

## **RRC Risk Management Framework**

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The Reliability Risk Committee (RRC) has a 2022 goal to develop a risk management process to be used to support the foundational responsibilities outlined in its charter. The following excerpts from the charter describe the RRC’s responsibilities.

RRC Purpose—The purpose of the RRC is 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 Reliability Assessment Committee (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.

The RRC’s purpose and responsibilities directly support Focus Area 2 of WECC’s [Long-Term Strategy](#):

Focus Area 2—Assess and initiate action to mitigate known and emerging risks to reliability and security.

Focus Area 2 Desired Outcome—Clear understanding of emerging risks to the BPS and associated mitigation strategies, particularly for WECC Reliability Risk Priorities.

## **RRC Risk Management Framework: Principles, Structure Elements, and Attributes**

The RRC risk management framework comprises the following items:

1. **Principles**—A set of tenets that guide the RRC risk management process activities.
2. **Structure**—The overall structure, roles, and operation of the RRC risk management function.
3. **Elements**—The essential elements of the RRC risk management process.
4. **Attributes**—The important properties, features, and functional characteristics to be considered when designing the RRC risk management process.

These four items will be used as a launchpad from which to develop the RRC risk management process.

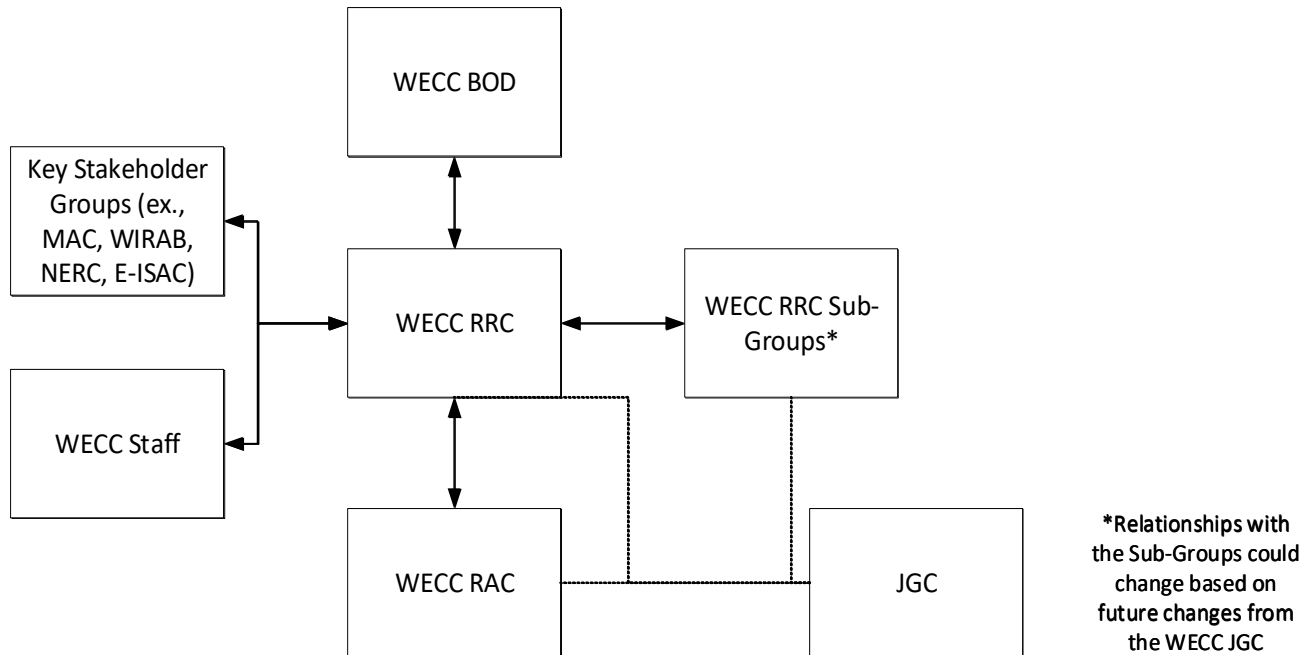
### RRC Risk Management Principles

1. **Reflects a tailored and customized approach**—The RRC’s risk management approach should be customized to their own needs, including the RRC’s objectives and the external and internal context in which the RRC operates. The RRC’s purpose is to identify and address known and emerging reliability and security risks to the Western Interconnection. Accordingly, the RRC’s risk management process should be tailored toward that objective.
2. **Relies on a transparent and inclusive process and fosters a culture of engagement**—Active and timely engagement from stakeholders enables their knowledge, views, and perceptions to be considered and is critical to the success of the RRC risk management process. This results in improved awareness and informed risk management. The RRC’s process will be transparent and will rely on input from RRC members and others, including the Joint Guidance Committee (JGC), the Reliability Assessment Committee (RAC), and WECC staff.
3. **Represents structured and comprehensive approach**—A structured and comprehensive approach to risk management contributes to consistent and comparable results. It is critical that the RRC’s risk management process design specifications ensure a structured and comprehensive approach.
4. **Ensures dynamic evolution**—Risks can emerge, change, or disappear as the RRC’s context changes. Risk management anticipates, detects, acknowledges, and responds to those changes and events in an appropriate and timely manner.
5. **Uses best available information**—The inputs to risk management are based on historical and current information, as well as on future expectations. Risk management explicitly considers any limitations and uncertainties associated with such information and expectations.
6. **Applies rigorous analytics**—Rigorous quantitative analysis is applied to available historical and present operating data to identify and evaluate both existing and emerging risks. This analysis is used to feed future projections. Because the future is unknown, and subject to change, qualitative interpretations and assumptions will be necessary to effectively rank and prioritize existing and emerging risks.
7. **Ensures roles and responsibilities are clear**—The risk management process should consider the human factors and ensure that everyone knows their roles at each stage of the risk management process.
8. **Facilitates continuous improvement**—Risk management is continually improved through learning and experience.



## RRC Risk Management Structure

The following diagram and table show the interaction between the various participants and the roles of those participants.



Group	Roles
Board of Directors	<ul style="list-style-type: none"> <li>Review the RRC master list of interconnection risks, and the prioritization and activities associated with those risks, and provide strategic direction as needed</li> </ul>
RRC	<ul style="list-style-type: none"> <li>Oversee the RRC risk management process to identify and address known and emerging reliability and security risks to the Western Interconnection</li> <li>RRC members coordinate within and outside their organization to understand reliability and security risks and share those risks with the RRC for a holistic view of risks facing the Western Interconnection</li> <li>Develop the RRC master list of risks and identify and execute activities to address priority risks</li> <li>Create reports and make recommendations to the Board as necessary</li> </ul>

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Group	Roles
	<ul style="list-style-type: none"> <li>• Provide guidance, training, and other outreach activities on the risk management process and risk priorities</li> </ul>
<b>RRC Sub-Groups</b>	<ul style="list-style-type: none"> <li>• Execute strategic initiatives and projects assigned by the RRC</li> <li>• Identify, monitor, and manage reliability and security risks in its area</li> <li>• Work closely with the industry to formulate, create, or help implement mitigating procedures or practices and monitor the effectiveness of those activities</li> <li>• Provide updates and information to the RRC regarding key risks (new or existing) to the interconnection and describe and mitigation efforts to address those risks</li> </ul>
<b>RAC</b>	<ul style="list-style-type: none"> <li>• Coordinate and collaborate with the RRC to develop the list of known and emerging reliability and security risks and to address those risks as appropriate</li> </ul>
<b>Key Stakeholder groups (ex., MAC, WIRAB, NERC, E-ISAC)</b>	<ul style="list-style-type: none"> <li>• Achieve a high-level understanding of RRC's approach to reliability and security risk management</li> <li>• Engage with the RRC to help identify and address known and emerging risks</li> </ul>
<b>JGC</b>	<ul style="list-style-type: none"> <li>• Review effectiveness of the RRC and its subgroups</li> <li>• Ensure existing reliability issues are being adequately addressed by technical committees as needed, and if not, initiate technical committee work to address them</li> </ul>
<b>WECC Staff</b>	<ul style="list-style-type: none"> <li>• Collaborate with RRC members to develop and maintain the RRC risk management process</li> <li>• Maintain the RRC risk register</li> <li>• Provide input to the list of known and emerging reliability and security risks and associated mitigation activities for priority risks</li> <li>• Support and contribute to the RRC's execution of its risk management process through data gathering, risk analysis, assessments, evaluation, tracking, and other relevant activities</li> </ul>

Group	Roles
	<ul style="list-style-type: none"> <li>Maintain an ongoing dialogue with NERC on RRC activities</li> <li>Facilitate crossover between RRC and RAC</li> </ul>
NERC	<ul style="list-style-type: none"> <li>Provide regular updates to RRC on NERC Reliability and Security Technical Committee (RSTC) activities</li> <li>Maintain an awareness of RRC activities</li> </ul>

### Elements of the RRC Risk Management Process

1. **Identify**—Intaking potential risks (identifying them—known and emerging risks).
2. **Clarify**—Understanding, clarifying, and documenting the risks.
3. **Evaluate**—Evaluating the risks (includes consequence/impact and likelihood).
4. **Rank**—Ranking the risk (magnitude, severity).
5. **Categorize**—Categorizing risks based on appropriate dimensions, e.g., temporal (immediate, near, long term); geographic (Interconnection-wide or sub-region(s)), etc.
6. **Identify Existing Initiatives**—Determining work already underway that is addressing the risk.
7. **Prioritize**—Determining the risks to address in priority.
8. **Plan Actions**—Identifying actions that can be taken to address the risk—includes describing desired outcome through those actions and developing plans for the actions.
9. **Execute Actions**—Executing and tracking the progress of action execution.
10. **Assess Actions**—Assessing effectiveness of those actions (feedback).

### RRC Risk Management Process Attributes

The RRC Risk Management Process should:

1. Cover the full range of reliability and security risks broadly—i.e., the "risk universe."
2. Address getting the risk from "out there" to being in our database. Understand and document where and how risks are "taken in" by the RRC.
  - a. Includes intaking risks from WECC staff and the RRC, per the charter.
3. Clarify the risk. Broad or ambiguous risks need to be broken down into specific risks if possible.
4. Categorize the risks—use categories and sub-categories as appropriate.
5. Have a method of prioritizing the risks.



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6. Have a method of determining the nature and degree of potential impact (consequences) and the likelihood of the risk occurring (i.e., likelihood of negatively affecting reliability and security).
7. Capture activities already occurring in the industry aimed at addressing those risks—who is doing what already? How is the RRC plugging into these initiatives?
8. Start with the risks we already know about.
9. Determine whether the risk is unique to the Western Interconnection.
10. Capture the relative time-based nature of the risk—immediate, near-term, mid-term, long-term.
11. Distinguish the impacts of risk across the various subregions—e.g., the risk is significant in the Pacific NW, but not as significant in the Desert Southwest.
12. Identify actions that can be taken to address the risk. Any action needs to be accompanied by a description of the desired outcome. This includes determining how those actions will affect the residual consequence and likelihood; i.e., the RRC process considers what we can affect, what we cannot affect, and all points in between.
13. Have a way of planning and executing any agreed-upon actions to be taken.
14. Have some way of tracking progress of the agreed-upon actions.
15. Have some way of assessing the effectiveness of those actions once implemented.
16. Include a continuous reassessment of risks and priorities as things change.
17. Make use of the best available information and data. The RRC process needs to determine the data or information needed to accomplish any step in the process.
18. Be continuously evaluated and improved—not set in stone.
19. Respect confidentiality agreements.
20. Respect established industry processes (e.g., NERC RISC, EA, GADS/TADS/MIDAS, NERC/WECC committee work). In other words, our process should not focus on changing other processes; instead, we should make the best use of the processes that exist.

Other attributes:

21. Once the RRC risk management process is established, there needs to be outreach and understanding of the RRC process and how it interacts with (and depends upon) other processes.
22. Risk analysis and evaluation can and should be done quantitatively and qualitatively and should be based on historical and current information as well as on future expectations and input from industry subject matter experts.



## RRC Risk Management Framework

23. WECC must have adequate staff dedicated to supporting the RRC in risk analysis and in the ongoing development and maintenance of the master list.

