

## Reliability and Security Technical Committee Meeting March 4, 2020

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## Election of Nominating Subcommittee

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#### **Election of Nominating Subcommittee**

The RSTC Charter provides that the Nominating Subcommittee comprise of the Committee Vice Chair and four additional members. The RSTC Executive Committee proposes the following members for the Nominating Subcommittee

- David Zwergel, RSTC Vice Chair
- Todd Lucas
- Wayne Guttormson
- Sandra Ellis
- Jodirah Green



## Committee Organization Charts

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#### **Operating Committee** Organizational Chart March 2019

#### **NERC Operating Committee (OC)**

**Operating Committee Executive Committee (OC ExCom)** 

**Events Analysis Subcommittee** (EAS)

Personnel **Subcommittee (PS)** 

**Operating** Reliability **Subcommittee** (ORS)

Resources Subcommittee (RS)

**EMS Working Group** (EMSWG)

**Continuing Education Review Panel (CERP)** 

Eastern Interconnect **Data Sharing Network** (EIDSN)

Interchange

Distribution

Group (IDCWG)

**Reserves Working** Group (RWG)

Joint OC/PC Task Forces / Working Groups

**Calculator Working** 

**Frequency Working** Group (FWG)

Inverter-Based Resource **Performance Task** Force (IRPTF)

Inadvertent **Interchange Working** Group (IIWG)



#### **Planning Committee Organization**

#### NERC Planning Committee

**Executive Committee** 

BPS Adequacy
Assessments

Reliability
Assessment
Subcommittee

Probabilistic
Assessment Working
Group

Performance
Analysis and Data
Collection

Performance Analysis Subcommittee

GADS Working Group

TADS Working Group

DADS Working Group

MIDAS Working Group BPS Planning and Modeling

System Analysis and Modeling Subcommittee

Load Modeling Task Force

> Power Plant Modeling & Verification Task Force

System Protection and Control

System Protection and Control Subcommittee Issue-Focused

Synchronized Measurements Subcommittee

System Planning Impacts from DER Working Group

GMD Task Force

Inverter-Based Resource Performance Task Force



## Critical Infrastructure Protection Committee Current Organizational Chart

#### **NERC Critical Infrastructure Protection Committee (CIPC)**

#### **CIPC Executive Committee (CIPC EC)**

Physical Security Subgroups

Cybersecurity Subgroups

Operating Security Subgroups

Policy Subgroups

Physical Security Advisory Group (PSAG)

Security Training
Working Group
(STWG)

Grid Exercise Working Group (GEWG)

Compliance Input Working Group (CIWG)

Physical Security Working Group (PSWG)

Remote Access
Guideline Task Force
(RAGTF)

Supply Chain Working Group (SCWG)

Security Metrics
Working Group
(SMWG)

Joint CIPC/OC/PC Task Forces / Working Groups

**Events Analysis** 



### **RSTC Transition Plan**

Greg Ford, Chair, RSTC RSTC Meeting
March 4, 2020



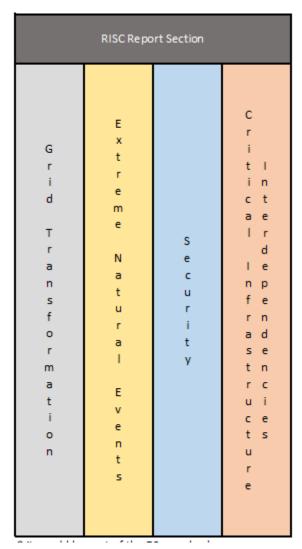












Workplan	
In-flight Projects	CIPC
Iterative Projects	

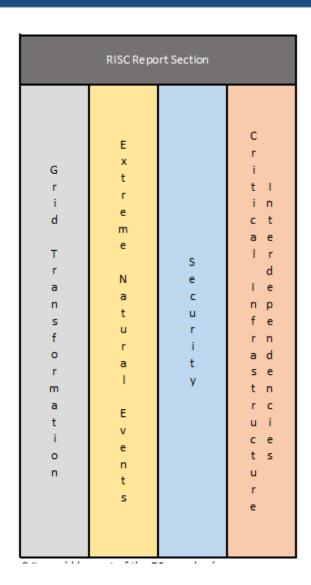
Workplan	
In-flight Projects	OC
Iterative Projects	

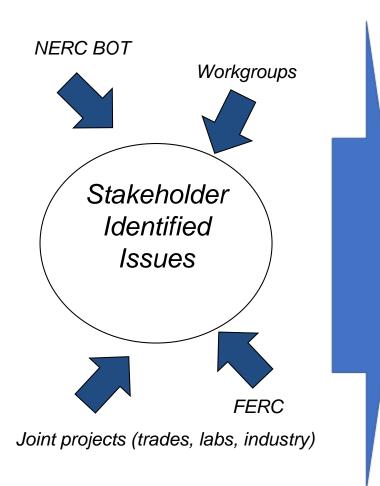
Workplan	
In-flight Projects	PC
Iterative Projects	

#### Day One

RSTC Work Portfolio / Project Pipeline







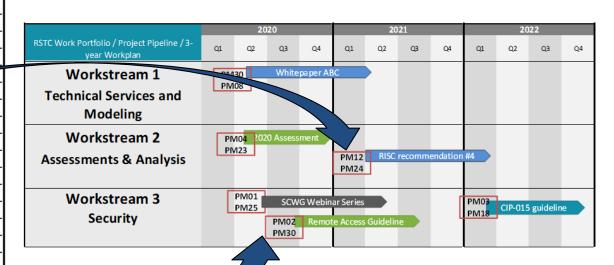
#### Day Two+

RSTC Work Portfolio / Project Pipeline



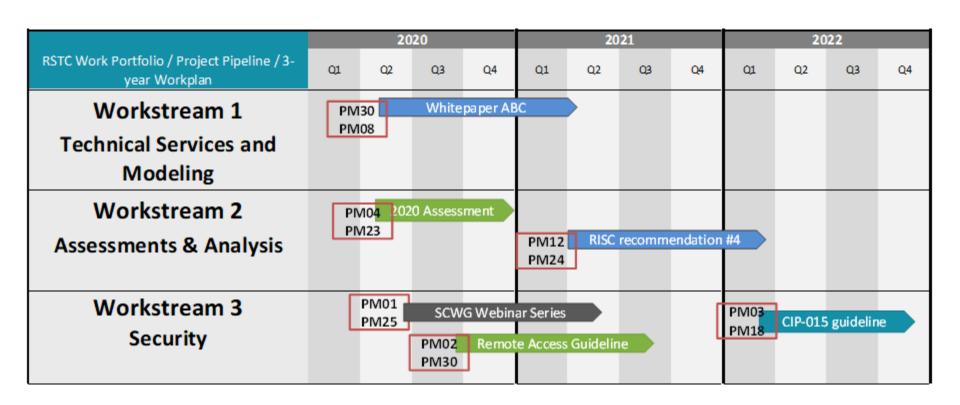
RSTC Executive Committee					
RSTC Voting					
Member	Sys Ops	Cyber	Physical	Planning	
PM01	X	-,	,		
PM02		Х			
PM03			Х		
PM04				Х	
PM05			Х	Х	
PM06		Х			
PM07	Х				
PM08		Х			
PM09			Х		
PM10	Х			Х	
PM11			Х		
PM12		X			
PM13	x				
PM14				Х	
PM15			Х		
PM16				Х	
PM17			Х		
PM18		Х			
PM19	x				
PM20		Х			
PM21			Х		
PM22	Х			X	
PM23			Х		
PM24		X			
PM25	x		X		
PM26		X			
PM27			X		
PM28				X	
PM29	Х		X		
PM30		X			
PM31	X				
PM32		X	Х		

## RSTC Work Portfolio / Project Pipeline



Assign Project Managers





**Updated Quarterly** 



# Policy Input and Industry Comments Resolution and Tracking

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## Policy Input and Industry Comments Resolution and Tracking

Action	Implementation Efforts
Develop plans to continue high value efforts of OC, PC, and CIPC	
Evaluation of OC, PC, and CIPC Work Plans for input to RSTC Work plan	
Develop enhanced logistics for RSTC subgroups reporting before and during RSTC	
meetings	
Consider how challenges related to RSTC recruitment and leadership continuity may be best approached, given the cross-cutting nature of the model	
Consider how challenges related to agenda-setting and issue prioritization may be best	
approached, given the cross-cutting nature of the model	
Refer matters as appropriate to the E-ISAC for assistance to leverage existing support	
and resources within NERC for its "Cyber and Physical Security" function.	
Consider how to ensure adequate Canadian membership and mandates to include	
North American perspectives, when relevant, for the subcommittees, working groups	
and taskforces the RSTC would oversee	
Ensure that proposals arising from this restructuring, and from overall effectiveness	
and efficiency initiatives, complement and reinforce each other, and leverage existing areas of support within NERC	
Ensure effective collaboration and efficient use of all ERO and industry resources.	
Organizations such as the North American Transmission Forum and the North American	
Generation Forum are critical to the ERO Enterprise's mission and the RSTC should	
determine how to effectively engage them.	
Consider renaming the RSTC to the Security and Reliability Technical Committee (SRTC)	RSTC membership will
to prevent confusion with the RISC	evaluate and determine final name



## Policy Input and Industry Comments Resolution and Tracking

Action	Implementation Efforts
Large Consumers agree that for purposes of having adequate participation, a sector	Evaluate balanced
seat can be converted to an at-large seat on a temporary basis only. However, sector	membership during
balance must remain an objective during the selection process for any such residual at-	election process
large seats.	
Large Consumers support a timeline extension and stress that as implementation	
occurs any subsequent timeline adjustments should be considered to ensure quality is	
not sacrificed for expediency.	
RSTC and RISC committees could contribute to establishing the long term strategy of	
ERO and NERC annual Business Plan.	
Encourage NERC to host the first few meetings of the RSTC in facilities that would not	
significantly reduce observers in person participation and to develop additional events	
to meet the industries desire for collaboration, training and education that has been	
occurring during the existing technical committee meeting.	
The NAGF understands the functional model proposed and would be very interested in	
participating on the RSC as a means to continue the forums collaborative support of	
the ERO.	
Recommend that WebEx/Teleconference capabilities be available for the open RSTC	
meetings in order to support broad and efficient industry access to the provided	
discussions.	
During the overlap between the first RSTC administrative meeting in March 2020 and	
the final meeting of the OC, PC, and CIPC in June, the RSTC should inventory and	
evaluate the activities of the existing Technical Committees and the associated	
underlying committees' structure to determine which activities should continue and	
how to manage retiring those that are no longer needed.	



## Policy Input and Industry Comments Resolution and Tracking

Action	Implementation Efforts
At some future date after implementation of the RSTC, the NERC Board should review the role of the RISC and identify whether the prioritization and identification of emerging BPS reliability risk prioritization functions of the RISC can or should be rolled into the Charter of the RSTC.  A specific statement regarding the metrics to be used to assess sector size should be provided at some early point in the transition process. We note that the reference to sector size is in the SET report, but not mentioned in the RSTC charter as it relates to the Nominating Subcommittee. We ask that the BoT reconcile this difference upon approval and clarify the intent of sector size and	Implementation Efforts
the metric to be used for allocating At Large positions.  Maintaining utility technical expertise will be paramount to the RSTC's success.	Evaluate as part of the sector and at-large appointments.
Structured engagement of the OC, PC and CIPC is needed.	Inclusion of the OC/PC/CIPC leaderhip in early round RSTC Leadership calls and inperson meetings. Working with OC/PC/CIPC leadership in consolidation of work plans as well as evaluation of the current sub-committees and working groups to determine overlap and appropriate consolidation for continued efficiency and effectiveness.
RSTC nominations, selections, and election results need sufficient transparency.	Posting to web-site as nominations are received; including sector results in the presentation to the Joint committee meeting.



## RSTC Transition Plan Activities

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## Activity 1: RSTC Structure and Work Flow with its Subgroups

				Target	
Qu	estions for Consideration	Proposed Actions	Assignment	Completion	Status
•	How will we understand, assign, track, oversee, and manage all RSTC sub teams' significant activities? What is different from what the OC, PC, and CIPC do now? What best practices from OC, PC, and CIPC should we merge into RSTC practices? What might we do during a transition period vs longer term?	<ul> <li>Align current subgroups/working groups by work products/ initiatives to assist in discussions on reducing to a manageable number by the RSTC</li> <li>Look at RISC report and assignments to determine objectives for transition versus longer-term.</li> </ul>	<ul> <li>Stephen/Tina to complete first draft at alignment of subgroups/ working groups</li> </ul>	Completion	Status



## Activity 2: RSTC Subgroup and Other Forums Quarterly Status Reports

		Target	
Proposed Actions	Assignment	Completion	Status
<ul> <li>Create a RSTC subgroup</li> </ul>	<ul><li>Stephen/Tina to</li></ul>		
report template, either	draft RSTC subgroup		
creating a word document	report template;		
or use combined work plan	Executive		
spreadsheet	Committee complete		
<ul> <li>Regulatory reports based</li> </ul>	first review at March		
on items/initiatives of	or April Meeting		
interest (ex., June FERC			
Technical Conf)			
• Forums (NAGF, NATF)			
provide quarterly reports			
similar to reports provided			
at prior standing			
committee meetings			
	<ul> <li>Create a RSTC subgroup report template, either creating a word document or use combined work plan spreadsheet</li> <li>Regulatory reports based on items/initiatives of interest (ex., June FERC Technical Conf)</li> <li>Forums (NAGF, NATF) provide quarterly reports similar to reports provided at prior standing</li> </ul>	<ul> <li>Create a RSTC subgroup report template, either creating a word document or use combined work plan spreadsheet</li> <li>Regulatory reports based on items/initiatives of interest (ex., June FERC Technical Conf)</li> <li>Forums (NAGF, NATF) provide quarterly reports similar to reports provided at prior standing</li> <li>Stephen/Tina to draft RSTC subgroup report template;</li> <li>Executive</li> <li>Committee complete first review at March or April Meeting</li> </ul>	<ul> <li>Create a RSTC subgroup report template, either creating a word document or use combined work plan spreadsheet</li> <li>Regulatory reports based on items/initiatives of interest (ex., June FERC Technical Conf)</li> <li>Forums (NAGF, NATF) provide quarterly reports similar to reports provided at prior standing</li> <li>Stephen/Tina to draft RSTC subgroup report template;</li> <li>Executive</li> <li>Committee complete</li> <li>first review at March or April Meeting</li> </ul>



## **Activity 3: Orientation for RSTC Members** and **Subgroups**

			Target	
Questions for Consideration	Proposed Actions	Assignment	Completion	Status
What expectations should	<ul> <li>Use work plans to set</li> </ul>	<ul> <li>VC Zwergel to draft</li> </ul>		
we communicate to the	expectations on subteam	talking points for		
RSTC subteams including any	work	orienting the		
changes on how they carry	• Status information on RSTC	committee on		
out and report on their	activities will be provided	expectations of the		
work?	during open meetings, via	committee and		
How will the committee	meeting minutes and the	purpose		
keep members, observers,	quarterly written reports to			
and subgroups/ working	the Board			
groups informed	<ul> <li>Assignment of activities -</li> </ul>			
• Evaluate and assign	Determine engagement			
activities based on	level and maximize based			
committee purpose and	on terms, skills/			
objectives	experience, etc.			



#### **Activity 4: RSTC Strategic Plan**

				Target	
Qu	estions for Consideration	Proposed Actions	Assignment	Completion	Status
•	Do we need this? The	<ul> <li>Evaluate value add of a</li> </ul>	• Executive		
	OC Plan is updated	RSTC Strategic Plan	Committee to		
	every 2 years and		review and		
	reviewed off years.		provide		
•	<b>Should Committee</b>		recommendation		
	utilize ERO Enterprise		to full committee		
	Strategic Plan				



#### **Activity 5: RSTC Work Plan**

	,			
			Target	
Questions for Consideration	Proposed Actions	Assignment	Completion	Status
Create an annual work	Evaluate and	<ul> <li>Gather input</li> </ul>		
plan	encompass the OC, PC,	from committee		
	and CIPC work plans,	members at		
	NERC RISC report, NERC	March meeting		
	Strategic Plan, and	• Executive		
	NERC 2020 Work Plan	Committee to		
	Priorities	create first draft		
	<ul> <li>Consider best practices</li> </ul>	and present at		
	for agenda setting and	June meeting		
	prioritization of			
	objectives/tasks			



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#### **DRAFT** Agenda

#### **Reliability and Security Technical Committee**

XXXXXXXXXX Y, 2020 | 1:00 – 5:00 p.m. Eastern Time XXXXXXXXXX Z, 2020 | 8:00 a.m. – 12:00 p.m. Eastern Time

Address TBD City TBD

#### Call to Order

**NERC Antitrust Compliance Guidelines and Public Announcement** 

#### Introductions and Chair's Remarks

- 1. Administrative items
  - a. Arrangements
    - i. Safety Briefing and Identification of Exits (Hotel Staff)
  - b. Announcement of Quorum
  - c. Background Information
  - d. Reliability and Security Technical Committee (RSTC) Membership 2020-2023\*
    - i. RSTC Roster\*
    - ii. RSTC Organization
    - iii. RSTC Charter
    - iv. Parliamentary Procedures\*
    - v. Participant Conduct Policy
  - e. Future Meetings

2020 Meeting Dates	Time	Location	Hotel
June 10, 2020	1:00 to 5:00 p.m.	TBD	тво
June 11, 2020	8:00 a.m. to 5:00 p.m.		
September 15, 2020	1:00 to 5:00 p.m.	TBD	TBD
September 16, 2020	8:00 a.m. to 5:00 p.m.		
December 15, 2020	1:00 to 5:00 p.m.	TBD	TBD
December 16, 2020	8:00 a.m. to 5:00 p.m.		





#### Consent Agenda - Approve

- 2. Minutes and other documents\*
  - a. Meeting minutes/date
  - b. Revised Reliability Guidelines/Reference Documents
  - c. Revised Scope documents
  - d. Revised Strategic Plan
  - e. Other

#### Regular Agenda

- 3. Remarks and Reports
  - a. Remarks Greg Ford, RSTC Chair
  - Report of most recent Member Representatives Committee (MRC) Meeting and Board Meeting – Chair Ford
- 4. RSTC Action Items Review\* Information Vice Chair Zwergel
- 5. RISC Profile Updates February, 2018 and November, 2019 reports (combine common profiles)
  - a. List each RISC Report Risk Profile with subcategories:
    - i. Operations
    - ii. Planning
    - iii. Cyber Security
    - iv. Physical Security
- Subcommittee Status Reports Select each subcommittee to provide a complete update twice per year? Stagger the meetings for these. (Half at June/December, Half at March/September)
  - a. Operating Reliability Subcommittee (ORS)\*
  - Resources Subcommittee (RS)
  - c. Event Analysis Subcommittee (EAS)
    - i. EMS Working Group
  - d. Personnel Subcommittee (PS)
  - e. Reliability Assessment Subcommittee (RAS)
  - Electric-Gas Working Group (EGWG)
  - g. Geomagnetic Disturbance Task Force (GMDTF
  - . Inverter-Based Resource Performance Task Force (IRPTF
  - Performance Analysis Subcommittee (PAS)



#### NERC

- Demand Response Availability Data System Working Group (DADSWG)
- Generating Availability Data System Working Group (GADSWG)
- Misoperation Information Data Analysis System Working Group (MIDASWG)
- v. Transmission Availability Data System Working Group (TADSWG)
- Reliability Assessment Subcommittee (RAS)
  - Probabilistic Assessment Working Group (PAWG)
- k. System Analysis and Modeling Subcommittee (SAMS)
  - . Load Modeling Task Force (LMTF)
  - Power Plant Modeling and Verification Task Force (PPMVTF)
- System Protection and Control Subcommittee (SPCS)
- m. Synchronized Measurement Subcommittee (SMS)
- n. System Planning Impacts from Distributed Energy Resources Working Group (SPIDERWG)
- o. Security Training Working Group (STWG)
- p. Grid Exercise Working Group (GEWG)
- q. Supply Chain Working Group (SCWG)
- r. Physical Security Working Group (PSWG)
- Compliance Input Working Group (CIWG)
- 7. 2020 Subcommittee Work Plans Combine this with RISC Profiles?
- 8. Reliability Issues Steering Committee (RISC) Status Report Information Chair Zwergel
- 9. EAS Annual Update of Events, Cause Codes and Trends Information (December meeting)
- 10. RSTC Strategic Plan Review Team\* Approval Vice Chair Zwergel
- 11. Standards Update Information NERC Staff
- 12. Task Force Updates
  - a. Inverter-based Resources Task Force Information Allen Schriver, IRPTF Chair
  - System Planning Impacts from Distributed Energy Resources Working Group (SPIDERWG)
     Information Ryan Quint, NERC Staff
  - c. Others?
- 13. Forum and Group Reports Information
  - a. North American Generator Forum Allen Schriver
  - b. North American Transmission Forum Ken Keels
- 14. Chair's Closing Remarks





15. Adjournment

\*Background materials included.





## **Questions and Answers**





## RISC Status Report and Coordination Information

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## North American Generator Forum RSTC Update

Allen D. Schriver, P.E.
Senior Manager NERC Reliability Compliance
NextEra Energy
and
COO North American Generator Forum
Allen.Schriver@nexteraenergy.com

March 4, 2020

#### **NAGF Mission**



The NAGF mission is to promote the safe, reliable operation of the generator segment of the bulk electric system through generator owner and operator collaboration with grid operators and regulators.

#### **Agenda**



- NERC Standard Drafting Teams
  - PRC-005
  - Winterization
- Collaboration With NATF
  - Supply Chain
  - Resilience
- > NPCC DER
- > IRPTF/IEEE P2800

## **NERC Standard Drafting Teams**



#### > PRC-005

- Revise PRC-005-6 to clearly delineate the applicability of Protection Systems associated with AVR protective functions.
- Needs to clearly limit the scope of the AVR protective functions to those elements that open a breaker directly or via lockout or tripping auxiliary relays.

#### Winterization

- Enhance the process and communications.
- Recognize all plants are a unique design, face different weather challenges and may have low capacity factors.

## NAGF Collaboration With NATF



#### Supply Chain

- Collaborating with NATF and other industry organizations to provide a streamlined, effective, and efficient industry-accepted approach to assess supplier cyber security practices to enhance cyber security.
- Model to reduce supplier burden so efforts with purchasers can be prioritized and entities provided information effectively and efficiently.

#### Resilience

 NAGF was invited to attend a pilot of the NATF Transmission Resilience Maturity Model (TRMM). NAFG to begin working with the NATF to develop a similar model to be used by GO/GOP's to evaluate their resiliency policies and programs.

#### **NAGF**



#### > NPCC DER

 Work with NPCC DER Forum to identify challenges/opportunities for DER "grid edge" resources installed on the Distribution System, to promote understanding and support reliable integration.

#### ➤ IRPTF/IEEE P2800

- Technical Report: Energy Transition to High IBR
  - Goal: Provide visionary technical report and roadmap of how to manage a BPS with increasing penetration of BPS-connected inverter-based resources.
- Reliability Guideline: EMT Modeling and Simulations
  - Goal: Provide industry with clear guidance and recommendations for use of EMT models and performing EMT simulations.
- Reliability Guideline: BESS and Hybrid Plant Performance, Modeling, Studies
  - Goal: Provide industry with clear guidance and recommendations for battery energy storage and hybrid plant performance, modeling, and studies.



## Q & A



# Thank you! www.GeneratorForum.org



Community Confidentiality Candor Commitment

# **NATF** Update

**NERC RSTC Meeting** March 4, 2020

**Roman Carter** 

NATF Director- Peer Reviews, Assistance, Training & Knowledge Management

rcarter@natf.net; 704-945-1920

#### **Open Distribution**

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## **NATF Overview**

NATF is a nimble and impactful provider of leading industry practices for reliability, security, and resilience of the bulk power system.



89 members 73 affiliates

IOUs
Federal/Provincial
Cooperatives
State/Municipal
ISOs/RTOs

Coverage (US/Canada):

~80% miles 200 kV+

~90% net peak demand



# NATF Revised MOU Focus/Role

- NATF-NERC Memorandum of Understanding (April 2019)
  - advance mutual objectives and collaboration
  - leverage respective and collective strengths
  - minimize duplication of effort
- Respective roles:

#### **ERO**

- identify existing and emerging risks to reliability
- facilitate strategies and activities to address the identified risks

# Solution Provider

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### NATF/Industry

- characterize and validate the identified risks
- implement appropriate strategies and activities among members to support mitigation of the identified risks



### NATF Solution Provider

- NATF is pre-qualified organization to submit Implementation Guidance under the NERC BOT Compliance Guidance Policy
- NATF Implementation Guidance submitted to date:
  - CIP-014-2 R1 Physical Security Risk Assessment (March 2017) ERO
     Endorsed
  - MOD-033-1 Methodology Reference Guide (March 2017) ERO Endorsed
  - CIP-014-2 R4 Evaluating Potential Physical Security Attack (Sept 2017) –
     ERO Endorsed
  - CIP-014 R5 Physical Security Plans (Sept 2017) ERO Endorsed
  - CIP-010-3 Software Integrity and Authenticity (November 2017) ERO
     Endorsed
  - CIP-013-1 Implementation Guidance Reliance on Independent
     Assessments (April 2019) ERO Endorsed
  - CIP-005-6 Vendor Remote Access Guidance (December 2019) Proposed



## NATF Ongoing ERO Collaboration

- NATF-EPRI-NERC Resiliency Summits
  - NATF-EPRI host since 2013
  - NERC joined in 2019
- NATF-EPRI-NERC Planning and Modeling Workshops
  - Joint effort since 2017
- Electric Power Human Performance Improvement Symposium
  - Collaborating since 2017
- RF and SERC "Pilot" Facility Rating and Supply Chain



# Pilot Collaboration with RF and SERC - Facility Ratings

ERO provides a problem statement; NATF confirmed importance to commence action

RF and SERC shared survey results with NATF identifying gaps

**NATF publication of Facility Ratings Best Practice addressing gaps** 

NATF member webinar(s) on facility ratings practices

- Using the NATF practice document
- Assigning accountabilities
- · Developing various process maps and related controls
- Taking field actions to baseline performance

NATF develops module to add to peer reviews to encourage best practice

•Evaluate member progress

**Conduct NATF workshop on Facility Ratings** 



# Pilot Collaboration with RF and SERC – Supply Chain

# **Conduct Regional Workshops on Entity Mitigation Practices for Supply Chain Risks to:**



- Focus on security, not on compliance/standards or on evaluation/risk assessment of suppliers
- How entity action to reduce risk fits into supplier assessment model
- Create awareness of actions, controls, and practices for network systems to detect, prevent, and correct risk
- Risk areas expected to be focused on in the workshops:
  - Counterfeit or compromised software, firmware, or hardware
  - Unauthorized or false (via compromised credentials) supplier or system-to-system remote access



# NATF's Objectives for Supply Chain Activities

### **Industry Convergence**

Achieve industry convergence on the approach (Model) to facilitate addressing:

- Security
  - Identifying and addressing cyber security risks introduced via supply chain
- Efficiency and Effectiveness
  - Convergence on common approaches to achieve reasonable assurance of suppliers' security practices
- Compliance
  - Implementation guidance to meet supply chain related CIP standards (CIP-013-1; CIP-005-6 R2.4; CIP-010-3 R1.6)

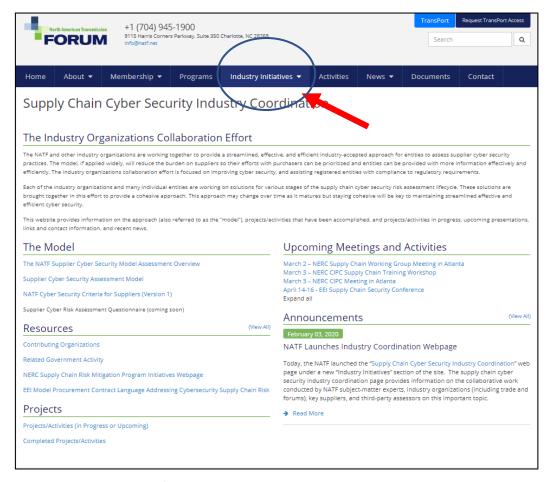


## **NATF "Open" Supply Chain Activities**

- NATF developed and shared best practices (August 2017)
- NATF Cyber Security Supply Chain Risk Management Guidance (June 2018)
- NATF Implementation Guidance
  - CIP-010-3 Software Integrity and Authenticity (November 2017) ERO Endorsed
  - CIP-013-1 Implementation Guidance (April 2019) **ERO Endorsed**
  - CIP-005-6 Vendor Remote Access Guidance (December 2019) Proposed
- NATF Criteria Version 0 (July 2019)
  - NATF Criteria Application Guide
- NATF Proof of Concept Team Strawman Model for Supplier Assessment (October 2019)
- Industry Organizations' Coordination and Alignment on Supplier Assessment Model (December 2019-February 2020)
  - NATF Criteria Version 1
  - Supplier Cyber Security Assessment Model
  - EEI Model Procurement Contract Language Update
  - NATF-hosted Webpage for Supply Chain Industry Coordination
  - Industry-wide and ERO staff webinars
- Supplier Cyber Risk Assessment Questionnaire/Additional Projects and Activities (In Progress)



# NATF-hosted web page for Industry Coordination





## **Industry Organization Team Members**

How is a supplier's adherence to criteria verified and reported?

Proof of Concept October 2019

### Organizations, Forums and Working Groups

- EEI
- LPPC
- APPA
- TAPS
- NAGF
- NAESB
- ConEd Working Group
- SCWG/CIPC
- NRECA

### **Suppliers**

- ABB
- GE Grid Software Solutions
- OSI
- Siemens Industry, Inc.
- Schneider Electric
- Schweitzer Engineering

### **Third-Party Assessors**

- Ernst & Young
- KPMG LLP
- PWC
- Deloitte

### Vendor Organizations for support products or services

- EPRI
- Fortress/A2V



# NATF Leading "Other" Key Emerging Issues

- Grid Security Emergencies
- Resilience

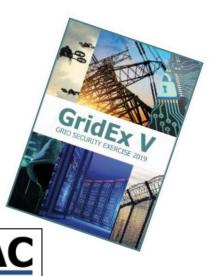


# **Grid Security Emergency**



- NATF Report to DOE and ESCC on Grid Security Emergency framework/protocols (July 2019)
- NATF staff and GSE team provided input for use in GridEx Executive Tabletop exercise
  - Lessons learned and feedback to guide further work by NATF GSE team
- NATF GSE team to continue work to create a set of valid types of form orders, schema, and decision support guidance







# Grid Security Emergency Reliability Coordinator-Centered Communications

 Developing the Reliability Coordinator (RC)-centered, verbal, operational communication for grid security emergencies

Shorter-term capabilities versus longer-term capabilities

Accommodation of both verbal and electronic communications

Communications for active engagement versus for awareness

Adequate security provisions and backup capabilities

### Team includes:

- NATF Staff
- NERC Staff
- E-ISAC Staff
- RC Representatives



## **NATF** Resilience Activities

- NATF-EPRI Resilience Summits
  - Conducted annually since 2013
  - Recently included NERC as co-sponsor
- Webinar series for members
  - physical security measures for substatio
  - insider threat and protection of communication systems
  - incident command structure, emergency response, and postevent preparation
  - spare equipment strategies and programs for substation equipment
  - planning for system resiliency (future)

### 2020 Resilience Summit

### March 31-April 1, 2020

- Theme:
  - Addressing the NERC RISC Issues of Critical Infrastructure Dependencies, Grid Transformation, and Security Vulnerabilities
- Hosted by Salt River Project
  - Tempe, AZ
- Co-Sponsored by NATF-EPRI-NERC
  - Open Sessions
  - NATF/EPRI Members-Only Sessions



# Questions?



