WIRAB Monthly Meeting

January 5, 2023



Introductions





Outline



WECC Activities:

- WECC Update
- WECC's Role in Transmission Planning

Upcoming WIRAB Meetings

WECC Training for WIRAB Members



WECC Update

January 5, 2023

Victoria Ravenscroft
Sr. Policy and External Affairs
Manager

Updates: General

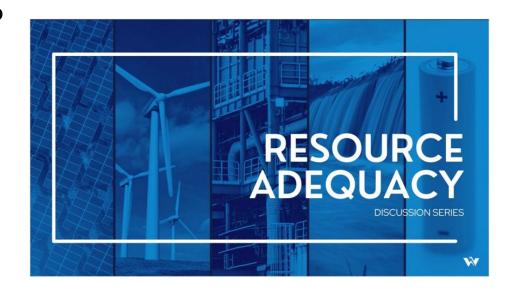
- 2024 Budget work starts this month
- Refresh of WECC Long-Term Strategy in 2023
- NERC <u>Board of Trustees</u> meeting
 - February 15, 2023
 - Tucson, AZ





Updates: Resource Adequacy

- Resource Adequacy Discussion Series
 - Returns Thursday February 2, 2023, from 10:00 to 11:00 a.m. MT
 - Topic: NERC Long-Term Reliability Assessment
 - Thereafter, first **Thursday** of the month at 10:00 a.m. MT
- Western Assessment of Resource Adequacy webinar
 - Thursday, February 2, 2023, at 2:00 p.m. MT
 - Focused for state regulators and policymakers





Updates: Study Program

- Seven studies underway
- Participation opportunities
 - 1. <u>Studies Subcommittee</u>
 - o <u>Jon Jensen</u> (WECC Liaison)
 - 2. Study-specific advisory groups
 - Email WECC staff leadOR
 - Email <u>engage@wecc.org</u> and include study name

Study Name	WECC Staff Lead
Year 10: Extreme cold weather event	Tyler Butikofer
Year 20: Long-duration Energy Storage— Extended extreme weather event	BK Ketineni
Year 20: Extreme hot weather	Bhavana Katyal
Year 20: Extreme cold weather event	Jon Jensen
Year 20: Impacts of compound changes in loads/electrification	Katie Rogers
Impact of grid-forming inverters on spring conditions with low inertia	Doug Tucker
Impact of changes in generation resources using short circuit ratio (compare 2019 to 2022)	Tyson Niemann





Transmission Planning Update— WIRAB Monthly Meeting

January 5, 2023

Branden Sudduth

VP Reliability Planning
&Performance Analysis

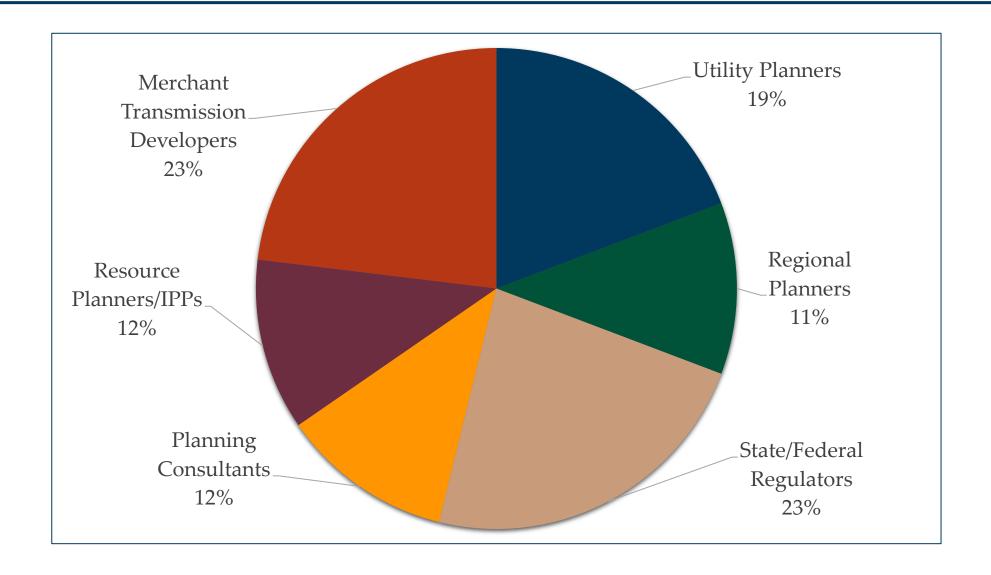
Transmission Planning

June 2022 WECC Board Meeting Action Item

Perform a gap analysis to identify challenges with existing transmission planning processes and report back on potential activities on how to add value to transmission planning in the West.



Transmission Planning—26 Stakeholders Interviewed





WECC Transmission Planning Roles

Opportunity	Pros	Cons	Resources Needed
Data collection, compilation, and distribution	 History of model development Critical to WECC and stakeholder study efforts Centralized effort 	Certain efforts may not be directly in line with reliability objectives	Dependent on scope of work (0 to several new FTEs, power system modeling software, contracted services)
Support for longer- term transmission planning	Uses WECC's coordination and model development functions	Possible duplication of effortComplexity of uncertaintyLimited benefits	1 to 2 new FTEs
Interconnection-wide transmission trends assessment	Top-down assessment approachComplements existing processes	New approach to planning— process and information needs not yet known	Pilot in 2023Possibly 2 new FTEs
Training	Can be built on existing processes (e.g., model building)	 Competing with existing training programs Identification of specific interconnection-wide training needs 	1 new FTE



WECC Transmission Planning Roles (cont.)

Opportunity	Pros	Cons	Resources Needed
Engagement in state and federal approval processes	Uses WECC's interconnection-wide perspective and coordination abilities	Not in WECC's typical scope of reliability work	Dependent on scope of work (0 to several new FTEs)
Understanding of new technologies/techniques (e.g., DLR)	May lead to modeling enhancementsIncreased sensitivity analysis	Modeling complexity and assumptions for planning models	Could be considered part of transmission trends assessment, but could also be one-off scenarios requiring contractor funding
Enhanced Project Coordination processes	 Increases stakeholder engagement in Project Coordination Predefined process 	Possible duplication of effortVoluntary nature of existing process	1 FTE and engagement from RAC



WECC Transmission Trends Assessment



Long-Duration Energy Storage

Extreme Hot Weather Event Extreme Cold Weather Event Impacts of
Compound
Changes in
Load/
Electrification

Transmission Congestion Evaluation





2023 Western Assessment of Transmission Trends





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WIRAB Advice: Next Steps



WECC BOD Action Item: WIRAB and MAC provide advice on WECC's Role

- January 5: WIRAB Monthly Meeting (today)
- January 9: Begin scoping WIRAB Advice and solicit input from WIRAB
- February 2: WIRAB Monthly Meeting Discuss potential Advice
- February 10: Send Draft Advice for WIRAB Review
- February 24: WIRAB Approval
- March 1: Submit to WECC Board
- March 8: WECC Board of Directors Meeting

Upcoming Meetings



WIRAB Monthly Meeting
First Thursday of the Month

Next Meeting: February 2, 2023

2023 Winter Wildfire Meeting

March 1-2, 2023 in Vancouver, B.C.

Thank You!

Eric Baran

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