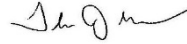


**TO:** NERC Board of Trustees (BOT)

**FROM:** Thomas J. Galloway, NATF President and CEO



**SUBJECT:** NATF Periodic Update to the NERC BOT – August 2016

Attachments: 1. NATF Focus and Activities

The North American Transmission Forum (NATF) mission is to promote excellence in the reliable operation of the electric transmission system, with the vision to see reliability continuously improve. To augment our strategic goals, the NATF has focused on several topics that serve as the base for trilateral collaboration between the NATF, EPRI and INPO. The 2016 focus areas are:

- Resiliency (All hazards, including severe weather, cyber/physical security, and GMD/EMP)
- Human Performance (reduced frequency and consequences of human error)
- Equipment Performance and Asset Management
- Operating Experience Exchange – cause analyses, corrective action, and lessons learned
- Continuous performance improvement – mechanisms / processes including risk reduction

Some of the specific activities associated with the above are expanded upon in attachment 1 and summarized as follows:

- Stratification of member performance regarding key equipment failure rates
- Reduced protection system misoperation via measures, training, and superior practices
- Comprehensive risk assessment practices document
- CIP standards transition guidance and implementation support
- CIP-014 reference documents and cross-member calibration on results
- Switchyard reliability assistance on-site visits and self-assessment tools
- Training for risk assessment and controls, human error reduction, and fundamentals
- Resiliency workshops: March 2016; September 2017 focused on recovery/restoration
- Transmission line right-of-way (ROW) maintenance coordination and superior practices
- Modeling reference documents (various topics), with many posted publicly
- Member assistance to support comprehensive event review and corrective action
- Broad based webinars on key topics including cold weather preparation and GMD
- Human performance “road-map” that promotes progress from any program maturity level
- Tailored duration and scope peer reviews with trending / corrective action for key gaps

The NATF shares many common objectives with NERC. To advance these common objectives, and avoid redundant or conflicting efforts, we have undertaken periodic coordination meetings between the senior leadership of both organizations. The next such session is scheduled for October 2016, with expected agenda topics including:

1. NERC sharing of select entity data / information (with authorization) with NATF staff
2. Equipment issues for coordination based on NERC / CEATI risk identification
3. Protection System mis-operations
  - a. Specific NERC concerns for added NATF focus
  - b. Adoption of common metrics to promote effective communication / improvement
4. Reduction in “Unknown” cause codes for TADS Unavailability
  - a. Mutual NERC / NATF efforts to reduce
5. 2017 Joint Human Performance Conference
  - a. Late March, Atlanta venue
  - b. Align on themes, logistics details
6. Resiliency / security
  - a. Governmental efforts including: Strategic transformer reserve, EMP / IEMI
  - b. Recovery / restoration (including NATF summit 8/30-31)
7. CIP V5 update and discussion
8. Vegetation management

Also, given the extremely complex and dynamic nature of the industry currently, the NATF has decided to make certain, specific work-products available beyond the membership. Two noteworthy areas involve recent NATF work on both physical security and modeling.

NATF member subject matter experts (SMEs) have produced high-quality work-products on both of these topics. And, with NATF Board concurrence, we have decided to make selected documents public – to the benefit of the entire industry. Such documents are available via [www.natf.net](http://www.natf.net) and are listed below.

- NATF Modeling Data Request Guide (MOD-032)
- NATF Reference Documents – CIP-014 R1, R4 and R5
- NATF Reference Document – Generator Specifications
- NATF Reference Document – Power Flow Modeling
- NATF Reference Document – Reporting and Verification of Generating Unit Reactive Power Capability for Synchronous Machines

***We plan to make other selected NATF work-products available outside the membership on a case by case basis.***

cc:

ERO: G. Cauley, M. Lauby, J. Merlo, A. Koch, K. McIntyre, S. Noesse, C. Edge  
NATF: R. Carter, K. Berent, C. Sills, Letter Log

## **Attachment 1 - NATF Focus and Activities**

### **NATF / EPRI / INPO**

- Five focus areas as framework for trilateral collaboration
  1. Resiliency (all hazards, including cyber / physical security)
  2. Equipment Performance / Asset Management
  3. Human Performance/ Error Reduction
  4. Operating Experience Exchange
  5. Performance improvement (mechanisms / processes)

### **NATF / EPRI specific**

- Joint NATF/EPRI/INPO Resiliency Summit March 1-2, 2016 (Charlotte, NC)
  - Anticipate about 100 attendees
  - Risk prioritization tools and associated actions (practices / R&D)
  - Cross-industry panel on challenges and solutions
  - Vendor panel on challenges and solutions
  - Tutorials: EMP/IEMI, GMD, security
- Joint NATF/EPRI/INPO Resiliency Summit January 2017 (Charlotte, NC)
  - Recovery / restoration emphasis
  - Blackstart paths
- Equipment Performance and Maintenance
  - Shared insights on failure rates, causes, and corrective actions
- Strategy Sessions: Grid Operations and Planning Synergies

### **NATF / INPO specific**

- Shared Operating Experience / LOOP Reductions (IER 13-53)
- Nuclear plant switchyard self-assessment tools
- Emergency power runtime / fuel supply replenishment / blackstart

## **Attachment 1 - NATF Focus and Activities (Continued)**

### **Other / General**

- Systematic interaction with Members / ERO on Reliability Assurance Initiative (RAI)
  - Sharing of key principles and lessons learned
  - Strong risk / controls focus in Peer Reviews
  - Preparing members for risk-focused audits
  - Interacting with ERO staff (workshops, etc.)
- NATF Peer Review Program fully integrates:
  - Risk Assessment and Internal Controls
  - Human Performance / Error Reduction
  - Operating Experience Exchange
  - Physical Security
  - *Now offering tailored, focused reviews on specific reliability subsets*
- Other recently completed / near term activities:
  - Human Performance Symposium
  - System Operations – EMS focus
  - Train-the-Trainer workshop
  - Vegetation Management – detailed benchmarking / compliance template
  - Cold weather preparation webinar
  - Comprehensive peer challenge boards for review of selected member events
  - March 1-2 Resiliency Summit
- Training Webinars (New NATF Program Area)
  - Risk Assessment and Internal Controls (RAIC)
    - 9/15/15: Internal Control Framework and Governance Overview (150+ attendees)
    - 9/28/15: Risk Assessment (125 attendees)
    - 1/20/16: Internal Control Design and Implementation
    - 2/17/16: Control Effectiveness (Monitoring and Testing of Internal Controls)
  - Protection Systems / MisOperation Reduction
    - 11/10/15: Directional Element Settings Practices (96 attendees)
    - 11/12/15: Directional Comparison Blocking Scheme Settings Practices (186 attendees)
  - **Upcoming**
    - **Transmission Fundamentals**
    - **Human Performance program – “Roadmap”**