

To: NEPOOL Markets Committee

From: Market Development

Date: July 5, 2023

Subject: Day-Ahead Ancillary Services Initiative (DASI) (WMPP ID: 162)

The ISO is requesting a vote on proposed revisions to Market Rule 1 to incorporate the DASI proposal that will procure and transparently price the ancillary service capabilities the region needs for a reliable, next-day operating plan with an evolving generation fleet.

By way of background, the ISO must develop reliable next-day operating plans that ensure sufficient supply capability to meet expected real-time energy demand and reserve requirements. At present, the Day-Ahead Energy Market clears only a single product, energy, based upon submitted energy supply offers and energy demand bids. This presents two gaps between what the Day-Ahead Energy Market clears and the region's key day-ahead reliability requirements. The first gap is the capability to address energy imbalances when the market clears less physical energy supply than the load forecast. The second gap is operating reserve capability to protect against system contingencies.

The DASI proposal creates a Day-Ahead Ancillary Services Market that, together with today's Day-Ahead Energy Market, creates a single, jointly optimized Day-Ahead Market. The proposal applies a new set of constraints in this Day-Ahead Market, and introduces a suite of new Day-Ahead Ancillary Service products that will be procured to satisfy these constraints and address the two gaps described above. The new constraints include the Forecast Energy Requirement constraint, as well as the Ten-Minute Spinning Reserve, Total Ten-Minute Reserve, and Total Thirty-Minute Reserve constraints. The new products include Energy Imbalance Reserve and a suite of Flexible Response Services (e.g. Day-Ahead Ten-Minute Spinning Reserve, Day-Ahead Ten-Minute Non-Spinning Reserve, and Day-Ahead Thirty-Minute Operating Reserve). The Forecast Energy Requirement constraint will procure a combination of additional energy and Energy Imbalance Reserve in order to ensure sufficient supply capability exists to satisfy ISO's real-time load forecast. The Flexible Response Services products and associated constraints are conceptually similar to those operating reserve constraints and products that are currently co-optimized in the ISO's real-time dispatch. These new day-ahead ancillary services will encourage reliable resource performance, and prepare the system on a day-ahead timeframe with the flexibility needed to manage operational uncertainties. Mitigation-related enhancements for the day-ahead market have also been incorporated to safeguard competitiveness.

Lastly, the ISO is proposing to sunset the Forward Reserve Market (FRM) on March 1, 2025 coincident with the implementation of DASI. Consistent with prior recommendations from the External Market Monitor, the ISO finds the FRM is no longer necessary in its suite of markets, given the development of the new Day-Ahead Ancillary Services and in light of the significant transmission and market improvements

that have been made over the last decade to relieve locational constraints and reward resource flexibility and performance.

The ISO's proposal incorporates a number of stakeholder-suggested revisions and is the product of extensive discussion with stakeholders. The proposal for the committee's consideration at its July 11, 2023 meeting has been presented on the meeting dates outlined below:

- October 12-13, 2022; [agenda item #7](#)
- November 8-10, 2022; [agenda item #8](#)
- December 6-8, 2022; [agenda item #7](#)
- January 10-12, 2023; [agenda item #3](#)
- February 7-9, 2023; [agenda item #2](#)
- March 7-9, 2023; [agenda item #4](#)
- April 11-13, 2023; [agenda item #7](#)
- May 9, 2023; [agenda item #3](#)
- June 6, 2023; [agenda item #3](#)