

Agenda

Reliability Issues Steering Committee

April 17, 2024 | 4:00-5:00 p.m. Eastern
Virtual Meeting

Attendee WebEx Link: [Join Meeting](#)

Attendee Password: AttendeeRISC0417 (28836333 from phones)

Audio Only: 1-415-655-0002 US Toll | +1-416-915-8942 Canada Toll | Access code: 231 124 53268

Introductions and Chair's Remarks

[NERC Antitrust Compliance Guidelines](#)

Agenda Items

1. **Welcome New Members**
2. **RISC Overview* - Review**
 - a. General Overview
 - b. RISC Charter and Mission
 - c. Risk Framework/RSTC Coordination
3. **Reliability Leadership Summit Timeline* - Review**
4. **Hot Topics for Future Meetings* - Review**
5. **Proposed 2024 Meeting Dates* - Review**
6. **Other Matters and Adjournment**

*Background materials included.

RISC Overview

Action

Review

Background

The Reliability and Security Committee (RISC) is governed by the [Committee Charter](#), last approved by the NERC Board of Trustees (Board) on August 20, 2020. This discussion is intended to provide information regarding the purpose and mission of the Reliability and Security Committee and other important considerations set forth in the Charter.

The main functions of the RISC include:

- Evaluating BPS reliability issues and risks;
- Providing an analysis of risks to the BPS, with a relative prioritization of the risks to guide planning activities of NERC and the standing committees; and
- Carrying out such other functions as assigned from time to time by the Board.

The main work product of the RISC is the biannual [ERO Reliability Risk Priorities Report](#). The RISC also hosts the biannual Reliability Leadership Summit, which informs its report.

Summary

RISC Leadership and NERC staff will take an opportunity during the April 17 meeting to familiarize the new members, and re-familiarize current members with the charter, mission, objectives and activities of the RISC.

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Reliability Issues Steering Committee (RISC) Overview

RELIABILITY | RESILIENCE | SECURITY



- Assure the reliability, resilience, and security of the North American Bulk Power System (BPS)
 - Develops and Enforces Reliability Standards
 - Annually assesses seasonal and long-term reliability
 - Monitors the BPS through system awareness
 - Educates, trains, and certifies industry personnel

Critical Infrastructure
Interdependencies



Security Risks



Extreme Events



Grid Transformation



- NERC is the Electric Reliability Organization (ERO)
- Overseen by U.S. and Canadian regulatory authorities (FERC and the Canadian Provinces)
 - Responsible for developing/enforcing Reliability Standards
 - Independent of owners, operators, users
 - Adheres to rules governing standards development, compliance enforcement, and budgeting

- NERC delegates certain functions to the Regional Entities
 - Compliance monitoring and enforcement
 - Organization registration and certification
 - Reliability assessments and performance analysis
 - Event analysis and reliability improvement
 - Training and education
 - Situational awareness
 - Infrastructure security
- NERC oversees the Regional Entities to ensure transparency, predictability, and uniform outcomes

History

1965: Northeast blackout

1968: National Electric Reliability Council (NERC) established by the electric industry

2002: NERC operating policy and planning standards become mandatory and enforceable in Ontario, Canada

2003: August 14 blackout

2005: U.S. Energy Policy Act of 2005 creates the Electric Reliability Organization (ERO)

2006: Federal Energy Regulatory Commission (FERC) certifies NERC as the ERO; Memorandum of Understanding (MOUs) with some Canadian Provinces

2007: North American Electric Reliability Council becomes the North American Electric Reliability Corporation (still NERC); FERC issues Order 693 approving 83 of 107 proposed reliability standards; reliability standards become mandatory and enforceable

Recent

2012-2021: Hurricanes Sandy, Harvey, Irma, Michael, Ida

2020: California Heat Event, Solar Winds Attack, COVID-19 Pandemic

2021: Texas Cold Weather Event, Colonial Pipeline Attack

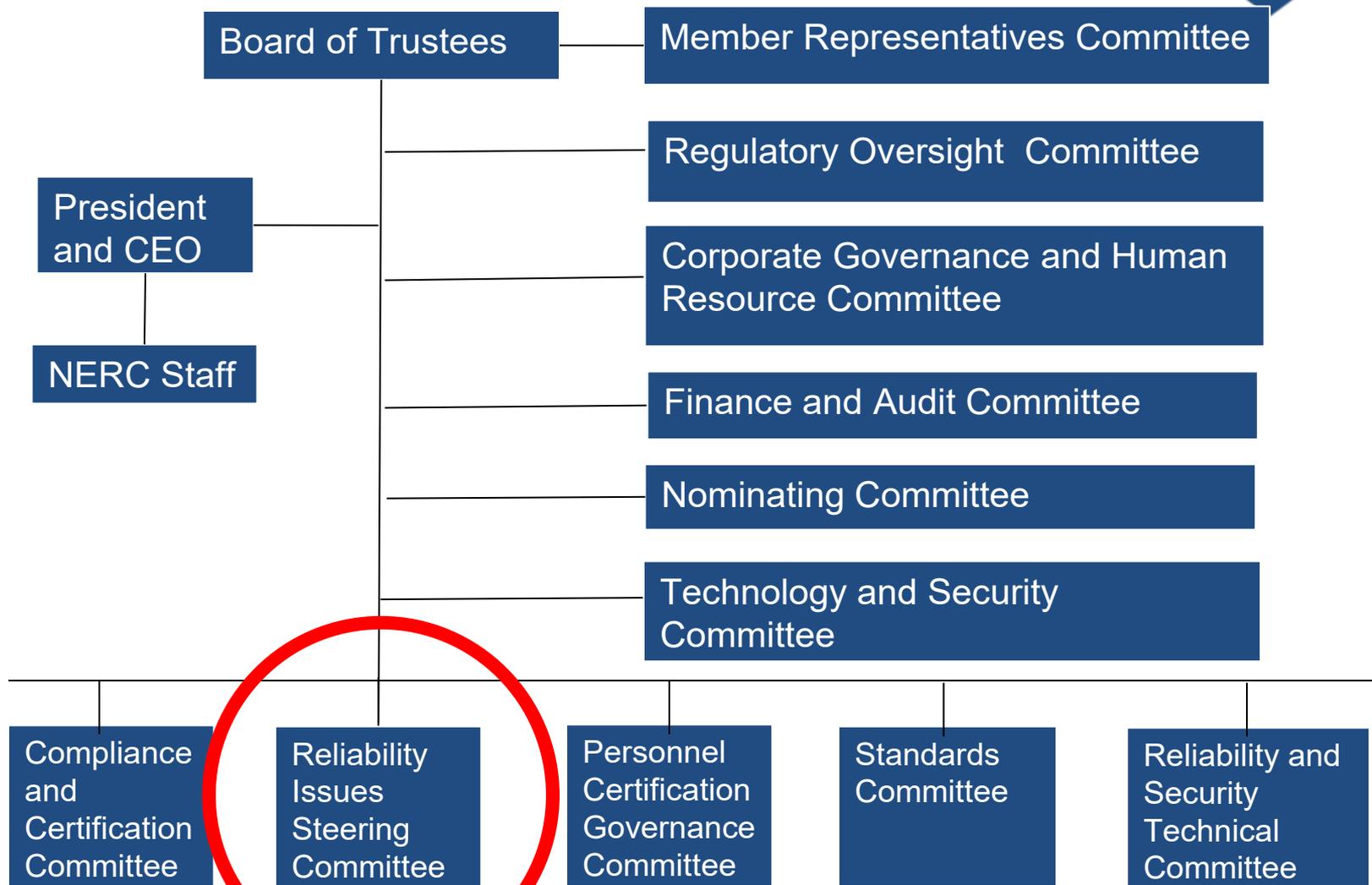
NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

RISC

RELIABILITY | RESILIENCE | SECURITY





The Reliability Issues Steering Committee (RISC or Committee) is an advisory committee to the NERC Board of Trustees. The RISC:

- Provides key insights, priorities, and high-level leadership for issues of strategic importance to BPS reliability.*
- Advises the Board, NERC committees, NERC staff, regulators, Regional Entities, and industry stakeholders to establish a common understanding of the scope, priority, and goals for the development of solutions to address emerging reliability issues.*
- Provides guidance to the ERO Enterprise and the industry to effectively focus resources on the critical issues to improve the reliability of the BPS.*

- Objectives:
 - Develop the scope, priority and goals to mitigate known and emerging risks to bulk power system reliability
 - Provide a framework to effectively focus NERC and industry resources to improve reliability
- Biennial Activities
 - Reliability Leadership Summit
 - Industry risk survey
 - Identify Priority Risks
 - Identify Mitigating Activities
- Document result in RISC Report

High level risk profiles:

Energy Policy



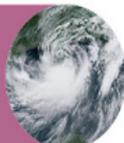
- A. Federal
- B. State
- C. Provincial

Grid Transformation



- A. Bulk Power System Planning
- B. Resource Adequacy and Performance
- C. Increased Complexity in Protection and Control Systems
- D. Situational Awareness Challenges
- E. Human Performance and Skilled Workforce
- F. Changing Resource Mix

Resilience/ Extreme Events

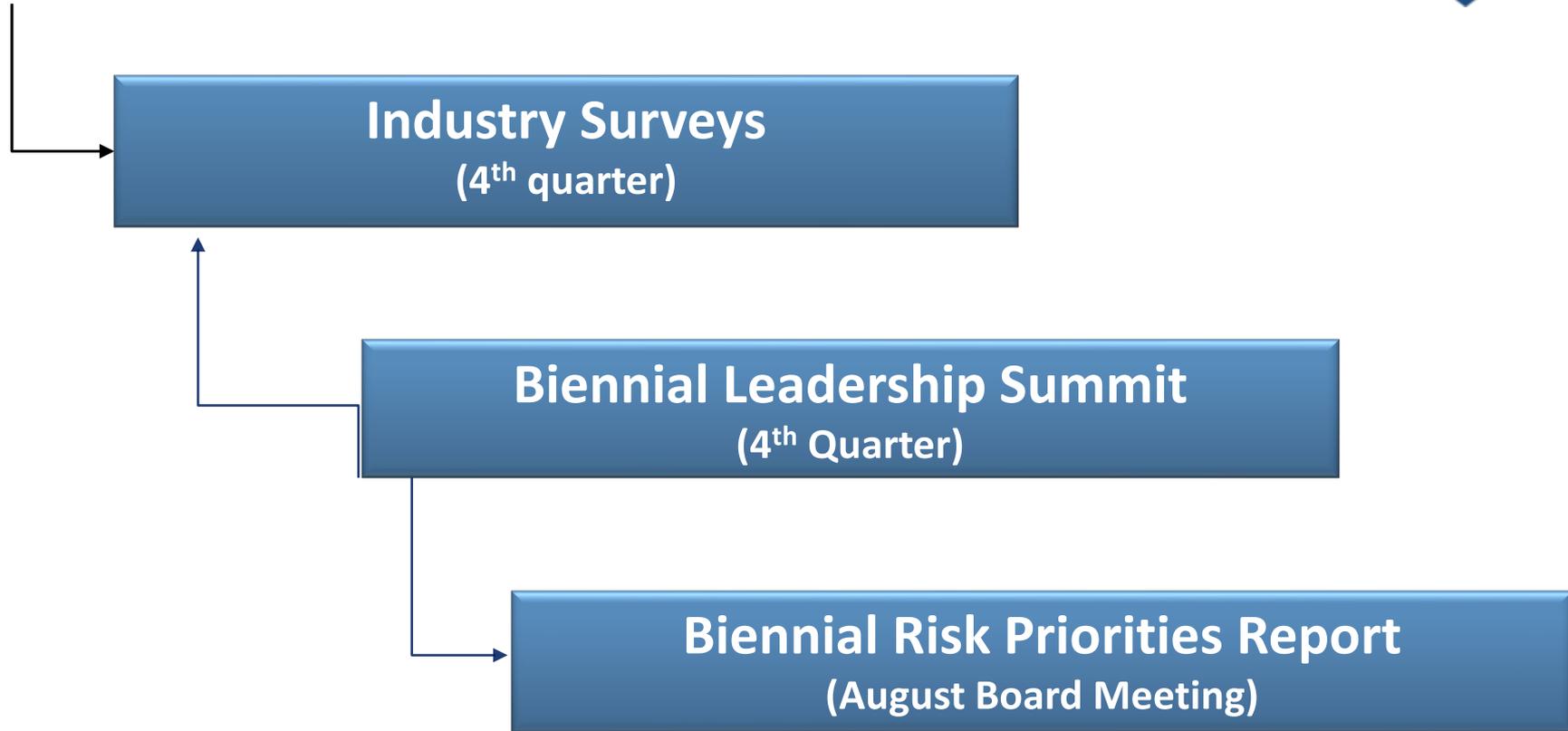


- A. Extreme Natural Events, Widespread Impact
 - GMD
- B. Other Extreme Natural Events

Security Risks



- A. Physical
- B. Cyber
- C. Electromagnetic Pulse



The primary objective of this *2023 ERO Risk Priorities Report* is to

- Report on key risks to the BPS that merit attention and to recommend mitigating actions that align with those risks
- The report differs from other ERO reports in that it is a forward-looking view to understand imminent risks and plan for their mitigation. It complements NERC's *Long-Term Reliability Assessment*
- This is in contrast to the *State of Reliability* report or event analysis reports, which review data from previous years or events to draw objective conclusions about events, emerging risks, and the appropriate monitoring for their mitigation

- Analysis of mitigating activities and the effects on risk likelihood and impacts, enable biennial comparison/trending
- A larger emphasis on immediate and short-term actionable activities to reduce risk
- Differentiation between actively manage versus monitor
- Prospectively it will be important for the RISC to:
 - Collaborate with the identified owners of the mitigating activities recommendations to understand actions implemented, if any, to address the risk and recommendations
 - Coordinate with the annual business plan and budget and ERO Enterprise Long-Term Strategy to ensure alignment of priorities and strategic execution on a going-forward basis

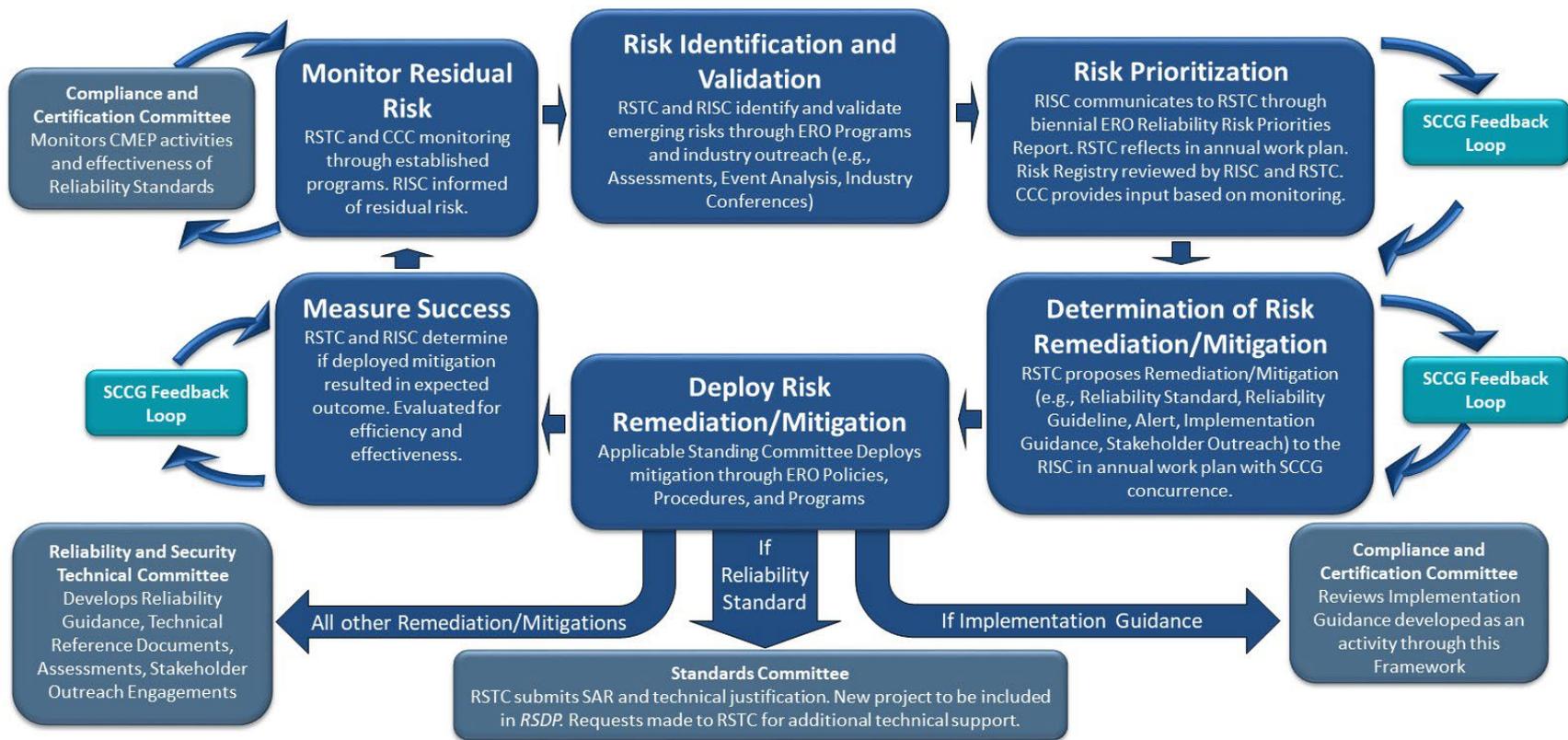
NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

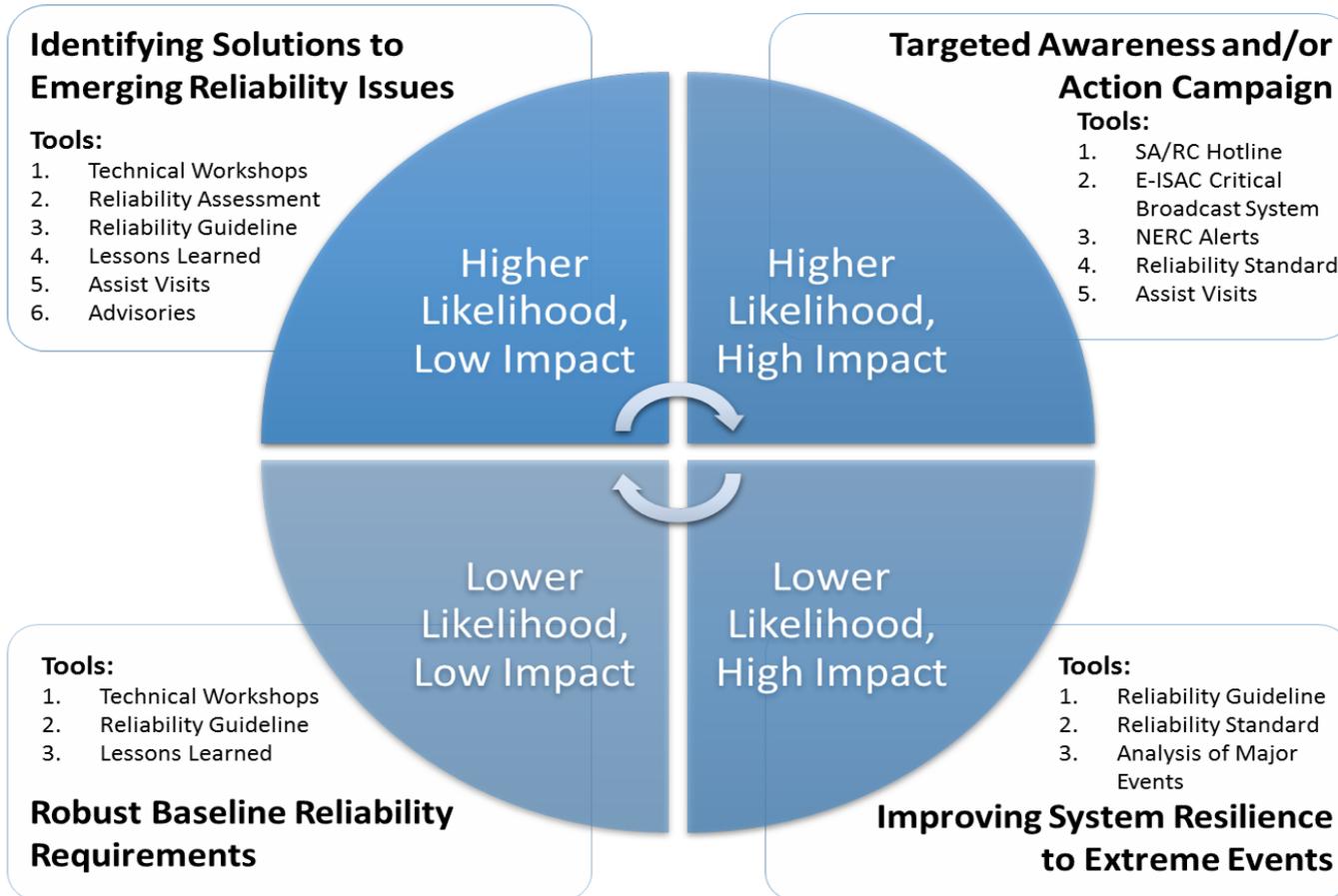
Risk Framework/RSTC Coordination

RELIABILITY | RESILIENCE | SECURITY





Electric Reliability Organization: Reliability Risk Mitigation Toolkit



*Likelihood is Likelihood of an "Adverse Reliability Impact"



Reliability Guideline

Suggested approaches or behavior in a given technical area for the purpose of improving reliability. Guidelines are not enforceable, but may be adopted by a responsible entity in accordance with its own policies, practices, and conditions.



NERC Alert: Level 2-3

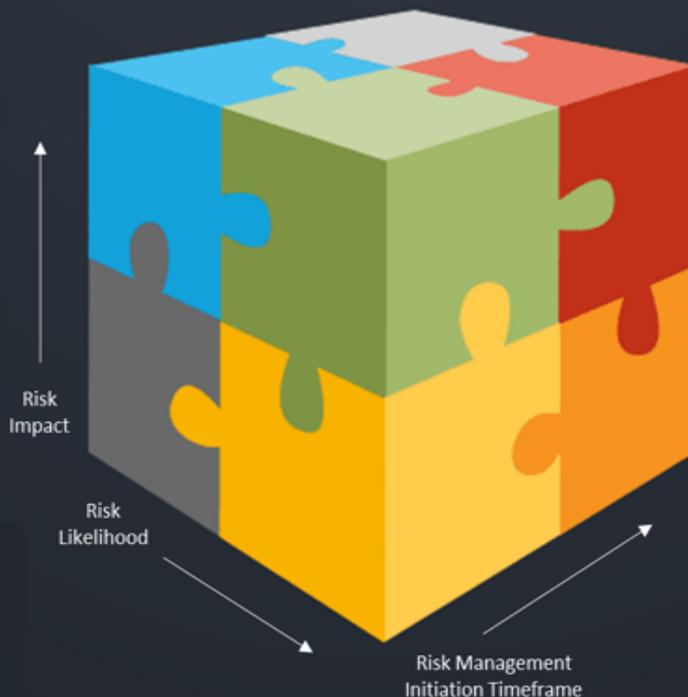
NERC alerts are divided into three distinct levels, 1) Industry Advisory, 2) Recommendation to Industry, and 3) Essential Action, which identifies actions to be taken and require the industry to respond to the ERO.



Technical Engagement

Technical Engagement is a catch-all for a variety of technical activity that is conducted between the ERO and entities. This includes, technical committee activities, technical reference documents, workshops and conferences, assist visits, joint and special studies, etc.

Electric Reliability Organization: Reliability Risk Mitigation Toolkit



Reliability Standards



NERC Reliability Standards define the mandatory reliability requirements for planning and operating the North American BPS and are developed using a results-based approach focusing on performance, risk management, and entity capabilities.

Reliability Assessment

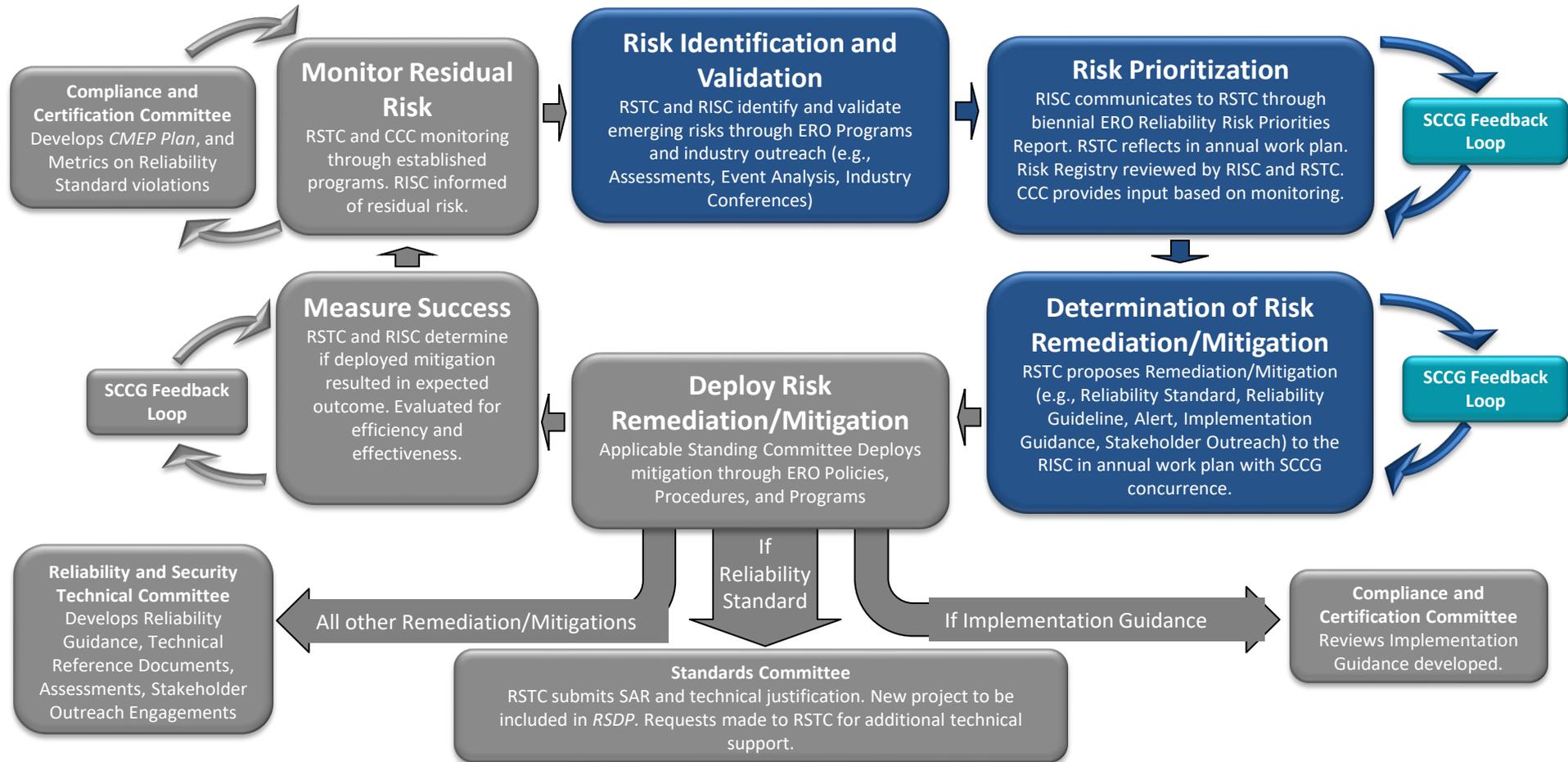


NERC independently assesses and reports on the overall reliability, adequacy, and associated risks that could impact BPS reliability. Long-term assessments identify emerging reliability issues that support public policy input, improved planning and operations, and general public awareness.

NERC Alert: Level 1



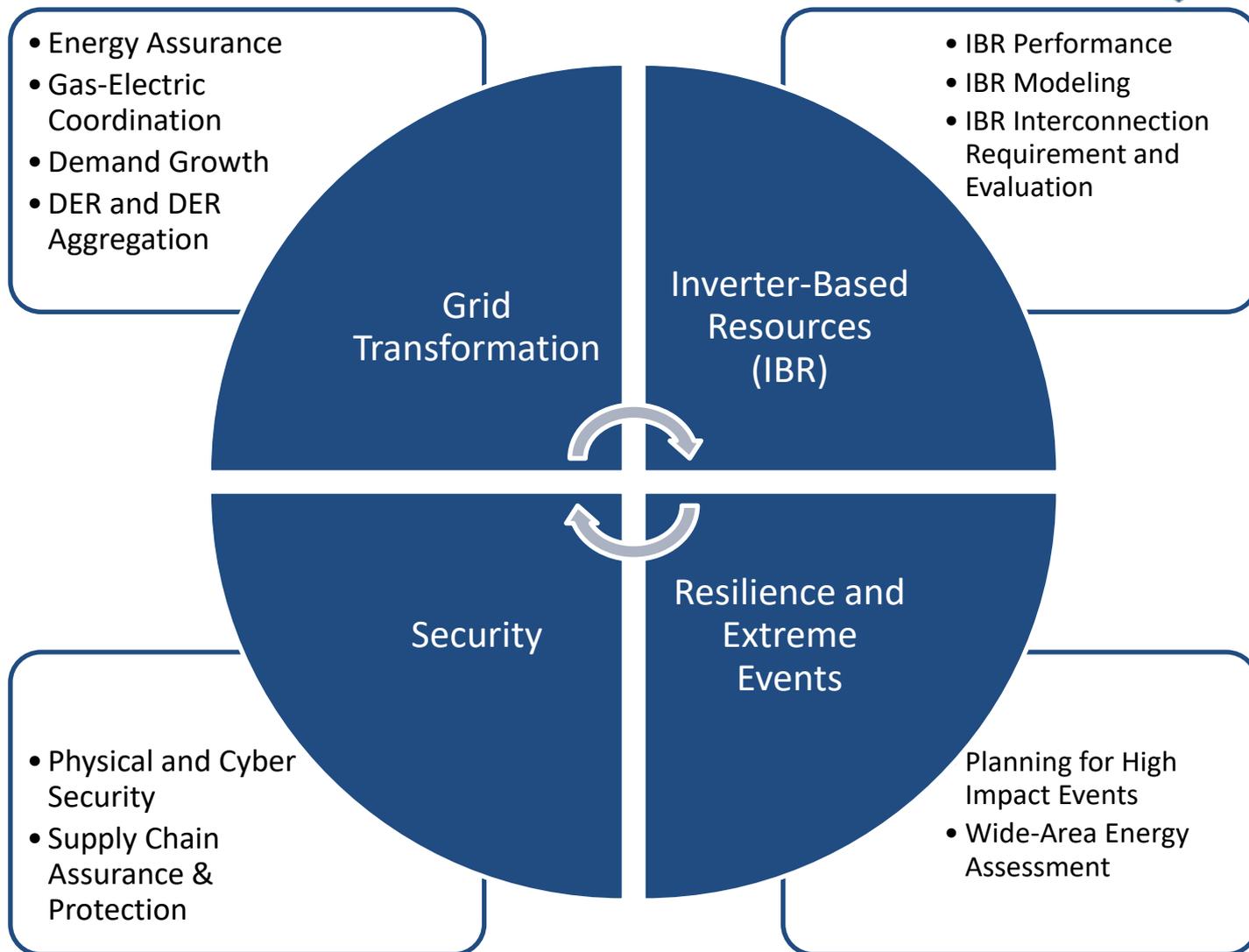
NERC Alerts are divided into three distinct levels, 1) Industry Advisory, 2) Recommendation to Industry, and 3) Essential Action, which identifies actions to be taken and require the industry to respond to the ERO.



- Risk Profile #1: Energy Policy
- Risk Profile #2: Grid Transformation
- Risk Profile #3: Resilience to Extreme Events
- Risk Profile #4: Security Risks
- Risk Profile #5: Critical Infrastructure Interdependencies

- In June 2023, the RSTC appointed a Work Plan Review Team to review the RSTC Work Plan and the soon to be published ERO Risk Priorities Report (RISC)
- Each RSTC Subcommittee/WG/TF reviewed their work plan and completed the template for the review team to consider at the October work plan summit.
- The RSTC Review Team assessed work plan item priority (H/M/L) and applicability to the RSTC Strategic Plan.

- Per RSTC Strategic Plan, the team included the following in the review:
 - Long-Term and Seasonal Reliability Assessments
 - Special Assessments
 - Event and Disturbance Reports
 - State of Reliability Report
 - FERC NOPR on IBRs
 - Other reliability indicators, whitepapers, gap assessments
 - 2023 ERO Enterprise Work Plan Priorities
(<https://www.nerc.com/AboutNERC/Pages/Strategic-Documents.aspx>)
- Develop priorities for work plan items.



- White Paper: Energy Reliability Assessments Vol. 2
- Monitor Performance of Electric-Gas Interface during Extreme Events
- Generating Unit Winter Weather Readiness Webinar
- Monitor and Share Development of EV Charging Model
- SAR: Revisions to FAC-001 and FAC-002—IBR Performance
- Reliability Guideline: Recommended Approach to Interconnection Study of BPS-Connected IBRs
- Reliability Guideline: EMT Modeling and Simulations of IBR
- White Paper: Case Study on Adoption of EMT Modeling

- White Paper: Probabilistic Planning for the Tails
- Response to Cold Weather Recommendations:
 - Effects of Load-Shedding during Long-duration Events
 - Impacts of Transfer Limits
 - Improvements to Load Forecasting
 - Impacts of Forecasting Intermittent Generation
- Special Reliability Assessment of Resiliency and Interdependencies Scoping
- Monitor and Support NERC Alerts for Supply Chain Issues



Questions and Answers

Reliability Leadership Summit

Action

Review

Background

The purpose of the Reliability Leadership Summit is to gather industry leaders and keynote speakers to provide unique perspective into the key drivers of existing and emerging risks and use as a vehicle to prioritize identified risks as well as to potentially identify new and emerging risks. Panel sessions are put together to collaborate around key risks and mitigating strategies as well as to engage in meaningful debate about their relative importance and significance. The Reliability Leadership Summit serves as a key building block to the ultimate ERO Reliability Risk Priorities Report.

Summary

NERC Staff will seek the Committee's input on the proposed amended timeline for the next RISC Reliability Leadership Summit.

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

RISC Reliability Leadership Summit

RELIABILITY | RESILIENCE | SECURITY



- The purpose of the Reliability Leadership Summit is to:
 - Gather industry leaders and keynote speakers to provide unique perspective into the key drivers of existing and emerging risks
 - Use as a vehicle to prioritize identified risks as well as to potentially identify new and emerging risks
- Panel sessions are put together to collaborate around key risks and mitigating strategies as well as to engage in meaningful debate about their relative importance and significance
- The Reliability Leadership Summit serves as a key building block to the ultimate ERO Reliability Risk Priorities Report which is approved by the NERC Board of Trustees at its August meeting

- Summit is typically held in late January and in the Washington, DC locale
 - This timing has consistently condensed development of the RISC Report
 - Final report has to be submitted to the RISC for approval in July to meet the submission for Board of Trustees approval in August
- Recommendation: Move the Summit to the 4th Quarter
 - For 2024: Looking at November 13-14, in the Washington, DC locale. We submitted RFPs to hotels for recommended dates in both October and November. We received no availability for October, but currently have a tentative hold on the Westin Washington DC for the November 13-14 dates
 - Summit Framework
 - First Day - PM ½ Day Session
 - Reception
 - Second Day - AM ½ Day Session
 - Allows for the consolidation of the data/feedback from the Summit and the Emerging Risks Survey in December and commencement of development of the RISC Report in January following the holidays



Questions and Answers

Potentially Newly Impactful Topics for Future Meetings

Action

Review

Summary

NERC Leadership will discuss potentially newly impactful topics for review and discussion at future meetings and will seek Committee input and any additional recommendations for topics.

Proposed 2024 Meeting Dates

Action

Review

Background

The RISC meets at least quarterly in person or by teleconference, with agendas developed and distributed in advance. Necessary actions are put to the committee for vote; proxies are not permitted.

The RISC may meet from time to time in confidential session to discuss sensitive information. Participants must agree to treat such information in accordance with Section 1500 of the NERC Rules of Procedure – Confidential Information and any applicable confidentiality agreements.

Summary

NERC Staff will review the following 2024 RISC meeting *proposed dates*:

- **1st Quarter**
 - April 17 | 4:00-5:00 p.m. Eastern (*Virtual*)
- **2nd Quarter**
 - July 16 and 17 | TBD Location – Mid-west/West (*In-Person Meeting*)
- **3rd Quarter**
 - September 19 | 3:00-4:00 p.m. Eastern (*Virtual*)
- **4th Quarter (Pending decision on Reliability Leadership Summit)**
 - October 31 | 3:00-4:00 p.m. (*Virtual*)
 - November 14 | 1:00-4:00 p.m. (*In-Person in conjunction with Summit*)