of NATF in promoting reliability. Chairman Wellinghoff asked how to define the respective roles of NATF and FERC. Mr. Cauley indicated that NERC and NATF hope to gain clarity on their respective roles in future meetings. Commissioner Moeller asked about getting smaller transmission owners involved in forums without disproportionately affecting their resources. Thomas Galloway, President of NATF, responded by saying that while transparency is an issue, forum members could likely share information publicly, and that membership in NATF does not have to be a one-size-fits-all approach.

The industry panelists recognized the importance of NERC communications, but cautioned that they are overly burdensome and can be counterproductive. One panelist noted that NERC's toolbox may be too full, and that NERC communications may require stronger discipline, more judicious decision-making, and greater involvement of subject matter experts at early stages. Other panelists indicated that guidance should not inadvertently add requirements to the standards process, noting especially the overuse of Compliance Application Notices (CANs), and recommended that industry be involved in helping create guidance. One panelist asked that the CAN process be changed or temporarily suspended.

Commissioner LaFleur indicated that interested parties should file Comments on the issues discussed by December 9, 2011. Many comments were filed, including those submitted by MRO on December 9, 2011. To review the Comments and the Statements from the Panelists, use the following link, choose "General Search," and enter AD-12 in the "Docket Number" field: http://www.ferc.gov/docs-filing/elibrary.asp.

Additionally, the FERC Technical Conference was webcast. All webcasts are archived for 3 months. The webcast is available at: http://www.capitolconnection.net/capcon/ferc/ferc.htm

Compliance Enforcement Initiative Update

Jacob Phillips, Enforcement Attorney

As described in the September/October Midwest Reliability Matters newsletter, NERC announced the Compliance Enforcement Initiative on August 3, 2011. Since then, MRO has processed 63 remediated issues using the Find, Fix, & Track (FFT) process. MRO processed 24 FFT remediated issues in September, 9 FFT remediated issues in October, 11 FFT remediated issues in November, and 19 FFT remediated issues in December.

NERC and the Regions have filed a total of 325 FFT remediated issues with FERC, and MRO has accounted for almost 20% of those remediated issues.

In NERC's filing on September 30, 2011, NERC committed to report back to FERC and industry stakeholders at six months and one year on experience gained and the results from implementation of the new mechanisms and tools. FERC has not yet issued an order in response to the new FFT process included in NERC's Compliance Enforcement Initiative filing; we anticipate a response from FERC within the next few months.

MRO continues to strongly support the Compliance Enforcement Initiative. We believe that addressing compliance issues according to their significance and risk to the Bulk Power System is critical to our ultimate goals - mitigating risk and improving reliability.

If you have any questions about the FFT process, please contact *Jacob Phillips* at 651-855-1758.

Lessons Learned from Enforcement Staff

Jacob Phillips, Enforcement Attorney

Concurrent with the release of this Newsletter, MRO Enforcement staff posted a fourth quarter update to the Case Notes and Dismissal Notes documents. The Case Notes and Dismissal Notes documents can be found at the following link: http://www.midwestreliability.org/compliance.html. Case Notes include violation descriptions and mitigation efforts for those Mitigation Plans accepted by MRO in the fourth quarter of 2011.

Dismissal Notes describe the underlying facts and subsequent basis for dismissal for cases in the fourth quarter of 2011. Once again, the MRO Compliance Committee assisted in the development of these documents and provided valuable feedback. MRO staff updates these documents on a quarterly basis, so please check back regularly. For questions regarding the Case Notes or Dismissal Notes, please contact *Sara Patrick*, Vice President of Regulatory Affairs and Enforcement at 651-855-1708.

NERC 2011 Long Term Reliability Assessment

By Salva Andiappan

The NERC 2011 Long Term Reliability Assessment is now available on the NERC website. This report provides an independent review of the reliability of the North American electric system and identifies trends, emerging issues, and potential concerns including those specific to each of the NERC Regions.

Highlights of the NERC 2011 Long Term Reliability Assessment include:

- A decrease in projected Future and Conceptual generation resources lead to declining Planning Reserve Margins in some areas—resource adequacy in Texas shows signs of concern; however, most areas appear to have adequate resource plans to meet projected peak demands.
- Existing and proposed environmental regulations in the U.S. may significantly affect bulk power system reliability depending on the scope and timing of the rule implementation and the mechanisms in place to preserve reliability.
- The growing dependence on natural gas as a primary fuel source of on-peak capacity must be considered in planning; operational measures must be in place to minimize interdependency risks particularly during off-peak periods as more gas-fired generation is expected to provide base-load functions.
- Significant growth in wind and solar generation continues to be projected, surpassing the NERC-wide on-peak capacity forecasts of all other types of generations. Tools, training, and transmission remain key to successful planning and operations for variable resources.

2011 Long Term Reliability Assessment Area

- Significant increases in Demand Side Management continue to offset future resource needs, while dispatchable and controllable types expand flexibility for operators.
- Transmission growth is responding to increased plans for integrating and delivering new resources (i.e., renewable); constructed transmission is on pace with projections.

In addition, NERC has identified a number of significant emerging reliability issues that that could be challenging for the electric industry during the next ten years. The most frequently cited emerging issue pertains to the integration of variable generation assets into the bulk power system. Based upon the most recent risk assessment performed by NERC, the Rules and proposed Regulations from the United States Environmental Protection Agency have also shown to have a high-likelihood and high consequence impact on the reliability of the bulk power system if the introduction of the regulations is not strategically managed. Other potential reliability issues include the operation of variable generation, critical infrastructure protection, integration of variable generation (planning), system modeling improvement and coordination, and increased gas generation to support variable generation.

NERC 2011/2012 Winter Assessment

By Dan Jesberg

The NERC 2011/2012 Winter Assessment is now available on the NERC website. Highlights include:

- Generation resources and transmission assets are forecast to be adequate to meet the projected winter season demand.
- Ongoing climate patterns (i.e. La Nina) are expected to contribute to below average temperatures and above average precipitation in the northern regions of North America and above average temperatures and below average precipitation in the southwestern region of United States.
- Overall operational conditions, including variable resource operations, appear adequate to address forecast conditions during the 2011/2012 winter season.

The NERC 2011/2012 Winter Assessment, as well as other NERC assessments, can be found on the

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NERC website under Assessments and Trends.

Power System Modeling ("Modeling 101")

By Dan Schoenecker

Accurate power system models are critical to both predicting and analyzing the performance of the Bulk Electric System (BES). There are two types of computer models, power flow or steady-state models and dynamic models. The following describes the types of models and identifies the related NERC Standards.

Power Flow or **Steady-State** computer models contain data representing generators, loads, transmission lines, transformers and reactive support equipment. Only equipment having an impact on the BES is included in the power flow models discussed here; sub-transmission (<100kV) representation is very limited and there is no distribution level equipment modeled.

Power flow models can be used to determine how the BES will serve the load with various changes to topology and how it will react to future generation or transmission additions. A number of study methods including contingency analysis and transfer analysis are used to review system performance under different outage or power transfer conditions. Specific power flow models representing different system topology, different years or seasons in the future and different dispatch and import/export levels are developed and saved. One of these models can then be chosen to study a particular day or topology. Models that represent the system one year or more in the future are considered to be "planning" models, whereas models that represent less than one year are considered present system conditions and are therefore "operating" models.

Dynamic or **Stability** models augment the data contained in the power flow or steady-state models to allow short term (less than a minute) simulation of the dynamic or time-varying aspects of the BES. Data representing the dynamic characteristics of generators and other types of equipment must be collected from the equipment owners, assembled, and tested to ensure a smooth simulation that responds reasonably to a test stimulus such as a fault.

Related NERC Standards:

MOD-010-0 and MOD-012-0 require Transmission Owners (TOs), Transmission Planners (TPs), Generator Owners (GOs) and Resource Planners (RPs) to provide steady-state (010) and dynamic (012) modeling data to the Regional Reliability Organization (RRO) in compliance with the requirements and procedures defined in MOD-011-0 and MOD-013-0. MOD-010-0 and MOD-012-0 are regulatory approved standards.

MOD-011-0 and MOD-013-0 require RROs to develop steady-state (011) and dynamic (013) data requirements and reporting procedures to model and analyze system conditions and behavior in an Interconnection. RROs within an Interconnection are required to coordinate requirements and procedures and must include specific requirements listed in the MOD standards**.** MOD-011-0 and MOD-013-0 are currently characterized as "fill-in-the-blank" standards.

For the Eastern Interconnection, the modeling data requirements required by MOD-011-0 and MOD-013-0 are developed by the Eastern Interconnection Reliability Assessment Group (ERAG) Multi-Regional Modeling Working Group (MMWG). The MMWG maintains a Procedural Manual that contains detailed requirements for steady-state and dynamic modeling. The MMWG Procedural Manual and Schedule can be found at: http://erag.info/MMWG.aspx

The MRO Model Building Subcommittee maintains a manual that contains all of the requirements from the MMWG Procedural Manual as well as some additional requirements that apply only to the MRO regional footprint. The MRO Model Building Procedural Manual and Schedule can be found on our website.

Power System Modeling Improvement

By Adam Flink

The accuracy and quality of power flow and dynamic models of the Bulk Electric System (BES) have recently drawn much attention from the industry. It has become clear that the planning for an increasingly reliable electric system depends heavily on the use of robust models that can be trusted to produce simulation results that match actual system response. MRO is committed to the ongoing improvement of model accuracy and quality and is working with the other five Regional Entities of the Eastern Interconnection Reliability Assessment Group (ERAG) to develop new processes and tools to ensure that the regional and interconnection model quality is sufficient to meet the needs of the industry.

Over the past few years, the ERAG Multi-Regional Modeling Working Group (MMWG) has contracted the development and operation of a set of data-

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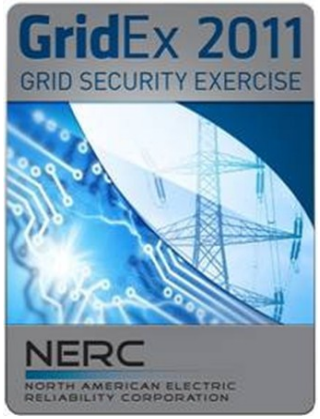
bases which are designed to provide the structure necessary to compile modeling data from each Region and perform data checks to ensure robust models.

- The Power Flow Database (PFDB) is designed to merge power flow cases from each region while carefully tracking and documenting the regional borders and the power flows across them. The PFDB also performs an extensive set of checks on the data to identify any data errors that could make the models difficult to use. These errors are reported back to the owner of the equipment so that the best possible solution and/or corrections can be provided.
- The System Dynamics Database (SDDB) is designed to maintain a set of working dynamic models that remain in the database from one year to year. Only changes to this data such as physical equipment modifications or new equipment are to be made rather than a bulk upload of new data each year. This prevents erroneous data from re-entering the models and maintains a more continuous set of data from series to series. Some checks are performed in the database to identify incompatibilities between power flow and dynamics data. The MMWG is currently developing an additional set of dynamics data checks to identify unreasonable data.

Efforts are also being made by both the NERC Model Validation Task Force (MVTF) and the ERAG to validate models by comparing simulation results to actual system events. Results from such comparisons will help to identify model data issues that have not yet been addressed.

Model Building Data Representatives who participate in the MRO regional model building process have already seen some of the effects of the movement towards higher quality models over the past couple of years. Their efforts are greatly appreciated and we hope to have their continued cooperation and support as we move forward to meet our goals of accurate, high-quality models.

COMPLIANCE REPORT



A Report on NERC's November Grid Security Exercise

Steen Fjalstad, CIP Audit Manager

Former chief security officer for NERC Mark Weatherford introduced GridEx 2011 stating "GridEx 2011 will involve bulk power system owners and operators from across North America. This large-scale security exercise will continue our forward momentum in securing the grid by allowing NERC and the industry to identify any gaps and to better focus our resources."

NERC held the exercise over a two-day period in mid-November 2011. "GridEx 2011" simulated a cyber-attack on the nation's Bulk Electric System (BES) and began with a message that read, "Energy Management System (EMS) network operators detect system performance slow-down and sluggishness. Router, Intrusion Detection System (IDS) and firewall statistics show that there is a higher level of Transmission Control Protocol/ Internet Protocol (TCP/IP) retries and loss of bandwidth on connections to the Inter-Control Center Communications Protocol (ICCP) servers." The exercise ended with a message that read, "Combination of Anti-Virus (AV) signatures, mitigation efforts and manual operations enables relative grid reliability but with significant inefficiencies. Reliable operation of the grid is achieved but is fragile." During the exercise there were three different scenarios including thirty-five messages sent to participants simulating various impacts the cyber-attack was having on the BES.

The most important take away from this exercise is that there was never mention of Assets or Critical Cyber Assets among the three GridEx 2011 scenarios or the thirty-five event messages that were sent. This real world simulation clearly points out that vulnerabilities and cyber-attacks on the BES make no distinction between what is and is not deemed "critical." Cyber-attacks may affect cyber systems regardless of their criticality classification. Please continue to bear this in mind when you are securing your Control Center, Energy Management Systems (EMS), Supervisory Control and Data Acquisition (SCADA), and other cyber assets that may impact the BES.

Please contact MCO@midwestreliability.org if you would like to obtain copies of any NERC information from the GridEx 2011 exercise.

Will Smith, Manager of Standards & Program Performance

Leveraging Stakeholder Expertise

2011 was a very engaging year for stakeholders in the MRO region, and MRO would like thank all who volunteered their time to participate on MRO organizational groups (committees, subcommittees, working groups or subject matter expert teams) or represented MRO on NERC committees. MRO appreciates the volunteers' hard work and dedication, and believes it is making a difference in the industry.

In 2012, there are many opportunities to improve upon and continue the stakeholders' efforts from last year. And, it is of the utmost importance that MRO and stakeholders continue their efforts in implementing initiatives that bring clarity on the application of Reliability Standards and on-going assurance of compliance through strong procedures and internal controls. Accomplishing this goal is possible with stakeholders' engagement, diligence, guidance and influence for improving current processes and Reliability Standards. Make a difference, consider volunteering on a MRO standards subject matter expert team, MRO's NERC Standards Review Forum (NSRF), NERC's Standards Drafting team or the Quality Review of Standards.

A significant number of standards development projects are scheduled for development and implementation in 2012. For more information on upcoming NERC projects, please reference the 2012-2014 Reliability Standards Development Plan on NERC's website. For information about participating on MRO organizational groups (committees, subcommittees, working groups or subject matter expert teams) or to represent MRO on NERC committees, please email *Jennifer Matz*.

Accelerate the Development and Implementation of Application Guides

One of MRO's top initiatives is to leverage the technical expertise of stakeholders to develop additional standard application guides. Since 2010, the MRO Standards Committee (SC) has identified pools of Subject Matter Experts (SME) from industry stakeholders within the MRO region to assist in the development of application guidance for existing, new or emerging Standards. The objective of the SME teams is to provide training and non-binding guidance to industry stakeholders regarding the effective application and the types of evidence required to demonstrate compliance with NERC Reliability Standards.

Year-to-date, three standard application guides have been created. The clarity provided by the application guides has resulted in a significant decrease in the number of violations discovered during a compliance audit and the application guides are receiving national recognition. Therefore, in order to maintain momentum and continually progress, the SC has requested that the SME teams accelerate the development and implementation of application guidance.

Historically, it has taken a SME team a significant amount of time to develop an application guide for a specific Standard. In 2012, the identified pool of SMEs will develop application guides utilizing an accelerated process for an entire suite of Reliability Standards. The goal for developing application guidance will remain the same; however, this approach will provide greater efficiency.

When the SME team meets to develop their specific application guide, the MRO SC asks that each team member have either a hardcopy or electronic access of his/her company's internal controls and procedures. (*Option: The "Reliability Risk Matrix" template that was developed by the Performance and Risk Oversight Committee is an excellent tool for use by SME team members. For those stakeholders that haven't implemented the "Reliability Risk Matrix," this would be a good opportunity for the SME team member to identify and document key processes and outcomes of entity specific ICP within the template.*)

The accelerated process requires the SME team to use the following steps:

- Each team member utilizes his/her company's ICP documentation to identify key processes and outcomes used to demonstrate compliance with the NERC Reliability Standard and its associated requirements.
- Through discussion, the SME team will identify and document the commonly shared processes and outcomes for meeting compliance for a requirement.
- Through discussion, the SME team will identify, document and provide examples (where applicable) of the commonly shared types of evidence that would be considered sufficient for demonstrating compliance with the NERC Reliability Standards and its associated requirements.

The SC is soliciting stakeholders in the MRO region for SMEs interested in participating on a SME team to develop application guidance for the following **SUITE OF STANDARDS:** Emergency Preparedness and Operations (EOP); Protection and Control (PRC); and Transmission Operations (TOP). If you would like to volunteer your technical expertise, and become a SME team member, please fill out a nomination form and send it to *Jennifer Matz* by **January 27, 2012**.

TIPS and Lessons Learned

The following Tips and Lessons Learned have been compiled by MRO staff during the conduct of compliance audits, mitigation plan reviews, enforcement actions, and event analysis. If you would like clarification on a particular topic, please contact jr.mitchell@midwestreliability.org.

Submitting Technical Feasibility Exceptions
Things You May Want to Consider

Thomas P. Tierney, CISSP, CISA, CRISC
MRO CIP Audit Specialist

Expiration Dates of TFE Requests

Appendix 4D to the Compliance Monitoring and Enforcement Program details the process for submitting Technical Feasibility Exception (TFE) requests. According to Section 4.3.2(9), Registered Entities must commit to submitting quarterly reports to MRO describing progress (i) in implementing the proposed compensating measures and/or mitigating measures, and (ii) towards achieving Strict Compliance with the Applicable Requirement.

However, for those TFE requests that expire more than one year from the date the TFE request is submitted, or for those TFE requests that the Registered Entity contends should have no expiration date, Registered Entities must commit to submitting annual reports to MRO on the continued need for and justification for the TFE. (See Section 4.3.2 (10). Upon approval of a TFE request, the process for reporting on a quarterly or annual basis is further detailed in Section 6. Given the differing reporting requirements and the scheduling of milestone dates typically outside of a Compliance Department's control, MRO suggests that Registered Entities carefully consider the appropriateness of any established expiration dates.

Self Reporting for Late Submitted TFE Requests

Pursuant to NERC Compliance Process Bulletins #2009-007 and #2010-001, Registered Entities were required to submit TFE Requests within established submittal dates. While MRO received many TFE Requests within the established submittal dates, several TFE Requests were submitted after the established deadline had passed.

TFE Requests submitted after the deadline for devices that were not newly subject to CIP compliance were considered "late submittals." At the time of their submission, it was not clear whether the ERO would consider the late submittals violations subject to enforcement.. This issue has been resolved; a late submittal is subject to enforcement. Therefore, in December 2011, MRO began processing late TFE Requests under the newly implemented Find Fix Track and Report (FFT) Process.

In the future, if a Registered Entity submits a late TRE Request, the Registered Entity should also submit a corresponding Self Report using the webCDMS application.

Amending TFE Requests for Additional Devices

The process for amending a pending or an approved TFE is covered in Section 7.0 of Appendix 4D to the Compliance Monitoring and Enforcement Program. According to Section 7.2.1, Registered Entities "may submit an amendment to an approved TFE for the purpose of requesting revision to any of the requirements specified in the approved TFE." MRO has noted several instances where Registered Entities have submitted multiple TFE Requests for the same Standard/Requirement with substantially similar compensating measures. Many times, these TFE Requests are submitted after the Registered Entity already has an approved TFE in place and has identified additional devices subject to CIP compliance. When the TFE Requests are for the same Standard/Requirement, relate to the same concern (e.g. malware or antivirus not available), and the compensating measures are substantially similar, MRO recommends that Registered Entities amend the existing approved TFE, rather than submit multiple related TFEs.

If you have questions about these considerations, please contact *Tom Tierney* at 651-855-1745.

Department of Energy Developing Project to Reinforce Grid Cybersecurity

January 5, 2012. The U.S. Department of Energy announced what it calls an *Electric Sector Cybersecurity Risk Management Maturity* project that will let utility companies and grid operators measure their current capabilities and analyze gaps in their cyber defenses. Maturity models, the DOE stated, rely on best practices to identify an organization's strengths and weaknesses, are widely used by other sectors to improve performance, efficiency and quality.

The initiative, which will involve officials from the Energy Department, the White House, the Department of Homeland Security and key utility companies will over the next several months draft a maturity model that can be used throughout the electric sector. More than a dozen electric utilities and grid operators are expected to participate in the pilot program to test the model, assess its effectiveness and validate results. Read more...

NERC to Conduct Survey on New FFT Process

NERC will be conducting s survey of the Registered Entities regarding the FFT Process from ***January 16, 2012*** *through* ***January 30, 2012***. The purpose of this survey is to gather information on the performance of the FFT program to assist NERC and the Regions in identifying opportunities for improvement to ensure the continued success of the program, and to aid in preparation for NERC's six month status report to the Commission and industry stakeholders.

FERC/NARUC Forum on Reliability Issues and Environmental Rules

January 4, 2012. FERC announced a joint federal and state Forum to explore reliability issues stemming from new and pending environmental rules for the power sector. The Forum, consisting of membership from the Federal Energy Regulatory Commission (FERC) and the National Association of Regulatory Utility Commissioners (NARUC), will coincide with NARUC's three yearly meetings. The first meeting of the FERC-NARUC Forum on Reliability and the Environment will take place February 7, 2012, during the NARUC Winter Committee Meetings in Washington. FERC Commissioners Cheryl LaFleur and Philip Moeller will be the Federal co-chairs of the workshops, and NARUC First Vice President Philip Jones of Washington and Treasurer David Ziegner of Indiana will be the State co-chairs. MRO staff will attend the Forum and provide a written summary for our Registered Entities. An announcement will be made when the written summary is available.

WEBINAR: Request for Data or Information (Response to Order 754)

January 20, 2012 | 11a.m.–1p.m. ET

NERC's Request for Data or Information was posted for comment on December 22, 2011 concerning the study of single point of failure on protection systems. This 45-day industry review as permitted by the NERC Rules of Procedure, Section 1600 allows industry stakeholders to provide comments for consideration prior to requesting NERC Board of Trustees approval in March 2012. This webinar is being provided to interested stakeholders, which missed the previous offering or just want an additional opportunity to ask questions.

Click here for Registration for Friday, January 20, 2012.

Click here for Order 754 Project Page

WORKSHOP: NERC-led Industrial Controls Cybersecurity Workshop

WASHINGTON, DC – NERC is conducting its second workshop on industrial control systems cybersecurity on January 28, 2012, in Lake Buena Vista, Fla. The workshop – From Exposure to Closure, Act II – is part of the 2012 North American SCADA and Process Control Summit sponsored by SANS, which takes place from January 21-29. Tim Roxey, director of Electricity Sector Information Sharing and Analysis Center at NERC, will lead the workshop. Read more here or, to register, click here.

Related Links:

Department of Energy

Federal Energy Regulatory Commission

North American Electric Reliability Corporation

Follow the below links for Tips, Lessons Learned and Publications in other Regions:

Florida Reliability Coordinating Council (FRCC)

SERC Reliability Corporation (SERC)

Texas Regional Entity (Texas RE)

Reliability*First* (RFC)

Western Electricity Coordinating Council (WECC)

Southwest Power Pool Regional Entity (SPP RE)

Northeast Power Coordinating Council (NPCC)

ADMINISTRATION MATTERS

Jessica Mitchell, Office Manager

MRO 2011 Satisfaction Survey Results

Annually, MRO asks its Registered Entities to provide feedback on the organization's performance; the quality of service, communication, leadership, training and education, and MRO's overall effectiveness as a Regional Entity.

The results of this survey are used primarily to benchmark MRO's year over year performance related to stakeholder satisfaction, as well as to identify areas for improvement and training and education opportunities.

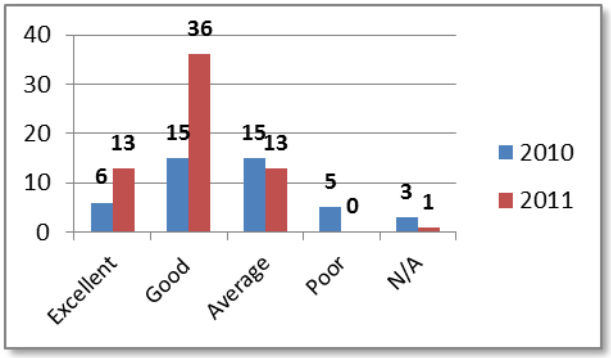
Survey respondents are asked to rate MRO on a 5 point scale of "Excellent, Good, Average, Poor and Not Applicable," and to provide qualitative comments. The survey is conducted anonymously so participants can be open and honest in their responses, thus deriving measurable and actionable results.

The primary purpose of the annual survey is to provide a basis for performance improvements using candid feedback from stakeholders, as well as to provide future performance metrics. MRO first performed the Annual Satisfaction Survey in 2010, providing a benchmark for the 2011 survey.

The 2011 Performance Survey was issued in October to all 125 Registered Entities in the MRO Region, and had a 50% response rate (up from 36% in 2010). Overall, the survey results show an improvement over 2010 in all areas measured. On a scale of 1 to 5, MRO maintains an average rating of 4 out of 5.

For example, when asked about the quality of service provided by MRO staff, 88.9 percent of 2011 respondents rated MRO as "good or excellent", compared to 71.1 percent in 2010.

Another area showing a large improvement over 2010 was *communications*. Respondents were asked to rate how well MRO does in sharing lessons learned from compliance audits, disturbance events, and enforcement matters, as well as providing information to entities to assist with their compliance with regulatory requirements. 77.7 percent of respondents gave MRO a "good or excellent" rating, compared to 47.7 percent in 2010.



The most notable improvement in 2011 was the drop in "Poor" ratings; Zero in 2011 compared to 11 in 2010.

MRO would like to thank those individuals who took the time to complete the 2011 Satisfaction Survey. A summary of the survey results can be found on MRO's website.

NERC Information and Lessons Learned

Spare Equipment Database under Development

NERC, through the Spare Equipment Database Task Force, announced the development of a ***spare equipment database*** that allows the industry to track spare long-lead time transformers.

NERC Case Notes

NERC now has 89 ***Case Notes*** posted on their website. The Case Notes are based, in whole or in part, on information contained in mitigation plans that have been accepted by Regional Entities and approved by NERC.

NERC posts webinars on their online Resource Center

NERC's ***Resource Center*** makes educational products available to Regional Entities, industry participants, and regulators that are designed to provide the industry with the basic foundations, from the NERC perspective, to improve reliability performance, as well as assist in the development of their own, internal programs.

NERC announces ERO Best Practices from Event Analysis

ERO Best Practices are publications that highlight selected registered entity practices that are recognized by NERC as unique and add significant reliability benefit. Best Practices allow other entities to leverage that information to the benefit of Bulk Power System (BPS) reliability.

For more...www. NERC.com

MRO GOVERNANCE

Jessica Mitchell, Assistant Corporate Secretary

The MRO Board of Directors met on December 15, 2011, for the Annual Member and Board of Directors meeting in Bloomington, Minnesota. Meeting highlights and minutes can be found on MRO's website. Significant action items from the meeting include the board's approval of revisions to certain MRO Policies and Procedures and the MRO Bylaws. The revised bylaws will be presented to the MRO Membership for approval in January.

Also at the meeting, the board elected ***Mr. Jeff Gust, MidAmerican Energy Company***, to serve as board chair and ***Ms. Teresa Mogensen, Xcel Energy***, to serve as board vice-chair in 2012. Chair Tymofichuk and President Skaar presented retiring board member Doug Curry (Lincoln Electric System) and departing board member Andrea Stomberg (Montana Dakota Utilities) with plaques and resolutions thanking them for their years of service and contributions to the MRO Board and the electric utility industry.

The following board members were elected by the industry sectors to serve three year terms ending December, 2014. (A current board roster can be found on MRO'S website.)

- ***Chris Fleege,*** *Minnesota Power, (Investor Owned Utility <3,000 mW)*
- ***Larry Koshire****, Rochester Public Utilities, (Municipal Utility)*
- ***Elizabeth Howell****, ITC Holdings, (Transmission System Operator)*
- ***John McKenzie****, Saskatchewan Power, (Canadian Utility)*
- ***Mike Rowe****, American Transmission Co. (Transmission System Operator)*
- ***Teresa Mogensen****, Xcel Energy, (Investor Owned Utility >3,000 mW)*

Also, please note that board accepted the resignation of Ellen Oswald (Edison Mission Marketing and Trading), therefore the Generator and/or Power Marketer (GPM) Sector has a open seat on the MRO Board of Directors. A solicitation for nominations was sent to the GPM Sector on January 3, 2012, with a deadline of **January 20, 2012**. If you're a member of the GPM Sector and would like to nominate a senior-level executive or officer from your organization, please contact *Jessie Mitchell* at 651-855-1733.

The first board meeting of 2012 is scheduled for **Thursday, March 29, 2011**, at a location yet to be determined. Board meetings are open to the public and MRO staff and the board encourage your attendance.

MRO BOARD SPOTLIGHT: KEN GOLDSMITH

Ken Goldsmith joined Alliant Energy in 1979 as an Electrical Engineer. He was promoted to Supervisor - Electrical Engineering in 1985, to Manager - System Control Center in 1994, and to Project Manager in 1999. In 2004, Goldsmith was named to his current position of Manager - NERC Compliance. In this role, he became involved in all aspects of engineering projects at the company's 20+ generating stations, management of System Operations, and corporate strategic projects.

Goldsmith is a native of rural Iowa. He earned a Bachelor's Degree in Electrical Engineering from Iowa State University in 1975, attended the Energy Services Executive Program at the University of Michigan in 1996, and is a registered Professional Engineer in the state of Iowa.

Prior to joining Alliant Energy, Goldsmith spent four years at Burns & McDonnell Engineering in Kansas City, MO working on the design and construction of coal -fired generating stations.

Goldsmith joined the MRO Board in 2009 and serves on the MRO Dispute Resolution Committee and as an Alternate on the MRO Hearing Body that reviews and approves all settlement agreements related to NERC Reliability Standard violations.

On an industry level, Goldsmith is also a member of the EEI Reliability Executive Advisory Committee (REAC) and the National Energy Compliance Forum (NECF). On a personal note, Ken is an avid trap shooter, and enjoys spending time outdoors and with his grandchildren.

Annual Implementation Plan Update

Russ Mountjoy, Compliance Audit Manager

The 2011 Implementation Plan was completed on schedule; MRO conducted 18 compliance audits (7 BA/TOP/RC and 11 non-BA/TOP/RC entities) and spot checks for 8 Registered Entities. NERC approved MRO's 2012 Implementation Plan on October 31, 2011. MRO has scheduled 18 audits (10 BA/TOP/RC and 8 non-BA/TOP/RC entities) for 2012. MRO continues work to identify and develop the framework for a more robust compliance program. MRO's key initiative is to develop a program that assists Registered Entities in developing and implementing a compliance program that identifies and documents the controls used to continuously measure performance as required by the Reliability Standards.

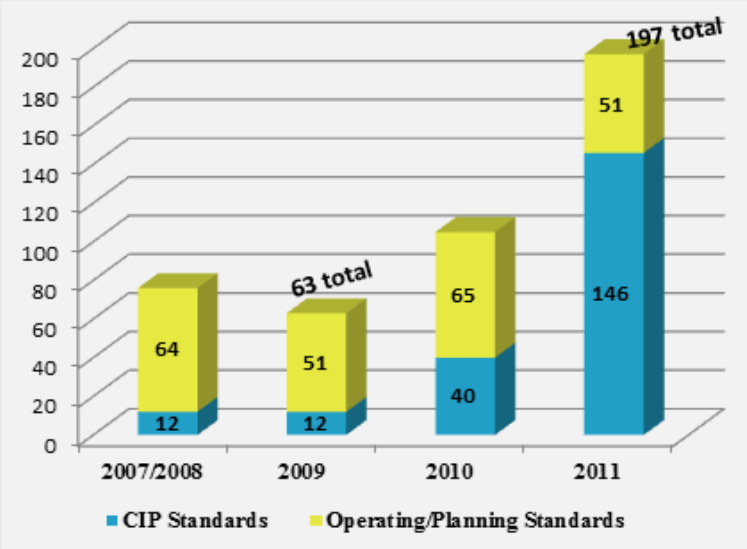
MRO's November 2011 CMEP report stated that a risk-based Registered Entity assessment is being developed by NERC and the Regional Entities in order to determine each Registered Entity's risk to the Bulk Power System (BPS). Since the November report, NERC changed its development timeline and will not complete the assessment by the end of 2011 as originally planned. NERC is now working with Registered Entities to develop this assessment and targets implementation in 2013. MRO staff is hopeful we will be able to blend in the work from the PROS with the NERC effort. While MRO staff expected a more significant change to the 2012 Implementation Plan as a result of this work, NERC and Regional Entities believed that the best course was to maintain the implementation plan similar to 2011 until the work was fully vetted.

In the interim, MRO plans to audit Tier 1 requirements for each registered entity to determine if the scope of the audit will increase. The scope may increase due to past enforcement activities, if a Registered Entity has not been audited in the past, or for other reasons as determined by MRO staff. In general, the audit scope will be included in the audit notification letters sent to Registered Entities at least 90 days prior to the audit; however, MRO reserves the right to change the audit scope at any time depending on the circumstances. The bottom line is that MRO staff will continue to monitor compliance with those standards and requirements which have been determined to be most critical to the reliability of the BPS.

(Continued on page 15)

Reliability Standards Violation Statistics

Number of Possible Violations in the MRO Region Reported to NERC



Standards Most Frequently Violated (the numbers below do not include dismissals)

Standards Most Frequently Violated		Frequency	% to Total
PRC-005	Trans. and Gen. System Maint. and Testing	66	19%
CIP-007	Cyber Security--Systems Security Management	64	18%
CIP-004	Cyber Security-Personnel and Training	42	12%
PRC-008	Implementation and Documentation of UFLS Equip. Maintenance Program	25	7%
CIP-005	Cyber Security-Electronic Security Perimeter(s)	22	6%
CIP-006	Cyber Security — Physical Security of Critical Cyber Assets	21	6%
CIP-001	Sabotage Reporting	16	5%

Call **Russ Mountjoy** at **651.855.1754** if you have any questions.

Annual Self-Certification Update

The 2011 Annual Self Certification is complete.

Education and Training

On December 14, 2011, MRO held its annual Compliance and Enforcement Workshop, which was well attended. The focus of the workshop was on MRO's initiatives to leverage stakeholder expertise in developing tools that Registered Entities could use to strengthen their compliance programs. Stakeholder groups consisting of subject matter experts from Registered Entities within the MRO region developed these tools.

MRO staff recognized the commitment and growth of Registered Entities' compliance programs since the implementation of mandatory reliability standards in June 2007. During this time, the number of Registered Entities in the MRO region has increased by nearly 500%. MRO staff has observed the dedication of Registered Entities in monitoring their own compliance by implementing new policies, procedures and tools which manage risk and detect possible reliability issues.

A key highlight of the workshop was the Performance Risk and Oversight Subcommittee (PROS) presentation given by PROS Chair, Mr. Joe DePoorter from Madison Gas and Electric. Mr. DePoorter discussed the PROS' purpose and objectives, and provided an overview of the organizational tool called the *Compliance Risk Matrix* the PROS developed to assist Registered Entities with organizing and managing their internal control activities more effectively.

Mr. DePoorter's presentation, "Mitigating Risk with Internal Controls," can also be found on MRO's website.

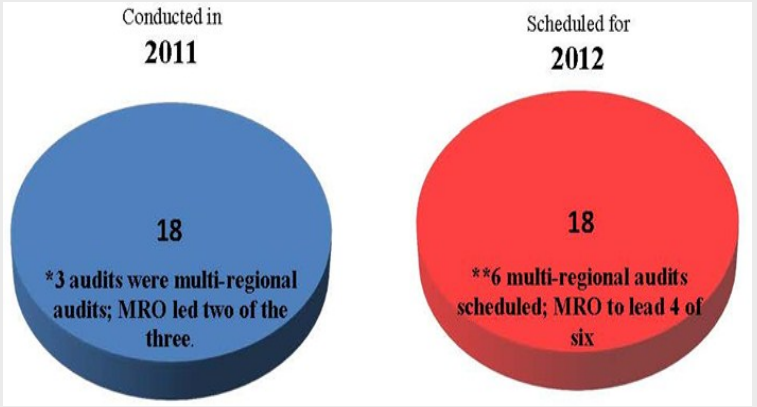
Although MRO staff cannot require the implementation of internal controls, Mr. DePoorter identified the following reasons for implementing such controls:

- Reduces the burden of preparing for an audit
- Mitigates financial risk of sanctions and penalties
- Provides Registered Entities with real-time feedback on department status
- Meets regulatory guidance and general good governance that encourages internal controls

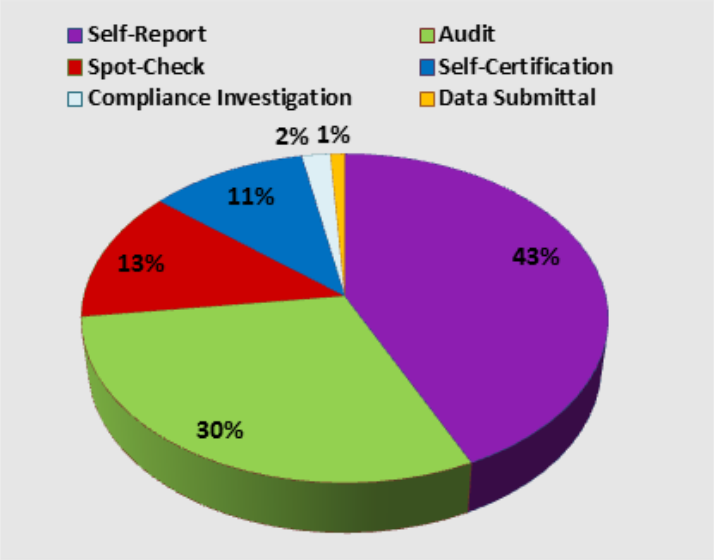
MRO utilizes a balanced stakeholder Standards Committee ("SC") to educate stakeholders about the application of Reliability Standards. The SC identifies pools of Subject Matter Experts ("SME") from industry stakeholders within the MRO region to assist in the development of application guides for existing, new or emerging Reliability Standards. For example, the PER

(Continued on page 16)

Compliance Audit Status



Comparison by Discovery Method (June 18, 2007 through December 30, 2011)



**Note: Numbers above, do not include possible violations that*

SME team presented their application guidance for Standard PER-005 at the Mid-Continent Compliance Forum meeting on December 15, 2011.

Thus far, SME teams have developed application guides for Critical Infrastructure Protection Standards CIP-002 through CIP-009 (version 3), Personnel Performance, Training and Qualification standard PER-005, and Protection and Control Standards PRC-005-1 and PRC-008-0. Other Application Guides are under development.

For more information on Application Guidance, please visit MRO's website at:
http://www.midwestreliability.org/STA_standards_committee_sme.html.

Presentations from the workshop can be found at http://www.midwestreliability.org/events_4.html

Key Enforcement Matters

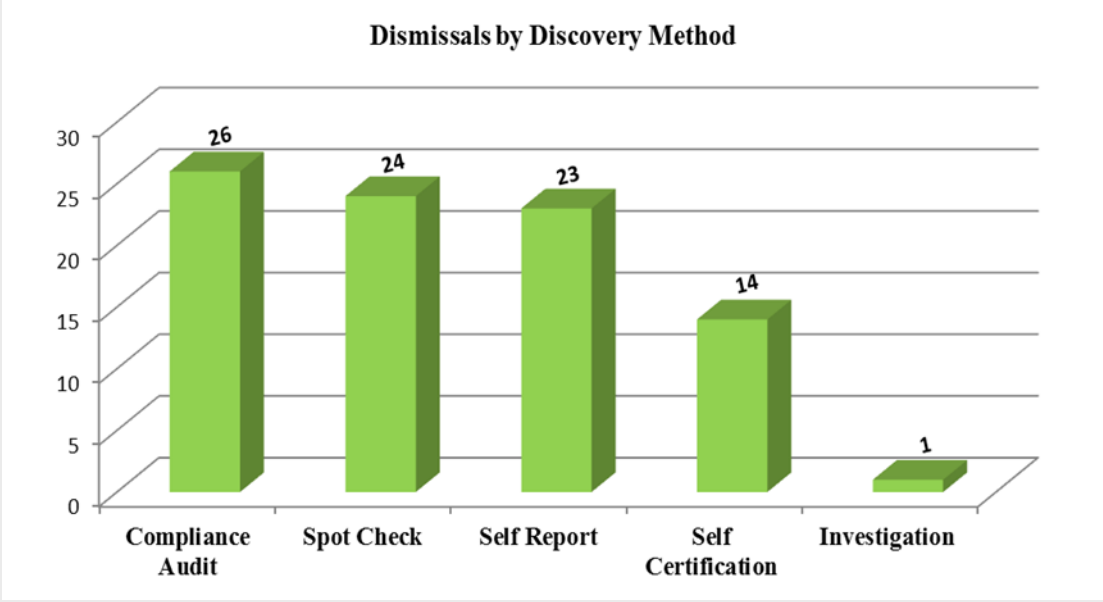
With the implementation of the Find Fix Track and Report (FFT) process, MRO staff will be more focused on enforcement actions related to possible violations which pose a higher risk to reliability of the bulk electric system. Focusing resources on the higher risk concerns will better ensure that violations are thoroughly mitigated in a timely manner, thereby improving reliability of the bulk electric system.

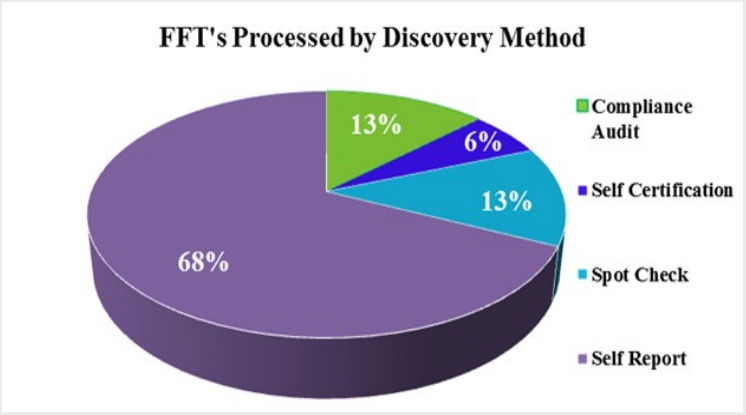
MRO issued FFT Reports for 19 remediated issues filed with the Commission on December 30, 2011. Combined with the 24 remediated issues included in the initial FFT filing submitted on September 30, 2011, 9 remediated issues filed on October 31, 2011, and 11 filed on November 30, 2011 these remediated issues represent 26% of the violations reported by MRO in 2010 and 14% of the violations reported by MRO in 2011.

(Continued on page 17)

Comparison by Discovery Method (June 18, 2007 through October 31, 2011)

Discovery Method Detail	June 18–Dec 2007	2008	2009	2010	2011	Sub Total	(-less) Dismissed	Total
Self- Certification	33	2	11	2	4	52	14	38
Self-Report	9	19	12	44	90	174	23	151
Compliance Audit	3	9	36	35	51	134	26	108
Compliance Investigation	0	0	0	0	10	10	1	9
Data Submittal	1	0	0	0	0	1	0	1
Spot-Check	0	0	4	24	42	70	24	46
Totals	46	30	63	105	197	441	88	353





Status of Alleged and Confirmed Violations Process

Status of Alleged & Confirmed Violations Process (Backlog)	Total (1)	%
Total Number of Alleged Violations	441	100%
Less: Number of Dismissals	88	20%
Less: Number of Violations Awaiting NOP	3	1%
Less: Number of Violations Processed (2)	202	46%
Number of Violations Outstanding(3)	148	33%
Total Completed	**290**	**66%**

1. Numbers are a cumulative total
2. Accepted or approved by applicable regulator, includes NOCV's, settlements, and exceptions.
3. Includes both alleged and confirmed violations yet to be processed and approved by applicable regulator (441 less 88 (Dismissed) less 202 (accepted and/or approved by regulator) less 3 (viols awaiting NOP) =148)

Status of Mitigation Plans

Mitigation Plans	
Number of Violations with Mitigation Plans	224
Number of Violations with Completed Mitigation Plans (validated by MRO staff)	195
Number of Violations with Outstanding Mitigation Plans to be Completed by the Registered Entity	29
Number of Late Mitigation Plans	0
Number of Violations with Mitigation Plans to be Submitted and Accepted by MRO	126

Questions?

Past Compliance Monitoring and Enforcement Reports can be found on MRO's website at:

http://www.midwestreliability.org/COMP_cmep_updates.html?cid=2|20

For question on this report, or any other compliance, mitigation, or enforcement matter, please contact:

MRO Compliance can be reached at **mco@midwestreliability.org**

MRO Enforcement can be reached at **enforcement@midwestreliability.org**

MRO Mitigation can be reached at **mitigation@midwestreliability.org**

{Quote of the Month}

"What is the distance between someone who achieves their goals consistently and those who spend their lives and careers merely following? The extra mile. Do more than is required."

- Gary Ryan Blair

Sue Clarke, VP Finance and Administration

2011 Year to Date Financials

MRO staff estimates that it will be slightly below budget at year end 2011. MRO terminated its current building lease and finalized negotiations for a new lease. The move will address current building issues and result in meeting cost saving measures. While, the lease termination triggered acceleration of amortization and depreciation costs in 2011, it did not impact funding and the overages in these areas were offset by underages in other areas. New asset purchases will be reduced by the reuse and resell of current furniture and fixtures. Reuse of existing fixtures at the new facility will reduce build out costs in 2012.

2012 Business Plan and Budget

The increase from 2011 to 2012 budget is a single digit increase at 7.86%; funding (revenues to be collected) will increase by 3.15% due to a working capital "pick-up". The headcount in 2012 will remain flat. Key drivers for the increased budget were the 2.5 FTE's (flat with actual projected in 2011); move to different facility (offset in part from savings in meeting expenses). Stabilizers to the budget increase were savings in benefits costs (ex. medical premiums) and the working capital reserve requirement met from past years accumulations. Staffing will be close to budget starting in 2012 as three new employees will be joining MRO in January.

Personnel Matters

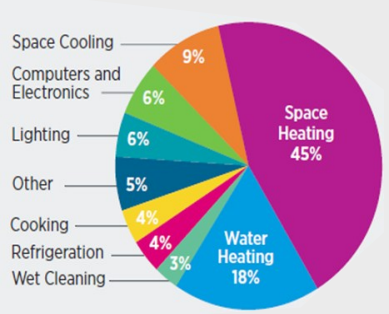
A primary focus of MRO is to develop its people, which is one of the pillars in MRO's "Benchmarks for Excellence." At the beginning of each year, MRO presents its annual goals and planned strategies at an employee kickoff meeting. The employee kickoff is held for the benefit of providing employees with information and resources that contribute to the valuable development of its staff. Our focus is to communicate the "Big Picture" of who we are, what we do, and how, as a team, are going to be successful. Each department states its strategic initiatives and some of the key components in its strategic plan. Throughout the year, as each employee works within their department to meet department goals and objectives, they build upon their own skills, knowledge, and experience.

The kickoff meeting is also crucial in reinforcing the ethical culture and behavior that is a cornerstone of the MRO organization. It is pivotal that the entire organization has an understanding of how each department contributes to MRO meeting its strategic goals and objectives. At the end of the year, MRO is able to measure its success by the accomplishments of each department. The employee kickoff is a great way to get each department, team, and individual employee headed in the right direction and contributing to MRO's overall success.

Any questions related to the business plan and budget can be directed to *Sue Clarke, VP of Finance and Administration.*

Questions regarding accounts payable or receivable should be directed to *Regina Davis, Accountant and HR Specialist*.

How We Use Energy



Did you know that heating accounts for the largest part of your winter utility bill? Below are some easy-to-follow energy saving tips that are sure to lower your energy costs:

- Install a programmable thermostat to lower utility bills and manage your heating and cooling systems efficiently.
- Air dry dishes instead of using your dishwasher's drying cycle.
- Turn things off when you are not in the room such as lights, TVs, entertainment systems, and your computer and monitor.
- Plug home electronics, such as TVs and DVD players, into power strips; turn the power strips off when the equipment is not in use—TVs and DVDs in standby mode still use several watts of power.
- Lower the thermostat on your water heater to 120°F.
- Take short showers instead of baths and use low-flow showerheads for additional energy savings.
- Wash only full loads of dishes and clothes, and air dry clothes.
- Check to see that windows and doors are closed when heating or cooling your home.
- Drive sensibly; aggressive driving such as speeding, and rapid acceleration and braking, wastes fuel.
- Look for the ENERGY STAR® label on light bulbs, home appliances, electronics, and other products. ENERGY STAR products meet strict efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy.

For more money and energy saving tips: **EnergySavers.gov**.

Our Vision

"To be the most reliable regional bulk power system in North America."

CONTACT LIST

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Main Fax: 651-855-1712
Web: www.midwestreliability.org

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Jessie Mitchell, Exec. Asst. & Office Mgr. (1733)

General Counsel and External Affairs
Miggie Cramblit, General Counsel and Director External Affairs (1721)

Finance
Sue Clarke, VP of Finance & Accounting (1707)

Enforcement
Sara Patrick, VP Enforcement and Regulatory Affairs (1708)
Jacob Phillips, Enforcement Attorney (1758)
Janice Anderson, Enforcement Admin (1720)

Compliance, Mitigation and Standards
Jim Burley, Vice President Compliance, Mitigation and Standards (1748)
Jennifer Matz, Mit & Stnd Administrator (1740)
Jo Anne McNabb, Compliance Admin (1730)

Operations
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Kristine Hutchens, Operations Admin (1749)
Salva Andiappan, Mgr Reliability Assessments and Performance Analysis (1719)
John Seidel, Sr. Manager, Sit Awareness, Event Analysis and Reliability Improvement (1716)

Information Technology
Dan Schoenecker, VP Operations (1753)

After Hours Emergency Line
651-734-8355
To report an MRO Region Event:
events@midwestreliability.org

EMPLOYEE NEWS

MRO would like to congratulate Carol Gerou, MRO Compliance Engineer, on the birth of her beautiful and healthy baby boy! Baylor James Gerou was born on Wednesday, January 11, and both mom and baby are doing well.

MRO would also like to welcome Miggie Cramblit, General Counsel and Director External Affairs, who began working full-time for MRO on January 1.

ABOUT MRO

MRO is a non-profit organization dedicated to ensuring the reliability and security of the Bulk Electric System (BES) and operates under delegated authority from regulators in both the U.S. and Canada. MRO works to develop and ensure compliance with Reliability Standards and also performs assessments of the grid's ability to meet the demands for electricity, and performs other technical analyses to improve reliability and address risks to the BPS. Additional information can be found on our website at

NOT A MEMBER YET?

MRO membership provides the following advantages:

- Participation on the various MRO committees and working groups; including the board
- Vote on key matters, such as; development of regional reliability policies and implementation
- Participate in North American and Interconnection-wide technical assessments
- Network of industry peers

MRO membership is free of charge. To apply, visit our **website** or call **651-855-1760**

For career opportunities with MRO, please visit the career page of our website.

MRO Calendar of Events

A full meeting calendar can be found on MRO's website

Date	Time	Group	Location
February 2012			
Feb 21	9:00-12:00	Compliance Committee	Crowne Plaza MSP, Bloomington, MN
Feb 23	10:00 - 3:00	Standards Committee Meeting	TBD
Feb 27 Feb 28	12:00 - 5:00 8:00 - 12:00	Protective Relay Subcommittee Meeting	Crowne Plaza MSP, Bloomington, MN
Feb 28	8:00 - 3:00	Operating Committee	Crowne Plaza MSP, Bloomington, MN
Feb 29	8:30 - 3:30	Planning Committee Meeting	Crowne Plaza MSP, Bloomington, MN
March 2012			
Mar 20	8:00 - 4:00	Model Building Subcommittee	Crowne Plaza MSP, Bloomington, MN
Mar 29	8:00 - 3:00	Board of Directors Meeting	TBD