



# Overview of February 2021 Arctic Weather

OMS/RSC Meeting

April 5, 2021

# Executive Summary



- The effects of a February 2021 arctic weather event were felt across MISO and neighboring systems
- MISO's procedures worked as drilled and designed, limiting load curtailment in the MISO footprint to a regional event lasting approximately two hours and a handful of local events
- Experiences across the week highlight the urgency to complete the work summarized in MISO's Reliability Imperative

# MISO was well positioned for the arctic weather due to on-going actions and leveraging operating procedures before and during the event

MISO regularly coordinates with our neighbors during these events and during normal operations

## SYSTEM TOPOLOGY

- Highly inter-connected grid across 15 states and Manitoba
- Diverse generation mix
- Relationships with seams partners

## ON-GOING

- Coordinated Seasonal Assessments (Winter)
- Winter Readiness Workshops
- Emergency Procedure Drills

## PRE-EVENT

- Issued Informational Advisories & Cold Weather Alert
- Daily coordination with neighbors
- Committed additional gas generation early to secure fuel supply
- Declared Conservative Operations

## ARCTIC EVENT

### February 15, 2021

- Local Transmission Emergency – Western Load Pocket (SE Texas)

### February 16, 2021

- Local Transmission Emergencies
  - Western Load Pocket (SE Texas)
  - North-Central Louisiana
- Transmission System Emergency – South-Central Illinois
- Maximum Generation Event Step 5 – South Region

# Unprecedented flows across our system that aided the interconnection also contributed to the need for emergency declarations

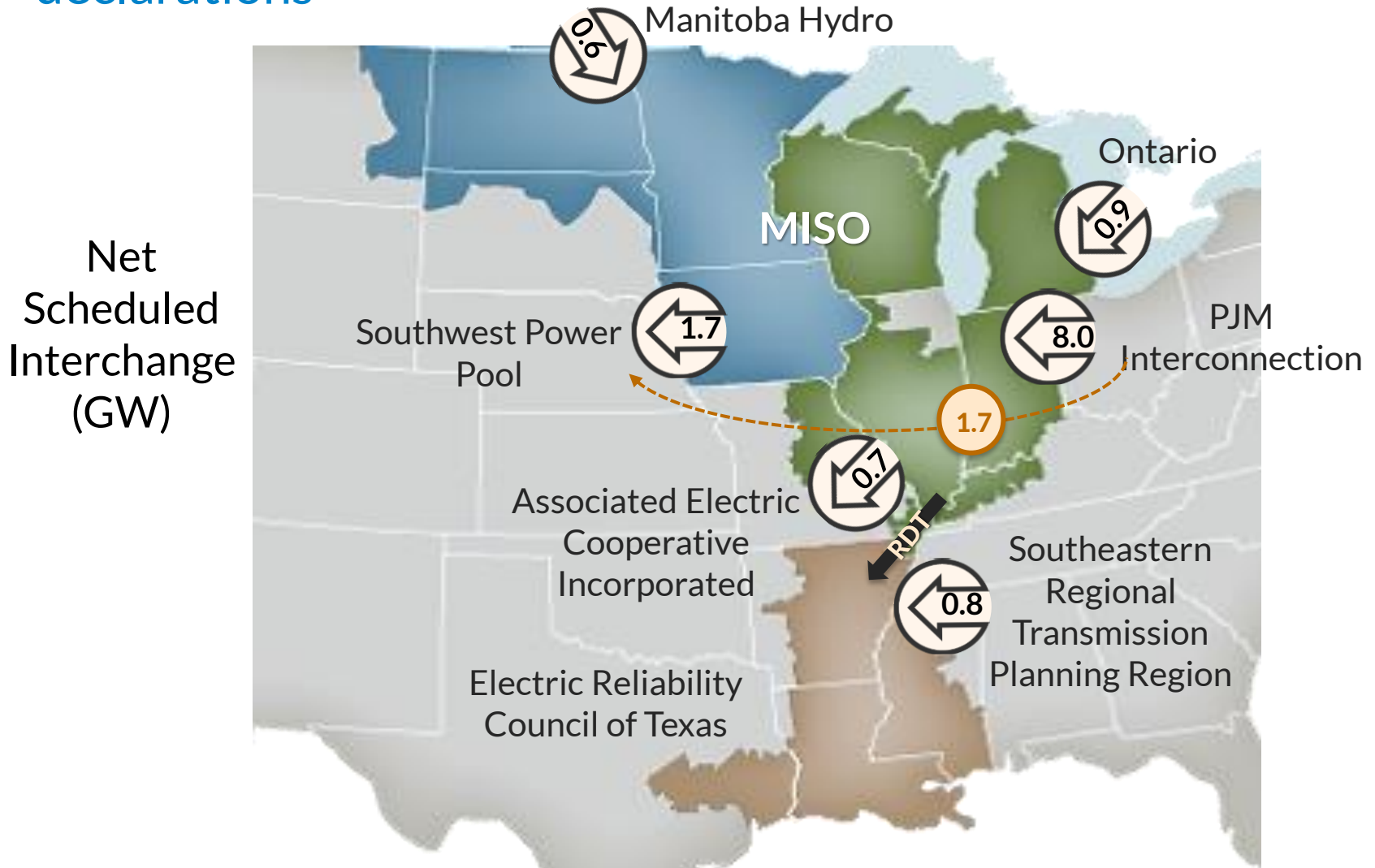
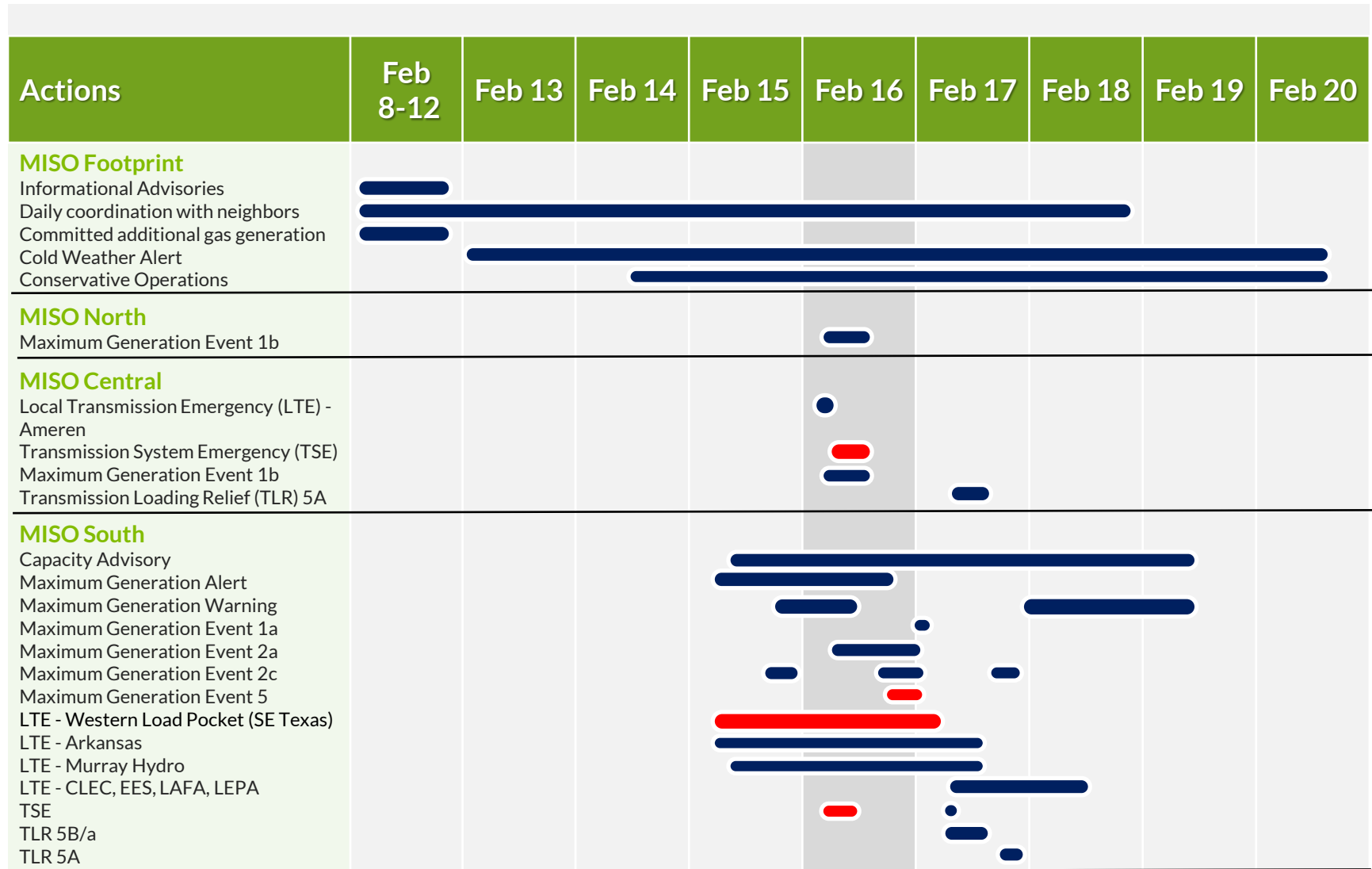


Image represents average flows into, out of and through MISO over 3 days (February 15-17, 2021)

RDT = Regional Dispatch Transfer, which has a North-South limit of 3 GW

# During a three-day period, MISO managed multiple independent and interdependent challenges across the footprint



# This event serves to illustrate the urgency to complete the work of responding to MISO's Reliability Imperative

- Availability is less than expected when conditions are tight, and the significant drivers (e.g., winterization, fuel assurance) are unique to seasons (Addressed through [Market Redefinition: Resource Adequacy Construct and Accreditation](#))
- Sufficient transfer capability within and between regions is critical to enabling the advantages of regional diversity (Addressed through [Long Range Transmission Planning](#))
- Assessment of uncertainties is critical for adequate and efficient commitment and real-time operational response (Addressed through [Operations of the Future](#))
- Resource adequacy evaluation in constrained areas is necessary (Addressed through [Market Redefinition: Resource Adequacy](#))