

Energy Regionalization: NorthWestern Energy Perspective

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Introduction

- Cooperation and trading among utilities is not new.
 - It is critical to have utility trading partners to maintain reliability and to reduce costs to our customers.
- NorthWestern supports an evolutionary and incremental approach to regional cooperation.
- Energy Independence and participation in these regional programs are completely consistent.



Characteristics of Good Markets and Programs

- Connectivity
 - Adequate transmission connections to other participants
- Large Footprint
 - Diversity of loads and resources drives the benefits
- Transparency
 - Clearly defined and consistently applied rules for participants
- Capacity
 - Rules that ensure that each entity carries its share of capacity
- Governance
 - Equitable structure that ensures a meaningful voice for NorthWestern and its customers as well as the State of Montana

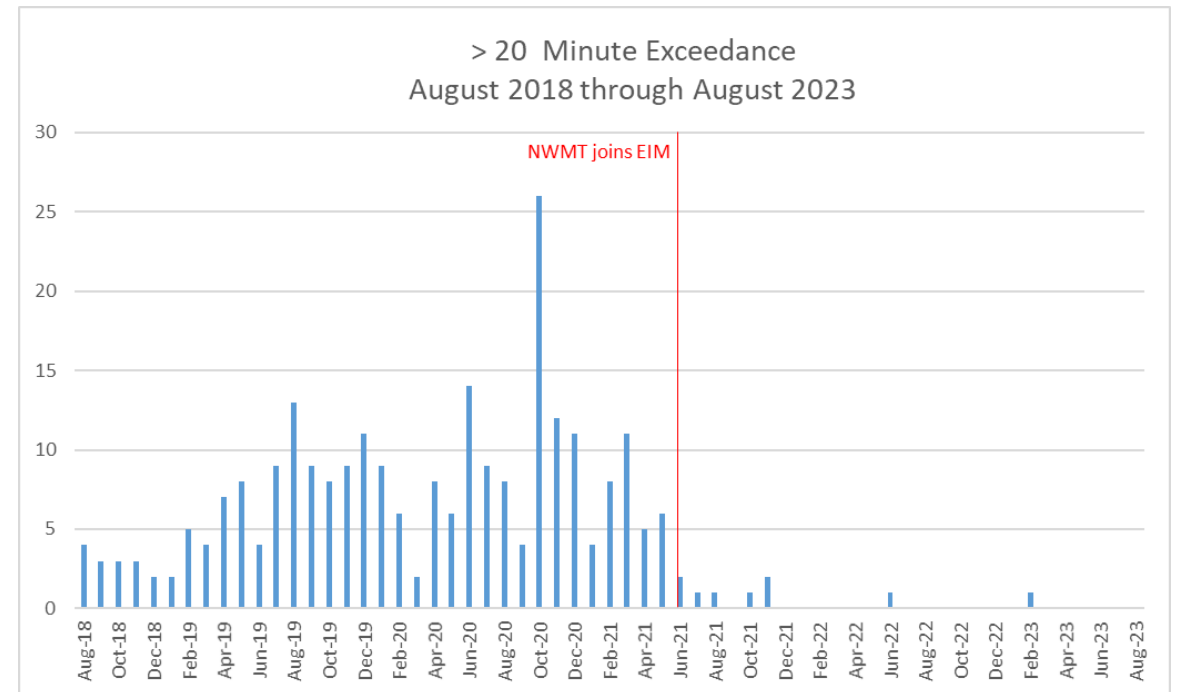
Western Energy Imbalance Market

Within-hour dispatch of energy to economically meet load across the market footprint

- Market was initiated by CAISO and PacifiCorp in 2014 and now includes over 20 participants
- NorthWestern joined in 2021

NorthWestern's customers have experienced consistent benefits from both the economic and reliability perspectives.

- CAISO estimates that the gross benefits for NorthWestern's Balancing Authority have totaled over \$60 million since June of 2021



Western Resource Adequacy Program

- Not a market, but a voluntary program
 - If we did not participate, costs for our customers would be significantly higher in order to provide the same level of reliability
- NorthWestern has been involved in the development since its beginning in 2019
- Helps ensure each participating entity owns or control enough capacity to meet its own expected peak load, plus a planning reserve margin
- Provides benefits through diversity of loads and resources

EDAM and Markets+

- EDAM and Markets+ represent further incremental steps
 - Both markets would provide day-ahead resource commitment, greatly increasing the benefits we have seen in the intra-hour energy imbalance markets
- NorthWestern is closely watching the development of both markets
 - We will very likely join one of the markets
 - It would be very difficult to operate outside the day-ahead markets when virtually all of our trading partners are in one or the other
 - Our decision will depend on the factors discussed earlier (connectivity, footprint, transparency, capacity, governance)

Going Forward

- NorthWestern will continue to closely follow and participate in regional development
- Montana's voice matters
 - Important for both public and private sectors to participate in discussions
 - All of the regional development efforts include forums for participation by state commissions, energy offices, etc.
 - All include stakeholder forums for participation by other stakeholder groups