Operational Analysis & Awareness (OAA)

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History of OAA

- **Event Analysis & Situational Analysis (EASA)**

  - 2011 to 2014 in RAPA
  - 2014 to 2017 in RAM
  - 2017 became formal department

- **In 2020, renamed "Operational Analysis & Awareness" (OAA)**

- **OAA Team:**

  - Senior Manager – Tony Purgar
  - Principal Analyst – Dwayne Fewless
  - Principal Analyst – Kellen Phillips
  - Principal Analyst & Protection Engineer – Bill Crossland
  - Analyst – Danielle Daugherty

OAA Department

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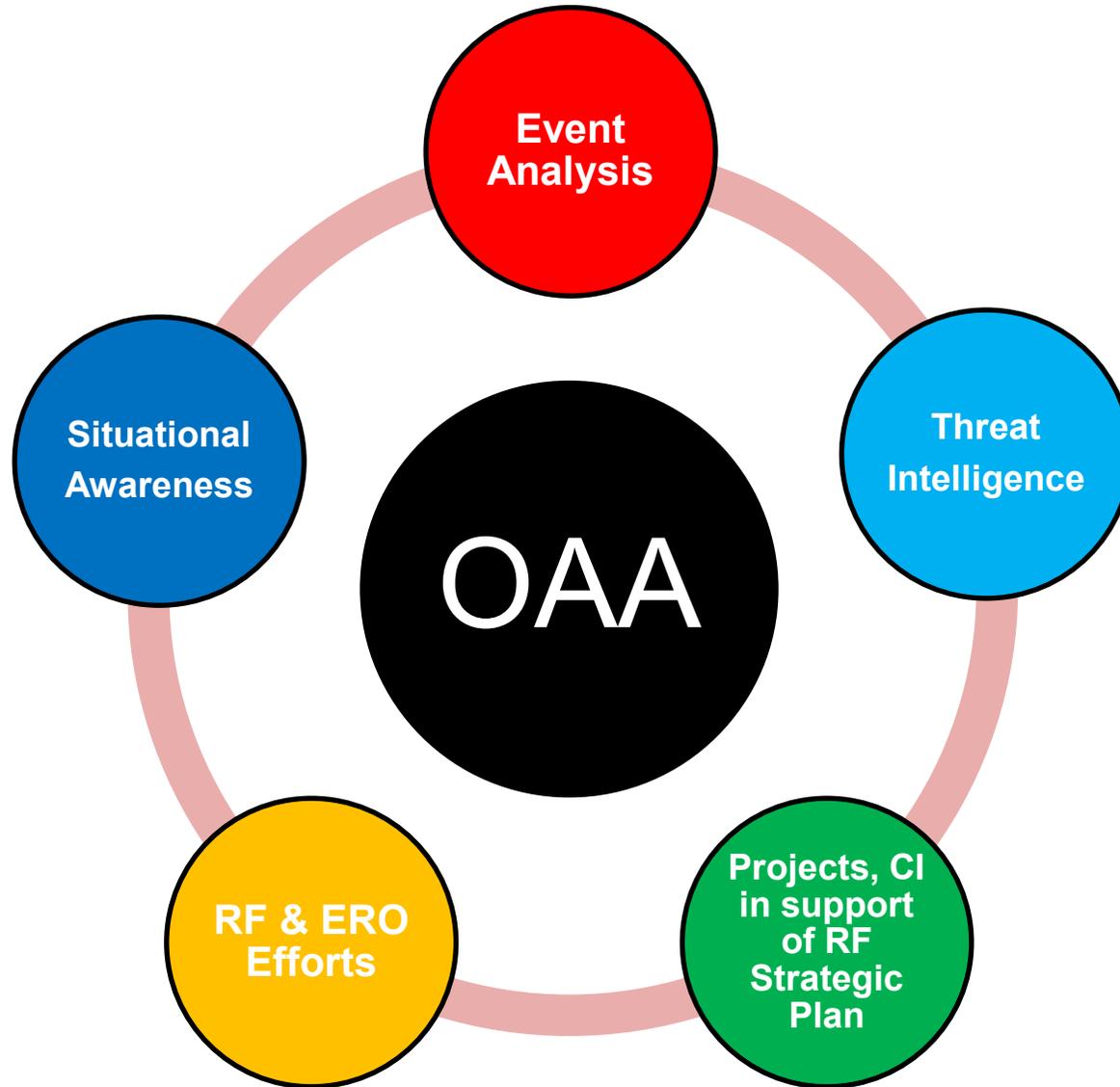
➢ **Key Outputs:**

- Event Analysis
  - [EA Cause Coding](#) and [Lessons Learned](#)
- Situational Awareness
  - Threat Intelligence Monitoring, Assessment and Communications
- Entity Outreach
  - FERC/NERC Inquiry
  - Ohio Security Tabletop
  - NERC Monitoring & Situational Awareness Conference
- Event Analysis Subcommittee (EAS)

Event Analysis

➢ **Where does the process start?**

- [OE-417](#)
- [EOP-004](#)

U.S. Department of Energy Form DOE-417	*ELECTRIC EMERGENCY INCIDENT AND DISTURBANCE REPORT*	OMB No. 1901-0288 Approval Expires: 05/31/2024 Burden Per Response: 1.8 hours

➢ **Discussion with reporting entity:**

- Interest in event
- Categorize event
- Set expectations
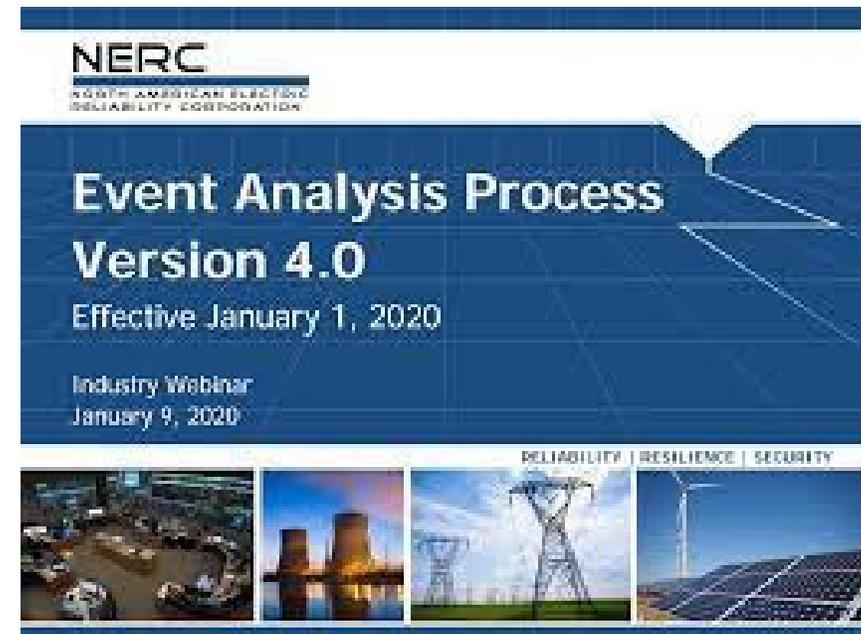
➢ **Targeted Time Frames:**

- Initial brief report

- Final brief report

- Initial call that includes
  - RF
  - NERC EA

- Any questions and a request for a final debrief sent to entity

- Final debrief includes
  - RF/NERC provide understanding of event to entity
  - Agreement on understanding reached

- Entity has time to provide final comments

- Event closed in EA space

Event Analysis cont'd

- ➢ **If your Registered Entity experiences a system disturbance, we encourage your participation in the Event Analysis (EA) Program**
  - Submit your event information to RF by using the email address: disturbance@rfirst.org
  - Event information includes, but is not limited to:
    - OE-417 Reports
    - EOP-004 Reports
  - For more information, visit:
    - RF Public Website: Event Reporting
    - DOE: oe.netl.doe.gov/oe417.aspx
    - NERC EA Program

Inquiries

➢ **Initiated by:**
- FERC
- NERC

➢ **Goal of an inquiry:**
- Understand what happened
- Let entities tell their story
- Create recommendations to learn from industry and implement best practices

What is Situational Awareness (SA)?

➢ Situational awareness involves knowing what is going on around you at any given time.

What are the benefits of Situational Awareness?

➢ Well developed situational awareness provides business leaders with insight into what has happened, what is currently happening and what might happen next.

Situational Awareness

The three stages of situational awareness:

➢ **Perception** - The first step in achieving SA is to perceive the status, attributes and dynamics of relevant elements in the environment.

➢ **Comprehension** - Comprehension of the situation is based on a synthesis of perceived information. Comprehension goes beyond simply being aware of (or perceiving) information that is presented to include an understanding of the significance of those elements.

➢ **Projection** - Projection is the ability to anticipate future conditions, based on the perception and comprehension of information at least in the near term in order to make informed decisions.

Source: NERCs "Reliability Guideline: Situational Awareness for the System Operator"

## ReliabilityFirst SA Objective

The Operational Analysis and Awareness (OAA) group monitors, coordinates, assesses and disseminates SA information with the RF Executive team, RF staff and stakeholders.

➢ Identify emerging threats and trends and analyze the potential impacts to reliable operation of the Bulk Electric System (BES)

➢ Gather and assess data and share information efficiently and effectively

➢ Work closely with RF Stakeholders to leverage expertise to advance general industry practices surrounding risk identification, mitigation and prevention by exchanging ideas, lessons learned and best practices

Tools and Sources

- RF Stakeholders (Registered Entities, NERC and EISAC, FERC, RF Staff)

- Poweroutage.us

- Ventusky

- FireEye

- Situation Awareness for FERC, NERC and the Regions (SAFNR)

- Reliability Coordinator Information System (RCIS)

- MISO Communications System (MCS)

- LifeRaft Navigator (News, Media)
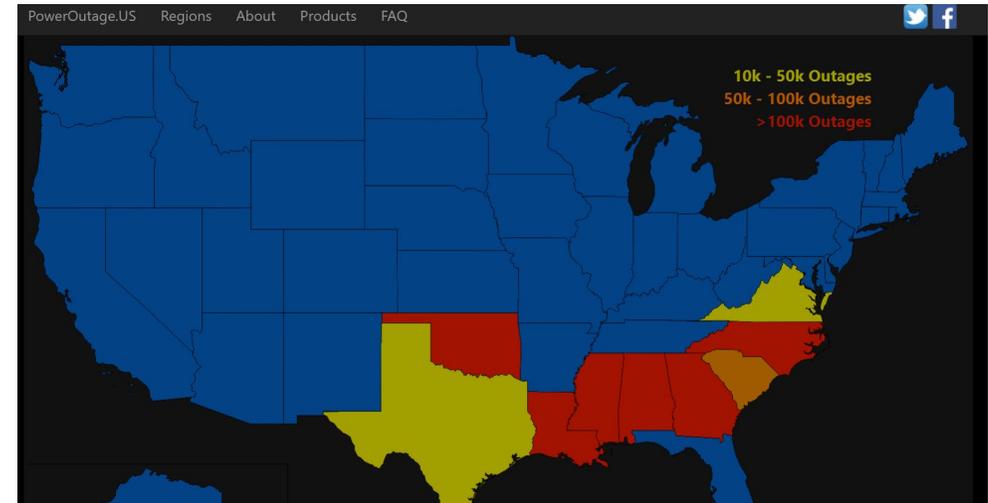
Situational Awareness

➢ **Partner with RF Stakeholders –** *Work together, Learn, Adopt & Adapt*

- Building relationships
- Mature Situational Awareness / Threat Intelligence capabilities

➢ **Work with and learn from the E-ISAC**

- Bulletins/portal
- Industry Engagement Program
- Services

➢ **Sharing information**

- Best practices
- Lessons learned

➢ **Learn from events and reduce risks to the Bulk Power System**

Situational Awareness Notifications

Notification Process - For events deemed appropriate to share with RF Stakeholders, OAA will develop and distribute an email notification to RF Registered Entities.

➢ **Example Process Summary:**

- RF was informed that entities received several suspicious letters
- RF determined that it was important to notify our entities
- RF was in touch with the E-ISAC who was also getting notification of these letters
- E-ISAC created an All-Points-Bulletin APB 22-06
- RF Shared E-ISAC APB with all RF Entities

➢ **Examples:**

- December 2022 – Members report receipt of suspicious letters
- April 2022 - Possible misconfiguration leading to security vulnerability for Siemens SPPA-T3000
- December 2020 - SolarWinds breach

OAA and Industry Collaboration

➤ **We are in this together**

- ERO and industry subcommittees, taskforces, working groups
- FERC & NERC efforts (e.g., inquiry results)
- RF annual cold weather preparedness visits
- Protection System monitoring/analysis/reporting
- NERC Monitoring and Situational Awareness Conferences
- GridEx / Grid Security Conferences

➢ Please share this material internally within your organization, where applicable.

➢ If you have questions about any material covered, please visit our [Contact Us](#) page and use the form to direct your questions to the Operational Analysis & Awareness team via the drop down.

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Questions & Answers

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