

# WECC

#### RRC Risk Management Process Development

October 20, 2022

Strike Team

#### **Strike Team**

- Rich Hydzik
- Grace Anderson
- Tim Reynolds
- Vic Howell



# **Reliability Risk Committee Charter**

Relevant items from the RRC Charter:

- Purpose—to identify and address known and emerging risks to the reliability and security of the Western Interconnection
- The RRC will:
  - 1. Evaluate the reliability and security risks associated with relevant commercial, operational, and other industry practices.
  - 2. Work with WECC staff and the RAC to develop and maintain an ongoing, prioritized list of known and emerging reliability and security risks facing the Western Interconnection.
  - 3. Coordinate and collaborate with WECC staff and the RAC to address priority risks.
  - 4. Initiate actions to address priority risks through the appropriate expertise and mechanism.



# **Recap from June Meeting**

- Presented RRC Risk Management Framework
  - Principles
  - Structure
  - Elements
  - Attributes
- Obtained and incorporated feedback
- Next step—develop RRC Risk Management Process



### Timeline

- Phase 1
  - May/June—Strike team to draft principles and framework
  - June 28–29 RRC meeting—Share work to date with RRC
- Phase 2
  - Jul–Oct–Incorporate RRC feedback into framework; develop draft process and tools
  - Oct 20 RRC Meeting—Review draft process and tools
  - Finalize process by the end of 2022
- Phase 3
  - Begin using new process in January 2023
- Phase 4
  - 2023 and beyond

### **Process Development Strategy**

- Figure out what's already been developed and is working
- Align with proven industry methods
- Identify and incorporate RRC-specific needs



# **Existing Material**

- Industry Standard
  - ISO 31000
  - Committee of Sponsoring Organizations (COSO) of the Treadway Commission
  - CENELEC European Standards
  - Other references
- NERC Framework to Address Known and Emerging Reliability and Security Risks\_v3
- RRC Framework



#### **Process Development**





#### **Industry Standard**

ECC



### **RRC Adoption of Industry Standard**



Sequential steps
 Periodic activities
 Ongoing activities

#### **Sequential Steps**



# Sequential steps Periodic activities Ongoing activities

#### **Sequential Steps**





# **Step 1—Risk Identification**

- Identify risks—many processes and methods
- Bring risks to the RRC
  - RRC Risk Register Initiation Form
- Screen each risk as a sanity check
- Enter risk into the RRC Risk Register
- Ensure documentation from this step is in order

	Risk assessment	
	Risk identification	D
	Risk analysis	
	Risk evaluation	
	Risk Treatment	
[	Recording and reporting	



# Step 2—Risk Analysis

- Understand and document the causes of the risk
  - What's driving it?
- Determine the likelihood and consequences of the risk
  - Risk Severity Matrix
- Ensure documentation
  from this step is in
  order

Risk Severity Matrix							
Likelihood/ Consequence	Insignificant	Minor	Moderate	Major	Severe		
Almost Certain	Medium	Medium	High	High	Extreme		
Likely	Medium	Medium	Medium	High	Extreme		
Possible	Low	Medium	Medium	High	High		
Unlikely	Low	Low	Medium	Medium	High		
Rare	Low	Low	Low	Medium	High		



# Step 2—Risk Analysis

**Consequence/Impact—How could a typical event due to this risk affect the reliability and security of the Western Interconnection?** 

Severe	Impacts may have widespread effects on the BPS across the whole interconnection
Major	Impacts may have widespread effects on regional, RC, or multi- state/providence levels within the interconnection
Moderate	Impacts may have widespread effects localized by multiple entities or single state/providence within the interconnection
Minor	Impacts may have effects on a single entity
Insignificant	Impacts may be small or non-existent to the BPS



# Step 2—Risk Analysis

Likelihood—What is the reasonable probability that consequences will occur within the Western Interconnection?				
Almost Certain	Mandatory Controls—No Reliability Standards in place for mitigation Emerging Trends—Increasing trends have been identified Event History—Documented events or widely publicized exploits have been recorded			
Likely	Mandatory Controls—No Reliability Standards in place for mitigation Emerging Trends—Some trends have been identified Event History—Documented events or generally publicized exploits have been recorded			
Possible	Mandatory Controls—Reliability Standards in place for limited mitigation Emerging Trends—Some trends have been identified Event History—No documented events or minimally publicized exploits have been recorded			
Unlikely	Mandatory Controls—Reliability Standards in place for mitigation Emerging Trends—Some trends have been identified Event History—No documented events or publicized exploits have been recorded			
Rare	Mandatory Controls—Reliability Standards in place for mitigation Emerging Trends—No known trends identified Event History—No documented events or publicized exploits have been recorded			



# **Step 3—Risk Evaluation**

- Identify activities that are already mitigating the risk
- Consider the risk analysis and examine the trend of the risk (increasing, decreasing), time frame of the risk (today, 10 years from now), new or existing
- Determine the relative rank of this risk to other risks
- Categorize the risk
- Ensure that documentation from this step is in order



# Step 4—Risk Treatment

- Mitigation Identification and Expected Effectiveness Review
  - Identify activities that could mitigate the risk
  - Evaluate effectiveness of those activities and determine the expected outcomes
  - Determine the expected reduction in risk resulting from the activity
- Determine actions to be taken based on this review
- Execute Actions
  - Develop and implement actions
  - Project plans, tracking of progress, etc.
- Ensure that documentation from this step is in order

Risk assessment	
Risk identification	
Risk analysis	
Risk evaluation	
Risk Treatment	D
Recording and reporting	

# **Step 5—Recording and Reporting**

- Communicate information about risk to decision-makers and other stakeholders
- Provide a record and justification of the rationale for decisions
- Preserve the results of assessment for future use and reference
- Provide an audit trail
- Ensure that documentation from this step is in order



# **Review Supporting Docs**

- Process flow chart
- RRC Risk Register Initiation Form
- RRC Risk Registry



#### **Communication and Consultation**



# Sequential steps Periodic activities Ongoing activities

# **Communication and Consultation**

Two periodic activities:

- Risk Prioritization
  - Broad engagement
  - WECC biennial Risk Priority Process
- Risk Report
  - Collaborate with WECC staff
  - Consult with RAC and others



### **Monitoring and Review**



Sequential steps
 Periodic activities
 Ongoing activities

# **Monitoring and Review**

- Individual risks
  - Did the mitigation actions reduce the risk? How and by how much?
  - Is the residual risk acceptable?
  - Monitor the residual risk as needed.
- RRC Risk Management Process
  - Ongoing assessment of process effectiveness.
  - Continuous process improvement.



#### **Next Steps**

- Incorporate RRC feedback
- Address specifics—who, when, how
- Finalize and document the process
- Approve RRC Risk Management Process document at February RRC meeting
  - Develop milestones and timeline
- Begin using the process in 2023



# **RRC Feedback and Discussion**

- Feedback on the process?
- Feedback on the Risk Registry Form or the Risk Registry?
- Anything stand out as especially positive or negative?
- What do you think is critical for the success of the RRC Risk Management process?





#### **Contact:**

Vic Howell—RRC Liaison Director of Reliability Risk Management vhowell@wecc.org