

WIRAB Monthly Meeting

November 7, 2024



Introductions



Outline



WECC Activities:

WECC Update



WIRAB Activities:

WIRAB Advice: WECC Long Term Strategy

WIRAB Endorse: Inverter-based Resource Project



Upcoming WIRAB Meetings



WECC Update

November 7, 2024

Matt Evans
Stakeholder Engagement
Specialist

2024 Western Assessment of Resource Adequacy

- A high-level evaluation of resource adequacy across the Western Interconnection over the next 10 years
- To be published the first week of December
- Among the findings:
 - Unprecedented amount of generation planned to be built over the next decade to meet demand growth forecasts
 - Two-thirds of the planned resources are variable resources like wind and solar
 - Demand is forecast to grow 20% from 2025 to 2034

Interregional Transfer Capability Study

- An analysis of the amount of power that can be transferred reliably from one area to another area of the interconnected transmission system
- This week, NERC published two [draft documents](#): Prudent Additions Recommendations and Meet and Maintain Recommendations
- Final report must be filed with FERC by December 2, 2024
- More information on the ITCS is available at wecc.org or nerc.com

WECC's Long Term Strategy

- To ensure that WECC continues to fulfill its critical reliability mission and address industry changes, WECC is updating its Long-term Strategy (LTS)
- The draft LTS can be found at wecc.org
- We are accepting comments



Electric Reliability and Security for the West

www.wecc.org

WECC Long Term Strategy: Overview and Notable Improvements



Background

- WECC's Long-Term Strategy aligns with the ERO Enterprise Strategy, addressing evolving challenges and priorities in the Western Interconnection.

Key Improvements from Draft 1 to Draft 2

- **Clear “Why” Statement:** Improved to "The Independent Voice of Bulk Power System Reliability in the Western Interconnection," enhancing clarity on WECC's role.
- **Forward-Looking Language:** Emphasizes future actions and reliability, moving beyond descriptions of past achievements.
- **Stakeholder Collaboration:** Expanded focus on partnership with utilities, regional entities, and others to address unique Western risks collaboratively.
- **Independence Clarification:** Strengthened the role of WECC in providing reliable information to a variety of stakeholders, enhancing impartiality.

WIRAB Advice: Recommendations for Enhanced Clarity and Focus



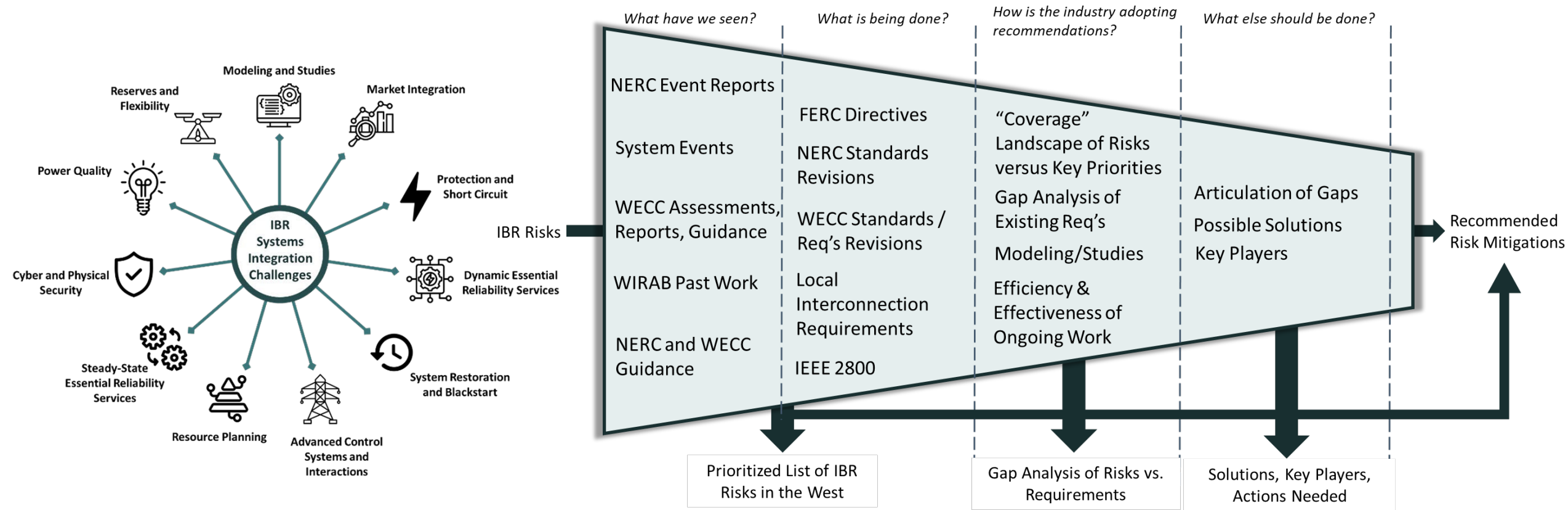
Areas for Further Improvement

- **Social Welfare Mission:** Emphasize WECC's 501(c)(4) status to reinforce neutrality and commitment to regional benefits over specific interests.
- **Continuous Improvement Culture:** Detail a strategy in Impact Area 5 *People* for celebrating staff achievements to promote a supportive organizational culture.

Next Steps

- WIRAB Advice is out for review by WIRAB Members
- Email support, edits, or concerns by November 14th

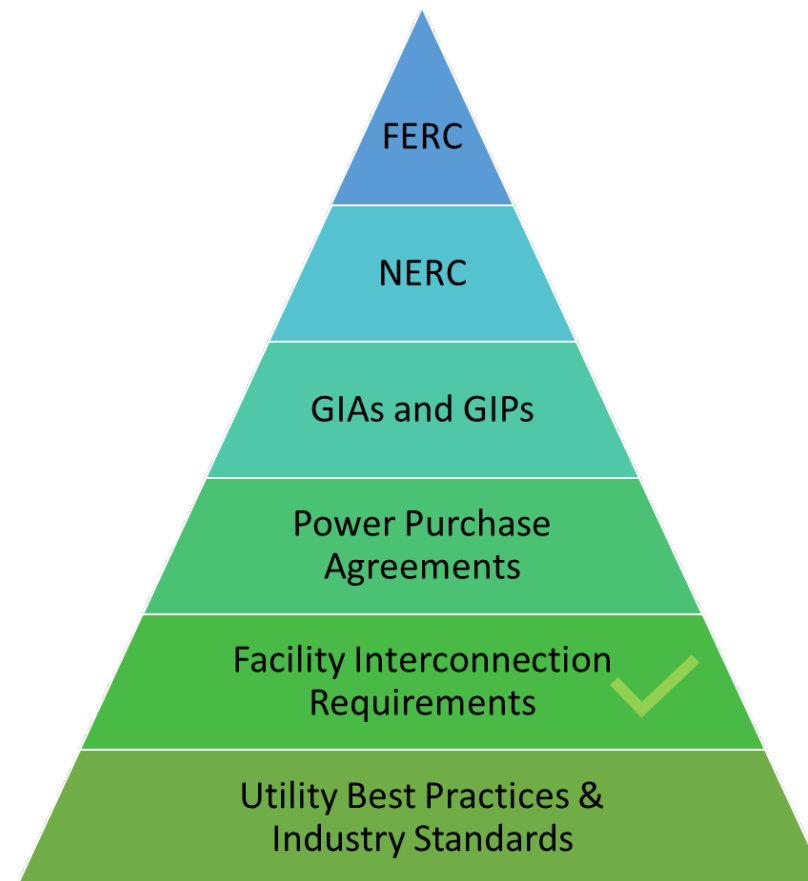
IBR Risk Assessment Report



IBR Risk Report: What is being done?



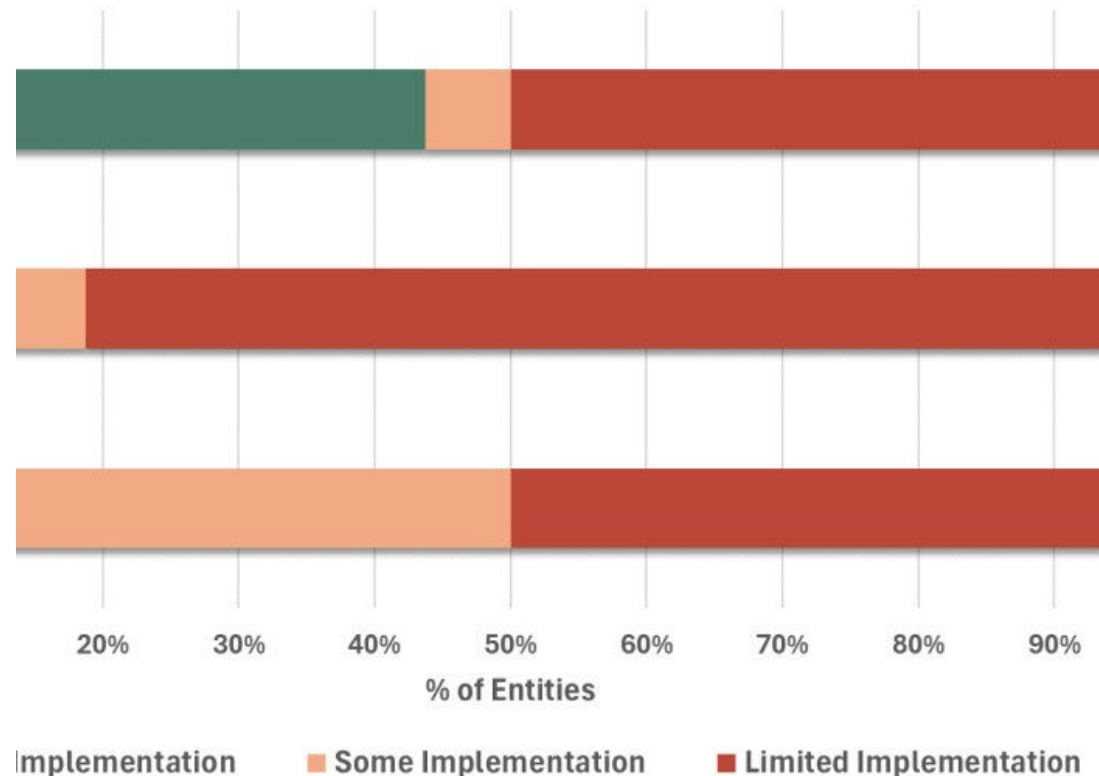
- **NERC Event Reports and Guidelines:** identifying emerging risks and potential voluntary solutions
- **IEEE 2800-2022:** creating minimum technical capability and performance requirements for IBRs (requiring formal adoption)
- **FERC Order 2023:** overhauling generation interconnection process
- **FERC Order 901 and NERC IBR Work Plan:** creating new or enhancing reliability standards for known IBR-related risks
- **FERC IBR Registration Order:** lowering ERO Enterprise registration criteria for smaller IBRs



IBR Risk Assessment: Why is it still a problem?



- Reviewed 32 FIR in the West
- Few entities have fully addressed the IBR integration risks and challenges in their FIRs to date
- There is a lag between when industry publishes guidelines and standards to when entities adopt them, and this lag is a concern given the exponential growth of IBRs in the Western interconnection



IBR Risk Assessment: Recommendations for WIRAB Advice



Near Term

1-2 years

1. **WECC** should help create a standardized template for FIR enhancements, ideally implementing IEEE 2800 standard.
2. **WECC** should conduct targeted regional training (and engage technical industry with working groups) for IEEE 2800, IBRs, EMT, GFM, and more
3. **FERC and/or NERC** should align with IEEE 2800-2022 in Reliability Standard(s) – harmonized requirements for IBR capability and performance
4. **State PUCs** should emphasize need for proactive enhancement of interconnection requirements (e.g., adopting IEEE 2800-2022)

Medium Term

3-4 years

1. **WECC** should engage in proactive risk mitigations for emerging systems integration challenges for IBRs
 - GFM, oscillations, decreasing system strength and inertia, etc.)
2. **WECC** should support pilot projects for emerging IBR risk mitigations (e.g., GFM, EMT, etc.)
3. If no NERC/FERC adoption of IEEE 2800-2022, **WECC should** create a Regional Reliability Standard adopting IEEE 2800-2022 (and future P2800.2)
 - Harmonized West-wide IBR req's.

Long Term

2030+

1. **The West** should consider shifting toward regional grid code approach including:
 - Proactively develop risk mitigations ahead of them occurring (leverage WECC studies program)
 - Independently developed and/or stakeholder-driven (by technical group(s))
 - Technical details defined in code
 - Harmonized across Region
 - Supports smaller entities
 - Clear compliance obligations and enforcement
 - Flexibility for utility-/system-specific needs allowed
 - Applicable to large loads, VPPs, etc.

IBR Risk Assessment: Recommendations for State Commissions



Advocate for enhanced and harmonized Transmission Provider interconnection requirements for IBRs



Inquire about and support adoption of IEEE 2800-2022 during RFPs and IRP/ISP hearings and filings



Promote coordination between state and federal authorities by engaging in collaborative discussions with FERC, ISOs/RTOs, and utilities



Encourage and support utility investment in grid modernization such as advanced technologies like FACTS devices, advanced modeling/studies, and long-term transmission upgrades



Support streamlining interconnection processes to reduce unnecessary delays, avoid administrative burdens, and ensure only credible projects are introduced into the queue



Stay informed on active industry efforts and developments in this area of IBRs and other emerging risks and challenges facing the industry

WIRAB Discussion: Endorse Risk Assessment Recommendations?



Does the Elevate report adequately present the risks and the describe the need to advance the recommendations?



Are there areas that require further explanation?



Should WIRAB endorse the Elevate report and recommendations to guide in the development of WIRAB Advice to WECC, NERC, and FERC?

WIRAB 2025 Strategic Initiative

Email support of endorsement by November 21st

Next Steps: WIRAB's IBR Risk Assessment Project



August:

Present Risk Assessment Analysis and Results at Monthly Meeting

Draft Recommendations



September:

Finalize Technical Report and Executive Summary



October:

Share Report and Proposed Recommendations at Monthly Meeting

Post Report

Discuss at Joint CREPC-WIRAB Meeting



November:

Seek WIRAB Endorsement of the Recommendations to Develop Formal WIRAB Advice



December:

Discuss Results and Recommendations as WIRAB Advice to the WECC Board

Discuss Results and Recommendations with FERC during Western Delegation Visit

Upcoming Meetings



WIRAB Monthly Meeting

First Thursday of the Month

Next Meeting: December 5, 2024 at 11:00 AM MT

Spring 2025 Joint CREPC-WIRAB Meeting

TBA

<https://www.westernenergyboard.org/meeting-calendar/>

Thank You!

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