



Alberta
Arizona
Baja California
British Columbia
California
Colorado
Idaho
Montana
Nebraska
Nevada
New Mexico
Oregon
South Dakota
Texas
Utah
Washington
Wyoming

Kara Fornstrom
Chair

Janea Scott
Vice Chair

Maury Galbraith
Executive Director

WIRAB Advice to the WECC Board of Directors on a Western Focused Long-Term Reliability Assessment

September 4, 2020

Background:

The NERC Long Term Reliability Assessment (LTRA) is an annual report produced by NERC with data and analysis provided by WECC that focuses on resource availability to meet planning reserve margins. There is nothing inherently wrong with the LTRA framework, although the results are largely determined by NERC's data collection protocols. WECC's analysis of the Western Interconnection tends to get lost in the national level assessment, therefore WECC is proposing to create a document that focuses on the long-term reliability of the Western Interconnection. The WECC Member Advisory Committee (MAC) created a task force to inform WECC on development of that Western Focused LTRA. WIRAB provides the following comments to the WECC Board on the development of a Western Focused LTRA. WIRAB emphasizes the regional importance of resource adequacy and hopes that the WECC MAC effort can inform the on-going resource adequacy efforts at the Northwest Power Pool, the Northwest Power and Conservation Council, and the Center for the New Energy Economy.

Problem Statement:

Western utilities have been relying on market purchases (i.e., Front Office Transactions) to meet resource adequacy requirements. Reliance on Front Office Transactions without an accurate accounting of regional resource adequacy can threaten reliability. If multiple utilities rely on the same market supply for resource adequacy, then one or more utilities may be left short when supply and demand conditions are tight across the West.

The NERC LTRA has contributed to the perception that there are significant surpluses of capacity in the Western Interconnection. For example, the 2019 NERC LTRA shows a prospective reserve margin of 21 percent in California in summer 2020. The methodology used to calculate the LTRA reserve margins includes "firm" transfers from neighboring regions, conservative resource retirement assumptions, and aggressive resource addition assumptions. This results in the NERC LTRA reporting artificially high reserves margins for the assessment areas in the West. The analysis in the NERC LTRA makes it more difficult to achieve real resource adequacy in the West.

Steps Towards an Improved Assessment of Regional Resource Adequacy in the West:

1. Calculate and show capacity surpluses/deficits prior to net firm imports.
 - o This will reveal what happens when each region is forced to rely on its internal resources.
2. Show and communicate capacity surpluses/deficits in megawatts, instead of reserve margin percentages.
 - o This will reveal the size and magnitude of the surpluses or deficits.

3. Create a scenario based on the least favorable resource assumptions.
 - Include known resource retirements and when a resource retirement is speculative err on the side of the capacity not being available.
 - Include known resource additions and when a resource addition is speculative err on the side of the capacity not being available.
 - This least favorable or “Pessimistic” resource scenario should be a complement to the “Anticipated” and “Prospective” resource scenarios currently included in the NERC LTRA.
 - The Western Focused LTRA should be an early warning system for resource adequacy problems in the West.
4. Provide detailed graphical displays and tables of data to inform public decision making.
 - Share information regarding the regional load forecast, regional resource retirements, and regional resource additions.
 - Err on the side of publicly sharing too much information.