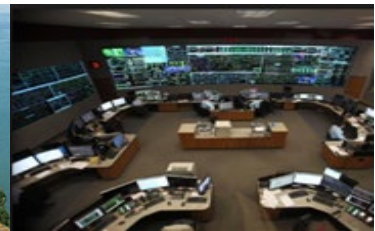


Certification Reviews and Readiness Evaluations

Sam Ciccone, Principal Reliability Consultant, RF
Ryan Mauldin, Compliance Assurance Advisor, NERC
Technical Talk with RF
April 19, 2021



Agenda

- NERC Rules of Procedure (ROP) governing Certifications
- Triggers for Certification Reviews
- Readiness Evaluations
- Overview of the Review/Evaluation Process steps
- Typical Process Timeline
- Example Review and Evaluation Items
- Certification document templates show and tell
- Testimonials



NERC Rules of Procedure (ROP)

Section 500 and Appendix 5A governs Certifications

- ROP revised and re-issued January 2021

Certifications are required for TOPs, BAs and RCs



Certification Reviews

➤ **ROP Appendix 5A Section V addresses Certification Reviews**

Mandated when certified entities (i.e. TOP, BA, RC) make operational changes:

- Expand or contract the Registered Entity's footprint, territory
- Relocate the Control Center
- Modify the Energy Management System (EMS)

➤ **Rule 501(2.1): Evaluate the entity's tools, personnel, facilities, and processes used to perform the duties and tasks identified in and required by the Reliability Standards.**



Certification Reviews

➤ **Changes to Registered Entity's footprint**

- Including de-certification changes to existing JRO/CFR assignments or sub-set list of requirements

The review of changes to an already registered and operational Entity's footprint is primarily concerned with ensuring the gaining functional entity has the tools, training, and security in place to reliably operate with new responsibilities.

Changes to an entity's footprint can be characterized by new metered boundaries associated with the integration or disassociation of existing electrical areas of the BPS (Reliability Coordinator Area, Transmission Operator Area, or Balancing Authority Area).



Certification Reviews

➤ Relocation of the Control Center

Control centers are fundamental to the reliable operation of the interconnected transmission network as they continuously monitor, assess, and control the generation and transmission power flows on the BES. Impacts to the functionality provided within these facilities can affect:

- Tools and applications that System Operators use for situational awareness of the BES
- Data exchange capabilities
- Interpersonal (and alternate) Communications capabilities
- Power source(s)
- Physical and cyber security

The impact of the relocation of the Control Center on the entity's ability to perform the functions for which the entity is registered under normal and emergency conditions should be explored and documented to understand the manner in which the Control Center continues to support the reliable operations of the BES.



Certification Reviews

➤ **Modification of the Energy Management System (EMS)**

Modification of the Energy Management System which is expected to materially affect CIP security perimeters or the System Operator's:

- situational awareness tools,
- functionality, or
- machine interfaces.



Certification Reviews

- Appendix 5A Section V addresses Certification Reviews
- The RoP states that an entity shall initiate the Certification review process by completing an application. It goes on to allow the Regional Entity or NERC to initiate the process.
- We are relying on entities to be proactive and recognize these Certification review triggers!
- The earlier you reach out, the easier to stay on schedule and to use feedback from the CRT as appropriate.



Readiness Evaluations

- Similar to Certification Reviews
- Intended for “an entity that is not required to be certified but performs tasks associated with a RC, TOP, or BA in accordance with Section IV” (ROP Appendix 5A Sec. V)
- Matrix of requirements pared down further for only those requirements delegated to the Entity



Certification Review and Readiness Evaluation Process Initiation

- **Entity notifies RF's Entity Engagement group regarding changes per the "triggers" mentioned previously**
 - Ideally at least 1 year before implementation of the change
- **Entity provides RF an overview of the changes including timeline for implementation**
 - Entity is asked to provide an application (if not already complete)
- **RF consults with NERC to confirm the need and proposed approach for a review**
- **Once confirmed with NERC, RF will start the process with the Entity**



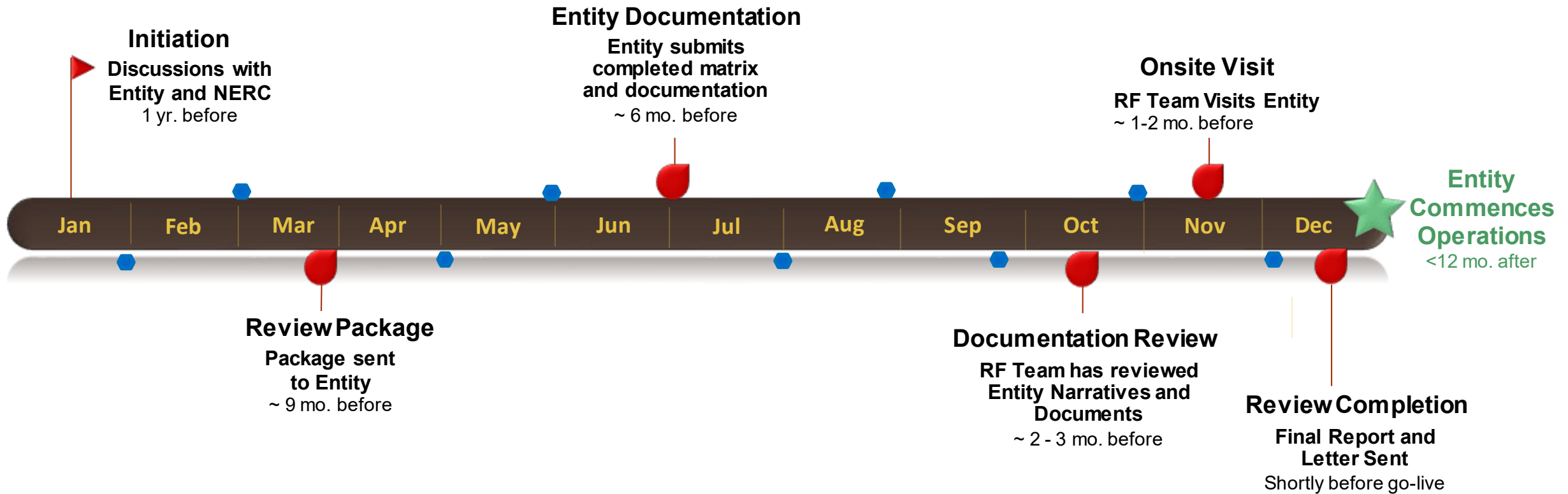
Overview of the Process Steps

- **RF assembles the review team**
- **RF creates and sends Certification Package to Entity**
 - Includes Matrix of requirements relevant to the changes being made

Note: Certifications are a forward looking engagement and may look at standards that have recently become enforceable or will soon become enforceable
- **Request for Information (RFI) and documentation reviews from Entity supplied to review team**
 - Review team reviews responses and documentation and closes out those that require no further action
- **Onsite (or virtual) visit to Entity for control room tours, interviews, and demonstrations**
 - Address open items
 - Record positive observations and recommendations
- **RF issues Final Report and Letter**



Typical Review/Evaluation Timeline



◆ Various touchpoints with Entity, Review Team, and NERC



Purpose and Example Review and Evaluation Items

Operator ability to monitor, assess, and control the grid

- Inspect and walk through any ESP, EAP, PSP changes
- Review security and physical plan changes
- Operator training depending on the extent the changes affect operator functions
- Data exchange capabilities and communications with their RTO and neighbor
- Tools operators use for situational awareness
- Demonstration of EMS/SCADA functionality and screens that may have changed
- Review changes to backup control center functionality and CIP assets and processes
- New metered boundaries associated with integration or dis-association of existing areas
- Review any and all policies/procedures impacted by the change



Documents and Templates

RF Certification section of public website

NERC Certification section of public website



Testimonials

- **“[Our] TMS Certification was a positive engagement. We incorporated the certification process into our TMS project plan. The certification team worked collaboratively with [us] through the certification process.”**
 - *Entity replacing their EMS (TMS) system*
- **“Our recent Recertification Review engagement with RF provided an avenue for a thorough review of our processes and evidence related to affected standards. RF was easy to work with, had great upfront communication to help us through the process and took the time to understand our project plan and specific timing needs.”**
 - *Entity upgrading version of their EMS system*



Questions & Answers

Forward Together  **ReliabilityFirst**