To: NERC Board of Trustees (BOT)  
From: Thomas J. Galloway, NATF President and CEO  
Date: April 15, 2019  
Subject: NATF Periodic Report to the NERC BOT (May 2019)  
Attachments: NATF External Newsletter (April 2019)

With the recent signing of an updated memorandum of understanding between our organizations, we look forward to enhancing NATF-NERC coordination and collaboration to positively impact reliability, resilience, and security of the bulk power system.

The attached April NATF external newsletter, which is also available on our public website at www.natf.net/news/newsletters, and summaries below highlight recent NATF industry efforts and collaboration.

Meetings and Workshops

Human Performance Conference (March 26-28)
Nearly 400 participants attended this year’s NERC-NATF conference, which featured excellent presentations on the academics and theory of human performance as well as sharing of individual experiences. A first for this conference was a panel session on assistance visits performed for NATF members that addressed both the human performance process and recommendations that resulted from the visit. The extensive pre-planning and coordination between NERC and NATF were key to the success of the conference.

Resiliency Summit (April 3-4)
This year’s summit—co-hosted by the NATF, EPRI, and NERC—was designed to move the industry towards the development and adoption of practical, cost-effective solutions to address the resiliency needs. Utilities discussed a range of resiliency topics, including their approach to an incident command structure (ICS) and physical security related to unmanned aerial systems. In addition, representatives from the US Department of Homeland Security (DHS), FERC, and the White House National Security Council (NSC) offered regulatory perspectives.

Projects and Documents

Relay Performance During Stable Power Swings Reference Document
As mentioned in the newsletter, PRC-026 requires a new type of evaluation. NATF members worked together to fill an industry need by creating functional attributes for developing software requirement specifications.

Supply Chain Cyber Security
NATF work in this area is geared to establish overall guidance and a common set of cyber security parameters for supply chain products and services specific to the electric industry that entities can use for effective and efficient management of evolving cyber security supply chain risks to reliability.
To-date, we have published two documents to our public website for industry use:

1. NATF CIP-013-1 Implementation Guidance (Version 2)
2. Cyber Security Supply Chain Risk Management Guidance

Version one of the “NATF CIP-013-1 Implementation Guidance” document was not endorsed as NERC “Implementation Guidance,” but the NATF updated the document based on feedback from FERC, NERC, and the Regional Entities and resubmitted to NERC on April 5. We requested an expedited review due to the compliance timeline for the industry.

As a next step, the NATF has begun scoping an effort to assist members with obtaining security assurance beyond the CIP-013-1 requirements while streamlining their implementation of the standard. This work involves (1) identifying and maintaining criteria for distinct supply chain products and services and (2) developing a common reporting format for the criteria for members and industry to use. We’ve had some preliminary discussions with members, vendors, and regulators, all of whom have noted the value in mapping existing frameworks to customize acceptable cyber security supply chain criteria in the electric utility industry.

Grid Security Emergencies

Section 215A of the Federal Power Act, added via amendment by section 61003 of Public Law 114-94 (the Fixing America’s Surface Transportation Act or “FAST Act”), gives the Secretary of Energy certain authorities to issue an emergency order following the President’s written declaration of a “grid security emergency” (GSE) as defined in the statute:

The term ‘grid security emergency’ means the occurrence or imminent danger of—(A) . . . a malicious act using electronic communication or an electromagnetic pulse, or a geomagnetic storm event . . . and . . . disruption of the operation of such devices or networks, with significant adverse effects on the reliability of critical electric infrastructure or of defense critical electric infrastructure, as a result of such act or event; or (B) . . . a direct physical attack on critical electric infrastructure or on defense critical electric infrastructure; and . . . significant adverse effects on the reliability of critical electric infrastructure or of defense critical electric infrastructure as a result of such physical attack.

Because of the specialized knowledge required and wide range of designs and practices inherent in the companies that own and operate the Bulk Power System, the NATF formed a team to offer recommendations on:

- Communication between the U.S. Department of Energy (DOE) and the electricity subsector after the declaration of a GSE
- Suggested criteria for declaring a GSE
- Emergency operations and waivers associated with issuance of a GSE order

In October 2018, the team completed a document to address the GMD threat noted in the FAST Act’s GSE definition. In 2019, the team is focusing its work on the other three threats (physical security, cyber security, and EMP). The document will be finalized in June and presented to the ESCC at its July meeting, and some content will likely be included in this year’s GridEx V tabletop.
NATF Posts Document to Assist Industry with PRC-026-1 Tools
The NATF has posted the “Relay Performance During Stable Power Swings (PRC-026-1) Evaluation Tools Reference Document” to our public website for industry use.

NERC Reliability Standard PRC-026-1, “Relay Performance During Stable Power Swings,” requires utilities to evaluate the performance of various load-responsive protective relays in response to stable power swings during non-fault conditions. Impedance-based relays are evaluated against a power swing region defined by the standard. This evaluation is unlike any analysis currently performed when setting most impedance-based relays. Thus new power swing analysis functions are needed within commercial protection system analysis tools, or utilities must develop custom calculators using general-purpose spreadsheets or engineering calculation software.

This document lists functional attributes for either type of tool. Tool developers may reference this list when developing software requirements specifications.

NATF and NERC Sign Updated MOU
NATF President and CEO Tom Galloway and North American Electric Reliability Corporation (NERC) President and CEO Jim Robb recently signed an updated memorandum of understanding (MOU) between the two organizations. The MOU is designed to facilitate collaboration and leverage respective and collective strengths to identify existing and emerging risks, prioritize actions, and implement mitigation strategies to advance the reliability, resilience, and security of the Bulk Power System.

“The NATF and NERC recognize the importance of efficient and effective coordination and collaboration in this time of unprecedented industry change,” said Galloway. “This MOU will support our shared goals of identifying and addressing risks and advancing reliability, resilience, and security objectives.”

NATF, NERC, and DOE Conduct Joint Human Performance Conference
The NATF, NERC, and the Department of Energy (DOE) collaborated on a human performance conference March 26–28 in Atlanta, Georgia. The conference brought together experts in a cooperative forum to share best practices at the organizational, process, and individual levels to help improve human performance on the Bulk Power System.

NATF Partners with EPRI and NERC on Resiliency Summit
The NATF, the Electric Power Research Institute (EPRI), and NERC conducted a resiliency summit April 3–4 in Charlotte, North Carolina. The summit focused on grid security emergency preparation and response; incident command structure; emergency communications; blackstart and critical load restoration; and actions to address cyber security, physical security, and EMP threats. The collaborative effort addressed the 2018 Reliability Issues
Steering Committee (RISC) report recommendation to conduct a comprehensive workshop related to risk profile 7: Extreme Natural Events.

**NATF CEO Participates in FERC-DOE Security Technical Conference**

NATF President and CEO Tom Galloway participated in the March 28 “Security Investments for Energy Infrastructure” technical conference co-hosted by the DOE and Federal Energy Regulatory Commission. The conference was designed to “discuss current cyber and physical security practices used to protect energy infrastructure” and “explore how federal and state authorities can provide incentives and cost recovery for security investments in energy infrastructure, particularly the electric and natural gas sectors.”

Galloway served on panel 1 (“Cyber and Physical Security, Best Practices, and Industry and Government Engagement”) and emphasized NATF resiliency and security activities; the NATF’s all-hazards approach to resiliency, which includes cyber and physical security; and the importance of coordination among the electric industry, other industries, and government.

**Workshops and Meetings**

In addition to regular web conferences, NATF working groups hold annual workshops and in-person meetings. Recent and upcoming activities include:

- NERC-NATF-DOE Human Performance Conference and Workshops (March)
- NATF-EPRI-NERC Transmission Resiliency Summit (April)
- Compliance Practices Workshop (May)
- Metrics Working Group Annual Face-to-Face Meeting (May)
- System Protection Workshop (May)
- Joint NATF-NERC-EPRI Planning and Modeling Workshop (June)

**Redacted Operating Experience Reports**

Since our last newsletter, we have posted three reports to our public site for members and other utilities to use internally and share with their contractors to help improve safety, reliability, and resiliency.

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For more information about the NATF, please visit [www.natf.net](http://www.natf.net).