

# WECC Events Analysis Process

WECC Event Analysis
Department

## **Document Objectives**

Start an ongoing conversation with our stakeholders about the Event Analysis process

- 1.Improve understanding of the process
- 2.Share how WECC intends to improve the process
- 3. Gather input from participants



# **Event Analysis Purpose**

- Analyze events to determine what happened, how, and why
- Track this information over time
- Learn from individual events as well as trends over time

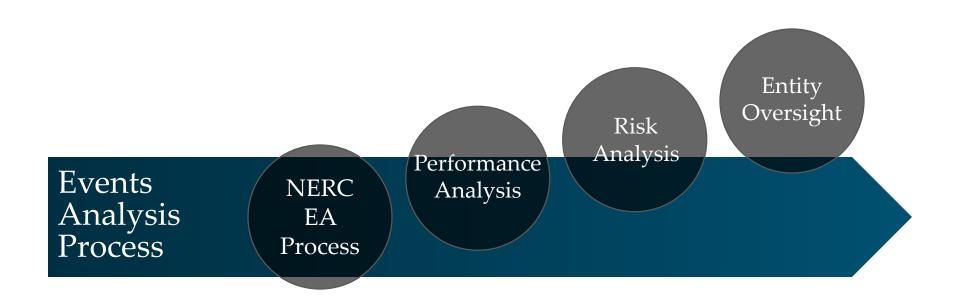


#### **Justification & Governing Documents**

- Delegated responsibility for
  - Events Analysis
  - Situation Awareness
  - Performance Analysis
- NERC EA Process
- Risk-based entity oversight
- Responsible regulatory behavior



### Relationship to WECC Work





#### **EA Process Overview**

Notification & Information Gathering

Reporting (Brief Reports) Evaluation & Analysis

Outreach & Sharing

- Situation Awareness
- Entity outreach
- •Event Analysis
- Stakeholder Participation
- Event Analysis
- •Risk Analysis
- Entity Oversight
- Cause Coding

- Lessons
- Stakeholder Committees



#### **EA Process Overview**

Notification & Information Gathering

- Situation Awareness
- Entity outreach

Reporting (Brief Reports)

- Event Analysis
- Entity Outreach
- Stakeholder Participation

Evaluation & Analysis

- Event Analysis & Cause Coding
- Entity Outreach
- •Risk Analysis & Entity Oversight

Outreach & Sharing

- Lessons Learned
- Stakeholder Committees



### Sources of Information

- Mandatory reporting
  - OE-417
  - EOP-004
- NERC Daily Report
- Direct entity communication
- System monitoring tools (e.g., SAFNR, FNet)

Notification & Information Gathering



## **Event Analysis Objectives**

- Provide 3<sup>rd</sup> party review and analysis of events
- Analyze causes and evaluate trends
- Identify emerging risks
- Feed Lessons Learned Program
- Identify improvements that may prevent recurrence

Reporting (Brief Reports)



#### **Event Analysis Process Overview**

#### Categorization

- Contact entity
- Discuss categorization

#### Analysis of Event

- WECC review
- EPAS review
- Entity inquiry

#### Interim Brief Report

Upload draft report

#### Final Brief Report

Upload final Brief Report



### Categorization

- WECC contacts the entity when it receives information about a possible qualifying event
  - Remind about reporting timeline
  - Inquire about event details
  - Discuss initial categorization

Reporting (Brief Reports)



## Categorization

- Event category determines next step
  - Category 0
    - Logged and closed
  - Category 1 & 2
    - Brief Report (BR)
  - Category 3–5
    - Event Analysis Report (EAR)

\*EAR can be requested for any event category

Timeline for Category 1-5 Events

E

Event

~10 days

~20 days

days BR posted

60-180 days (Depending on event category)

EAR & Lessons Learned (if applicable)

Draft BR to WECC

Close event



## Interim Brief Report

- Within 10 days of the event
  - Entity submits draft Brief Report to WECC staff
  - WECC reviews and discusses questions with entity
  - Determine if Event Analysis Report and Lessons Learned should be created (required for category 3–5 events)

Reporting (Brief Reports)



#### **Event Review**

- WECC Staff
  - Internal review by experts
  - Weekly meeting to discuss and track events
  - Communication with entities to clarify details
- WECC Committees
  - Monthly review by Event Performance Analysis Subcommittee

Reporting (Brief Reports)



# Final Brief Report

- Within 20 days of the event
  - WECC staff completes analysis
  - Posts Brief Report to NERC TEAMS database
- WECC risk and audit teams access report
  - Risk Assessment Mitigation uses information for trending risk and oversight planning
  - Audit team conducts a compliance screening
    - If necessary, conduct compliance assessment with entity



## **Analysis**

- Cause Coding
- Trend Analysis
  - Performance
  - Risk
- Best Practices and Lessons Learned

Evaluation & Analysis



# Cause Coding Purpose

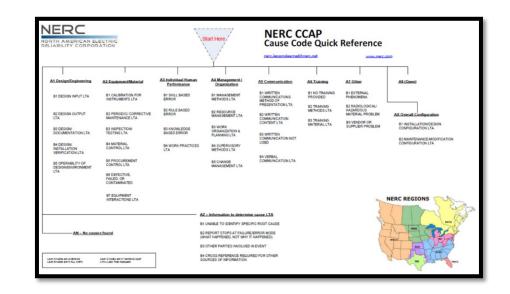
- Determine the primary cause(s) of specific events
- Apply broad expertise
- Track and trend information across events
  - Identify potential issues on Interconnection scale
- Provide useful information to entities
  - Lessons Learned
  - Recommendations

Evaluation & Analysis



# **Cause Coding Process**

- Use NERC-approved Cause Code Assignment Process (CCAP)
- WECC and NERC staff
  - Increase entity participation





# **Cause Coding Process**

- Expert review
  - 3+ SMEs review the event individually
  - Anonymously submit cause codes prior to discussion
- Cause Coding session
  - Walk through event
  - Discuss proposed cause codes
- CCAP Report
  - Provide draft report to entity
  - Finalize report



# **Information Sharing**

- Sharing CCAP with Entity Oversight
  - Is there a barrier to sharing CCAP reports with Oversight?
  - Does WECC EA share CCAP reports with Entity Oversight?

Evaluation & Analysis



# **Trend Analysis**

- Performance metrics
  - NERC and Regions
  - Across entities and time
- Risk assessments
  - Identify potential vulnerabilities, e.g., common equipment failure
- Stakeholder SME analysis (via committees)
  - E.g., EPAS looks for potential fixes for broad issues
  - E.g., HPWG looks for human performance elements

Evaluation & Analysis



#### **Lessons Learned**

- Entities are encouraged to submit if they believe an event has an "industry-worthy" lesson
- Collaborative effort
  - WECC, NERC, committees, submitting entity
- Posted publicly
  - Made anonymous
  - Aggregated where possible

Outreach & Sharing



# **Industry Outreach**

- Presentations at Committee Meetings
  - WECC OC, EPAS, DEMSWG, etc.
  - NERC EAS and OC
- Webinars
  - Western Interconnection
  - ERO Industry
- Conversation with stakeholders

Outreach & Sharing



#### The Path Forward

- Three-pronged strategy for continuous improvement
  - 1. Internal Processes
  - 2. Tools
  - 3. Relationships



### **Improving Internal Processes**

#### What we will do...

- Increase coordination of information requests
- Increase efficiency and tighten timelines
- Increase internal coordination of analysis

#### What you will see...

- Less duplication of requests
- More timely information requests and sharing
- More unified message and information from WECC



## **Improving Tools**

#### What we will do...

- Enhance reporting tools
- Coordinate process through tool
- Enhance analytics

#### What you will see...

- More reporting efficiency to stakeholder groups
- More consistency in awareness across
   WECC staff
- Entity performance information will include more event analysis, e.g., trends



## Improving Relationships

#### What we will do...

- Increase efficiency of information gathering communication
- Increase transparency of process
- Increase entity involvement in analysis

#### What you will see...

- Fewer duplicate touchpoints for events
- More communication about process and entity input points
- More opportunities to participate in entire process

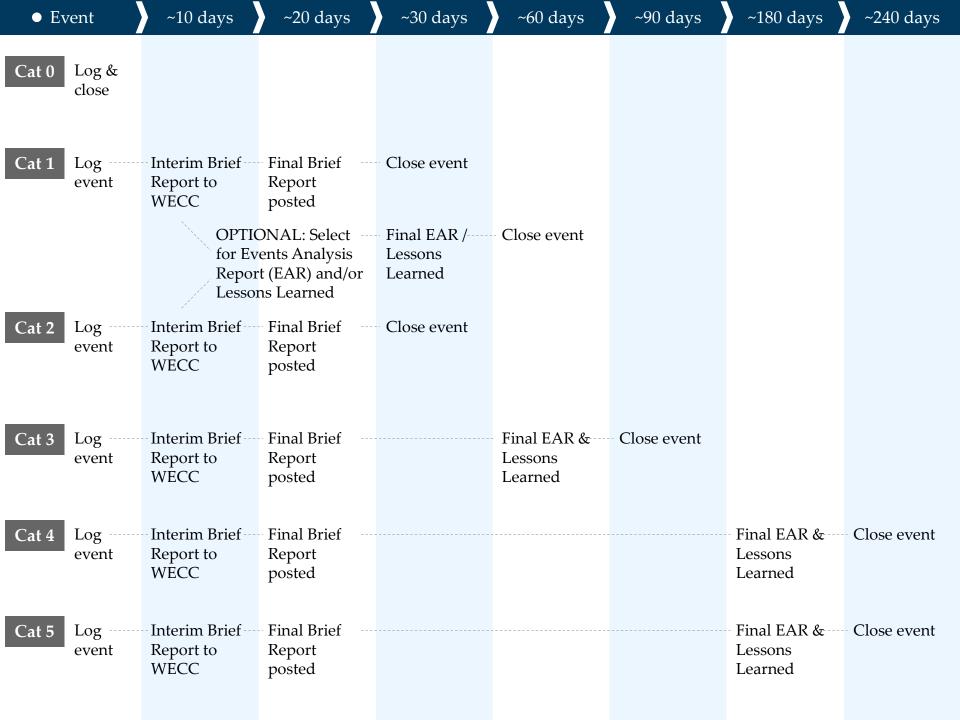


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Electric Reliability and Security for the West

#### **Contact:**

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