WECC

Risk Management Program Town Hall

Wednesday, July 8

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Risk Management Program Virtual Town Hall

Travis English
Senior Outreach and Partnerships Specialist

Electric Reliability & Security for the West

July 8, 2026

Antitrust Policy

- Participants are reminded of their obligations under the WECC Antitrust Policy and the NERC Antitrust Compliance Guidelines.
- Read the full Antitrust Statement on wecc.org.

Meeting Disclosures

- Confidential or proprietary information should not be discussed in open session.
- This webinar is being recorded.
- By participating, you give your consent for your name, voice, image, and likeness to be included in that recording.
- WECC strives to ensure the information presented today is accurate and reflects the views of WECC.
- However, all interpretations and positions are subject to change.
- If you have any questions, please contact WECC's legal counsel.

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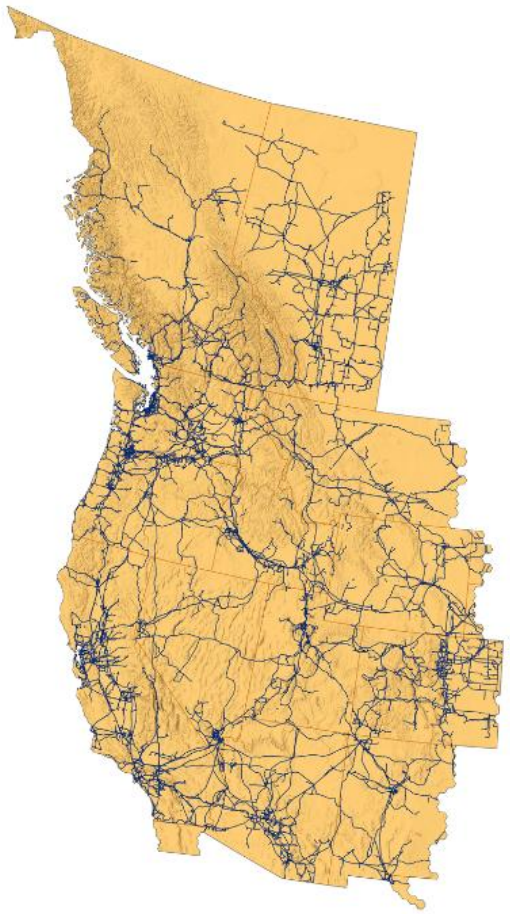
Reliability for the Western Interconnection

Jeff Droubay
President and Chief Executive Officer

Electric Reliability & Security for the West

July 8, 2026

The Independent Voice of Bulk Power System Reliability in the Western Interconnection



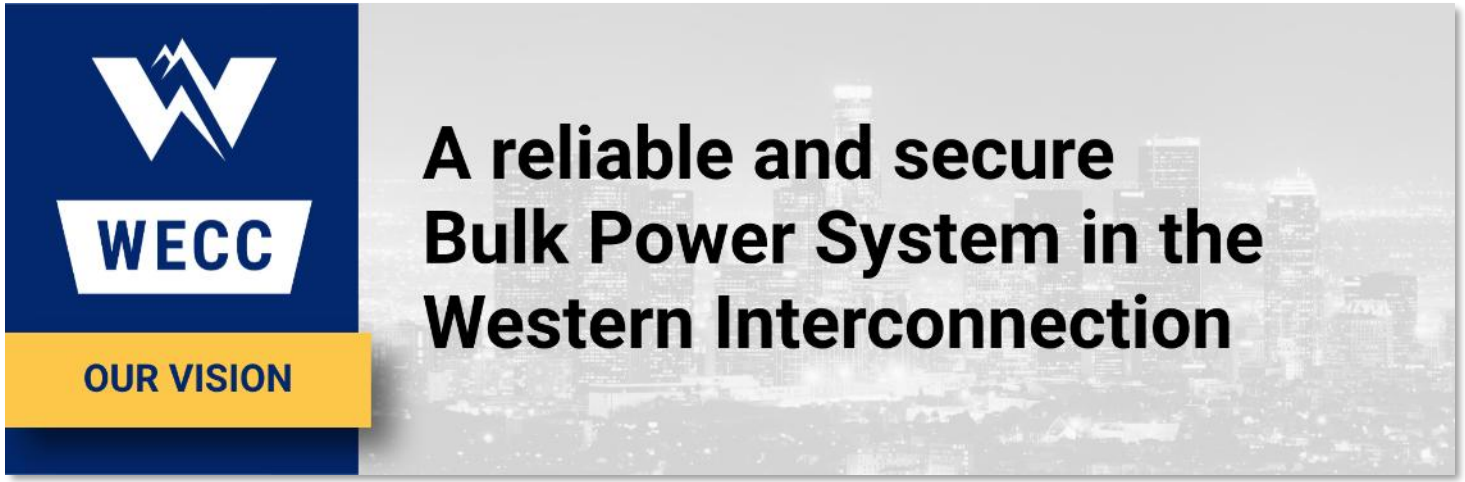
ELECTRIC RELIABILITY & SECURITY FOR THE WEST

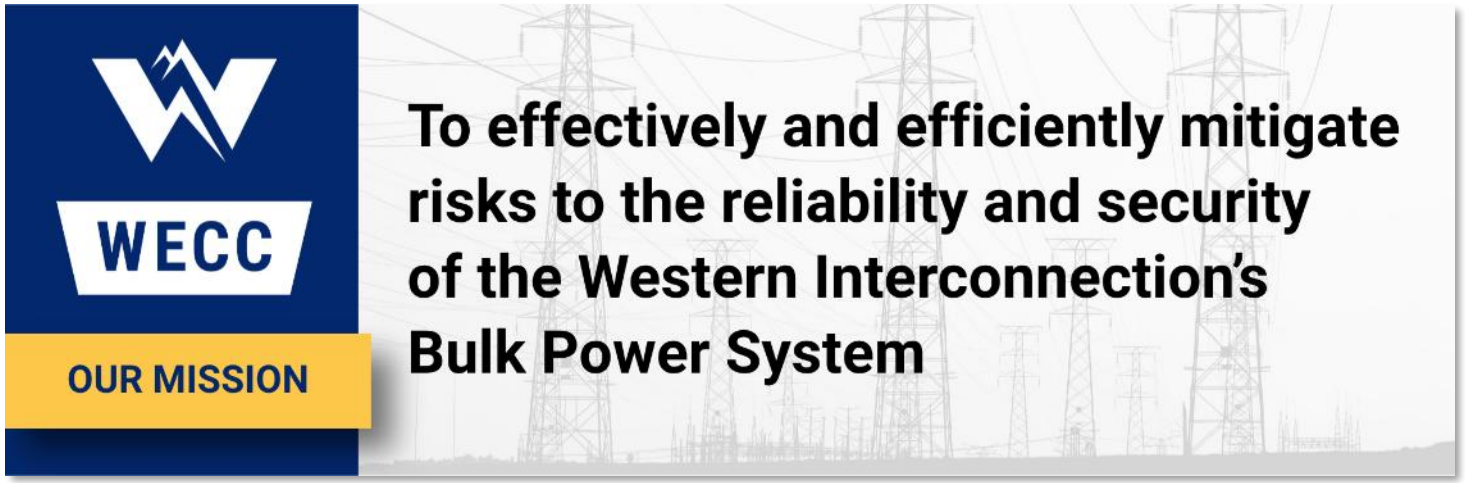
WESTERN INTERCONNECTION AT A GLANCE

- **160,529 TOTAL** — Miles of transmission lines
- **90+ MILLION** — People living in the Western Interconnection
- **163 GW** — Interconnection peak demand

525	391	54	35	4
Registered Entities	Generator Owners	Transmission Operators	Balancing Authorities	Reliability Coordinators

WECC's Vision and Mission





WECC's Long-Term Strategy

Risk Mitigation

Impact Area 1: We are an organization aligned on risk reduction. Our holistic risk-based approach uses all the tools and skills available to deliver comprehensive risk mitigation strategies.

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Plugged In: Understanding the Risk Management Program

Tim Reynolds
Director, Reliability Risk Management

Electric Reliability & Security for the West

July 8, 2026

RMP for the Western Interconnection Bulk Power System (WI BPS)

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Powering Reliability:

Risk Management Program Overview

Branden Sudduth
Vice President, Reliability Planning and Performance Analysis

Electric Reliability
& Security for the West

July 8, 2026

Key Components of the RMP

1. **Identification**
   - Risks are identified by WECC (e.g., through assessments), stakeholders, or interested parties.
2. **Ranking**
   - WECC and technical stakeholders analyze, rank, and sort the risks in accordance with ISO 31000 process and ranking methods.
3. **Prioritization**
   - WECC works with stakeholders to prioritize the ranked risks through town halls and associated outreach based on risk tolerance, whether other entities (e.g., NERC) are already working to address them, etc.
4. **Strategy and Planning**
   - WECC develops strategies and plans work to mitigate risks, including WECC scorecard initiatives, goals, stakeholder treatment plans, etc.
5. **Treatment**
   - This is the work to address the risks through standards development, risk-based oversight, white papers, and other work products.

Ranking vs. Prioritization

Ranking

- **Objective**, **repeatable** evaluation of the risks
- Based on **pre-determined criteria** and **analytical methods**
- Produces a **transparent**, **data-driven**, replicable list
- Conducted by **technical SMEs** with expertise in each risk
- Focused on **technical analysis** and **risk assessment**
- **Internal** analysis process

Prioritization

- **Review of ranked risks** with additional **strategic considerations** such as:
  - The ability for **WECC and industry to do something about it**
  - Uniqueness to **Western Interconnection**
  - **Business needs/goals**
  - **Public policy considerations**
  - **Other work** being done
- Incorporates **judgement**, risk **tolerance,** and **Western priorities**
- **Involves industry** in **external engagement** and conversation in decision-making process

Ranking vs. Prioritization — Why Separate Them?

- Different purposes:
  - **Ranking** = where do risks fall relative to one another based on analytical criteria?
  - **Prioritization** = where do WECC and industry want to apply time and resources based on mitigation impact and other criteria?
- Preserves integrity of analytical ranking process
  - Example: in the case of a top **Ranked** risk not selected as a top **Priority**
  - The ranking process is unaffected and maintains integrity because the prioritization of the risk is performed in a separate process.

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Current Rankings: The Risk Dashboard

Scott Brooksby
Senior Cyber Risk Advisor

Greg Park
Manager, Risk Analysis & Data Services

Mark Willis
Principal Risk Engineer

Electric Reliability & Security for the West

July 8, 2026

Risk Ranking

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Risk Matrix: Impact

Consequence/Impact—How could a typical event due to this risk affect BPS reliability in the Western Interconnection (WI)?	
Severe (C5)	Impacts may have widespread effects on the WI.
Major (C4)	Impacts may have widespread effects on multiple subregions within the WI.
Moderate (C3)	Impacts may have widespread effects on a subregion within the WI.
Minor (C2)	Impacts may have effects on an entity within the WI.
Negligible (C1)	Impacts may have small or non-existent effects within the WI.

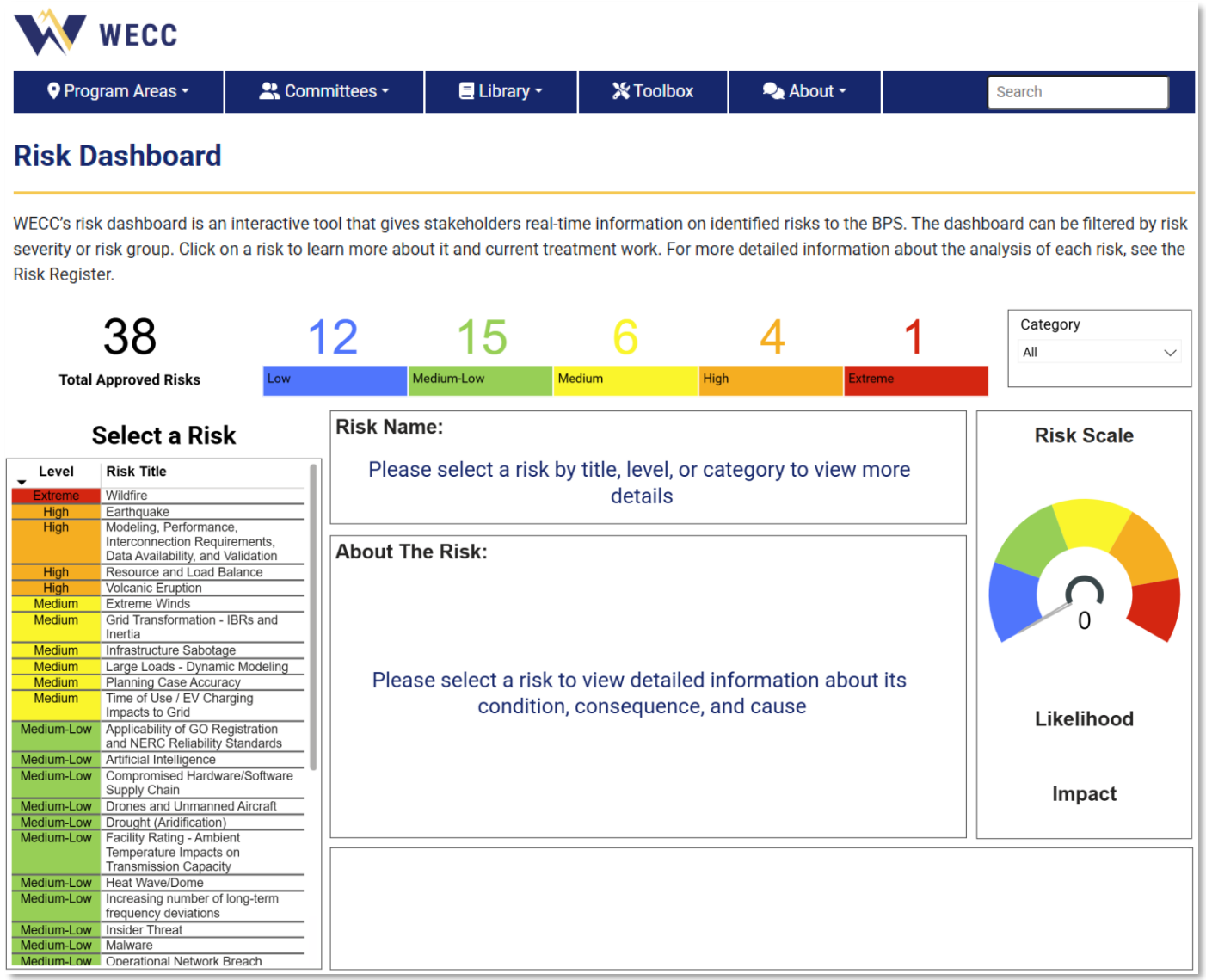
Risk Matrix: Likelihood

Likelihood—What is the reasonable probability that consequences will occur?	
Almost Certain (L5)	Mandatory Controls—No NERC Reliability Standards in place for mitigation. Emerging Trends—Increasing trends have been identified. Event History—Documented events or widely publicized exploits have been recorded. Probability – Frequent (or) Multiple times per year (or) >90% chance.
Likely (L4)	Mandatory Controls—No NERC Reliability Standards in place for mitigation. Emerging Trends—Some trends have been identified. Event History—Documented events, or generally publicized exploits have been recorded. Probability – Probable (or) 1 to 2 times per year (or) 50% - 90% chance.
Possible (L3)	Mandatory Controls—NERC Reliability Standards in place for limited mitigation. Emerging Trends—Some trends have been identified. Event History—No documented events, or moderately publicized exploits have been recorded. Probability – Occasional (or) Once in 1 to 5 years (or) 15% - 50% chance.
Unlikely (L2)	Mandatory Controls—NERC Reliability Standards are in place for mitigation. Emerging Trends—Some trends have been identified. Event History—No documented events, or minimally publicized exploits have been recorded. Probability – Remote (or) Once in >5 years (or) 5% - 15% chance.
Very Unlikely (L1)	Mandatory Controls—NERC Reliability Standards in place for mitigation. Emerging Trends—No known trends identified. Event History—No documented events or publicized exploits have been recorded. Probability – Improbable (or) Once in >20 years to almost never (or) <5% chance.

Risk Matrix

Reliability Risk Matrix											
Consequence /Impact (C)		Likelihood (L)									
		L1		L2		L3		L4		L5	
		Very Unlikely		**Unlikely**		**Possible**		**Likely**		**Almost Certain**	
C5	**Severe**	High	16	Extreme	21	Extreme	23	Extreme	24	Extreme	25
C4	**Major**	Medium	13	Medium	15	High	17	High	20	Extreme	22
C3	**Moderate**	Medium-Low	8	Medium-Low	10	Medium	11	High	18	High	19
C2	**Minor**	Low	5	Medium-Low	6	Medium-Low	7	Medium	12	Medium	14
C1	**Negligible**	Low	1	Low	2	Low	3	Low	4	Medium-Low	9

The Risk Dashboard



Risk Dashboard
-Review-

5 Minute Break

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High Voltage Decisions: Prioritizing the Risks

Travis English
Sr. Outreach and Partnerships Specialist

Mark Willis
Principal Risk Engineer

Electric Reliability & Security for the West

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Prioritization

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<Limited-Disclosure>

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Risk Mitigation in Action: EMT Modeling Success Story

Vic Howell
Director, Reliability Assessments and Modeling

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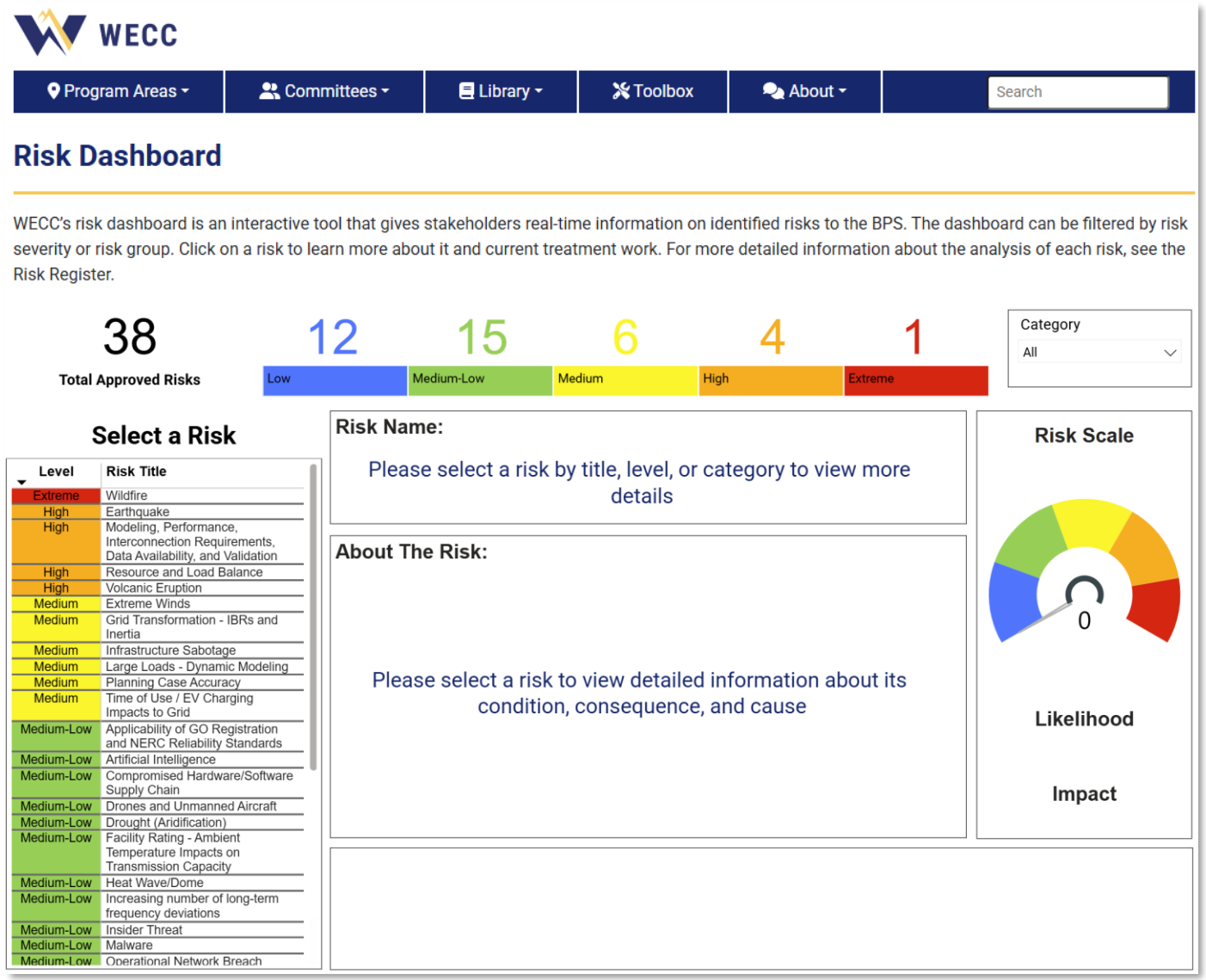
July 8, 2026

The Risk Dashboard



High Rank and Priority

High	Modeling, Performance, Interconnection Requirements, Data Availability, and Validation

Risk Name:

Modeling, Performance, Interconnection Requirements, Data Availability, and Validation

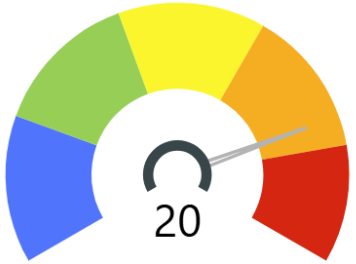
About The Risk:

Condition: Insufficient modeling and modeling quality based on inadequate interconnection requirements, as well as data availability either through performance testing or disturbance monitoring equipment, combined with simulating actual IBR performance of stand-alone, hybrid, and/or co-located facilities with a capability of 750 MW BESS at a single point of interconnection, 700 MW PV/400 MW BESS at a single point of interconnection, or electrical proximity of IBRs in BA/TOP areas, and or sub-regions.

Consequence:- Inability to accurately validate the IBR performance in power flow/stability studies.- Historical loss of over 2000 MW of IBR generation.- During normal clearing faults, with expected protection operations on the BPS, resulting in likely unexpected loss of IBR generation over 2000 MW occurring once per year.- Increasing loss as additional IBRs (doubling to tripling 2023 IBR levels in 10 years) are interconnected to the grid in concentrated areas or sub-regions.- Forced oscillations from IBRs.

Risk Scale

High



Likelihood

Likely

Impact

Major

Risk Mitigation in Action

- Identified a priority risk topic for stakeholder action
- Recruited 90+ key industry participants for the EMT Strategic Workshop (Nov. 2026)
- Compiled written takeaways; vetted them with attendees
- Led follow-up meetings with attendees proposing a path forward on Feb. 3
- Formed a SAR development team; SAR submitted (March 10), and approved by WECC Standards Committee on (March 24)
- Standard drafting team finalized; work began in June
- An example of achieving results by focusing on the **right priorities**, engaging the **right people**, and using the **most effective approach**

Risk Mitigation in Action: EMT Modeling Success Story

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Addressing Risk — Watt's Next?

Tim Reynolds
Director, Reliability Risk Management

Electric Reliability
& Security for the West

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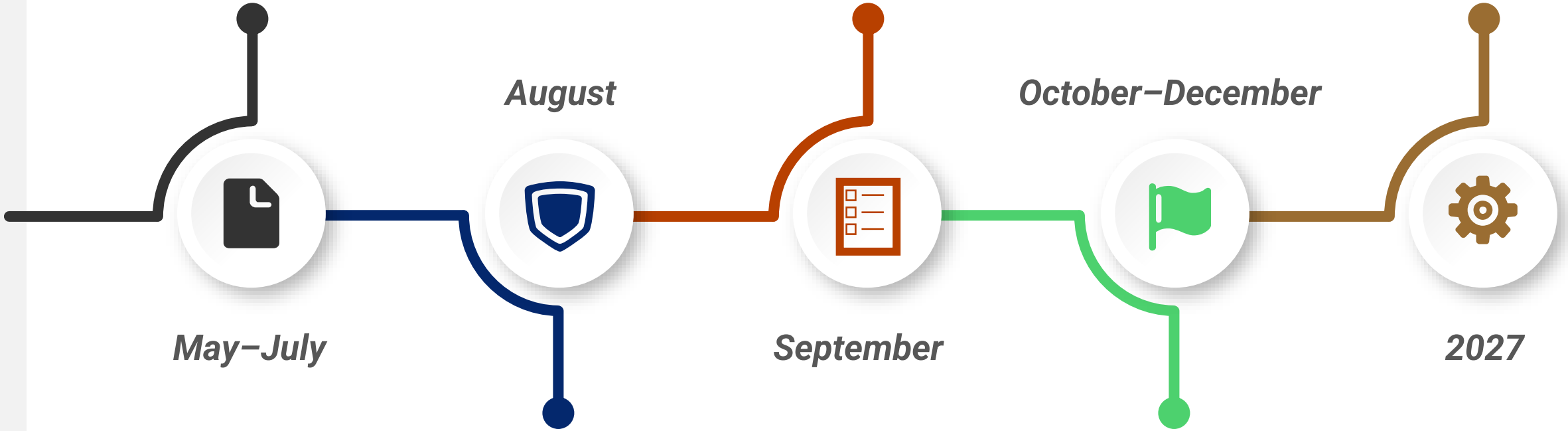
Watt's Next?

Tolerance Outreach/Feedback
- **Updated Website**
- **Reliability in the West**
- **WECC Town Hall**



Get Involved!

- Risk@wecc.org
- Submit new Risks
- Give feedback

ELECTRIC RELIABILITY & SECURITY FOR THE WEST

ENGAGE WITH WECC