



WECC Event Analysis Process

WECC Operations Analysis Group



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

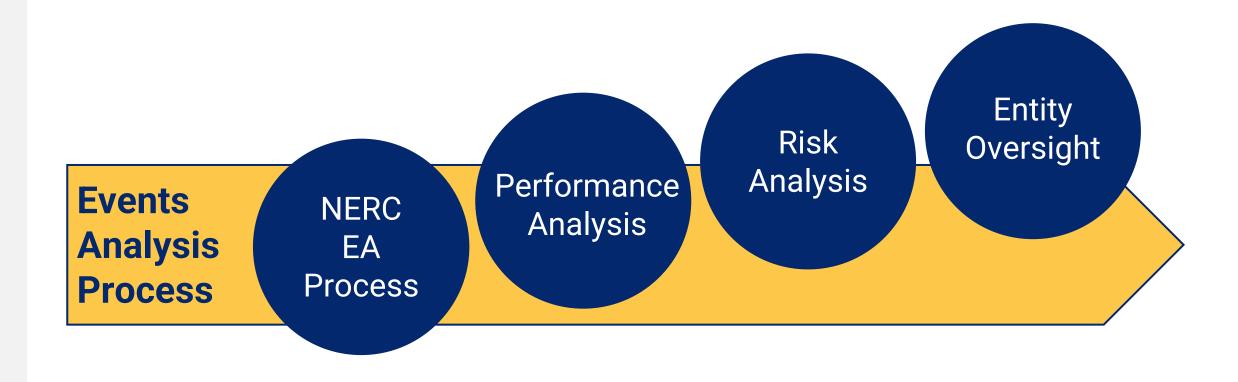


Justification and Governing Documents

- 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

- SituationAwareness
- Entity outreach

Reporting (Brief Reports)

- Event Analysis
- Entity Outreach
- StakeholderParticipation

Evaluation & Analysis

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

Outreach & Sharing

- Lessons Learned
- Stakeholder
 Committees



Sources of Information

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

Notification & Information Gathering

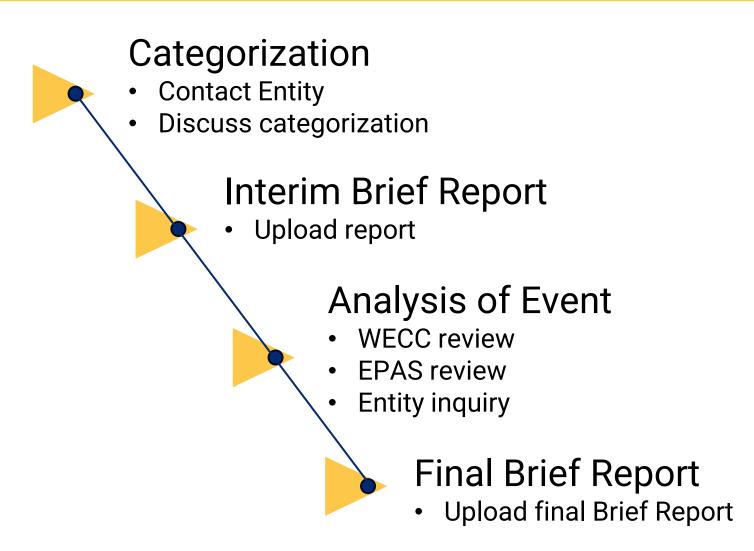


Event Analysis Objectives

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



Event Analysis Process Overview





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



Categorization

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

Timeline for Category 1-3 Events

Event~10 daysDraft BR to WECC~20 daysBR posted

Within 45 -90 business days of the event (Depending on Event category) EAR & Lessons Learned (if applicable)

Close Event

* EAR can be requested for any event category



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 whether Event Analysis Report and Lessons
 Learned should be created (required for Category 3 events)



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 and Performance Analysis Subcommittee



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 and 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



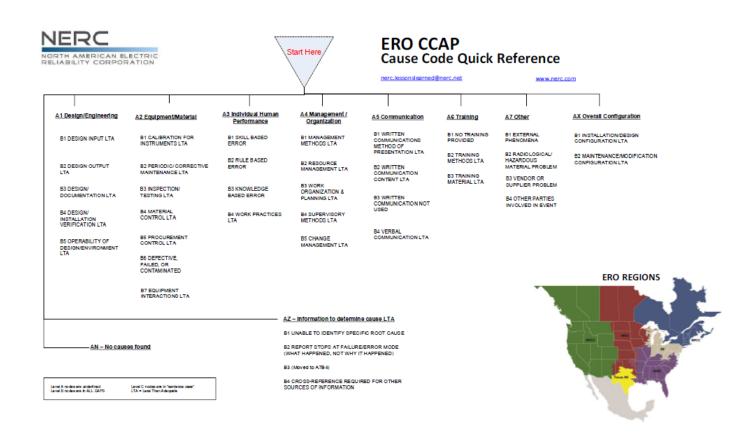
Cause Coding Purpose

- 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
 - Considerations



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
 - Submit cause codes prior to discussion
- Cause Coding Session
 - Walk through event
 - Discuss proposed causes
- CCAP Report
 - Provide final report to entity



Information Sharing

- Sharing CCAP with Entity Oversight
 - Is there a barrier to sharing CCAP reports with Oversight?
 - Yes, per the disclaimer on the CCAP, "This document cannot be used for compliance monitoring or enforcement purposes."
 - Does WECC EA share CCAP reports with Entity Oversight
 - No



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



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 RRC, EPAS DEMSF, etc.
 - NERC EAS and RSTC
- 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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Target Time Frames for Completion of Brief Reports, Event Analysis Reports, and Lessons Learned

Event Category	Brief Report	Event Analysis Report	Lessons Learned	Close Event Analysis
1	Registered entity sends interim report to Regional Entity within 10 business days of the event for review (day of the event does not add to the count). Registered entity sends final report to the Regional Entity to be uploaded by RE to NERC within 20 business days.	(If requested) ² Within 30 business days of the request	Within 45 business days of the event (if applicable)	10 business days following receipt of final Brief Report or 30 business days following receipt of final EAR (if requested)
2	Registered entity sends interim report to RE within 10 business days of the event for review (day of the event does not add to the count). Registered entity sends final report to RE to be uploaded by RE. Final report to NERC within 20 business days.	(If requested) ² Within 30 business days of the request	Within 45 business days of the event (if applicable)	10 business days following receipt of final Brief Report or 30 business days following receipt of final EAR (if requested)
3	Registered entity sends interim report to RE within 10 business days of the event for review (day of the event does not add to the count). Registered entity sends final report to RE to be uploaded by RE. Final report to NERC within 20 business days.	Within 90 business days of the event	Within 90 business days of the event (if applicable)	45 business days following receipt of final EAR



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