

MISO TARIFF

David Cormie



MISO

- Regional Transmission Organization
 - Operates electric grid
 - Transmission access
 - Reliability coordination
 - Efficient market operations
 - Coordinates regional planning



MISO - Tariff

- Open Access Transmission
 - Calculating available transfer capability.
 - Evaluating and approving all requests for service.
 - Performing transmission system impact studies.
 - Communicating with transmission customers.
 - Coordinating use with other transmission providers between regions
- Energy and Operating Reserves Market
 - Balancing Authority
 - Day Ahead, Real Time and Operating Reserves

Transmission Service

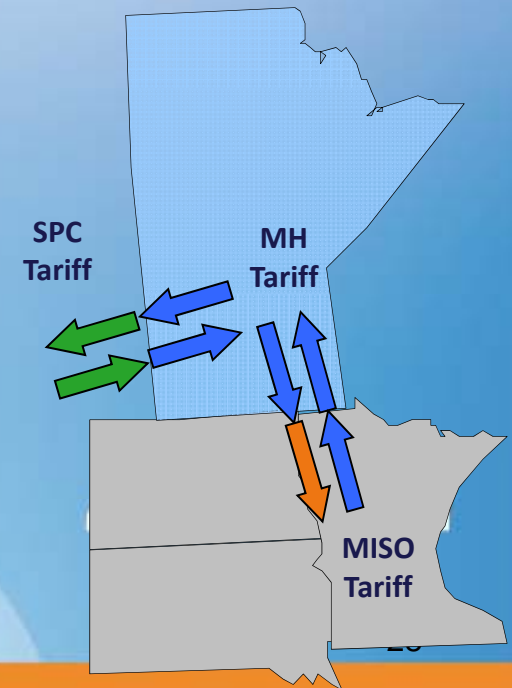
- What is Transmission Service?
 - Right to use the transmission grid to ship electricity
- Are there different levels of Transmission Service available?
 - Yes, 7 levels , priority 1-7
 - Network
 - Firm (7) or non firm (6)
 - Used to serve network load
 - Firm Point to Point (7)
 - Used for wholesale power transactions
 - May includes congestion insurance
 - Non Firm Point to Point (1-5)
 - Used for wholesale power transactions
 - Subject to curtailment
- How long can you buy it for?
 - Hourly, daily, weekly, monthly, yearly

Transmission Service

- Who sells it?
 - Manitoba Hydro, SaskPower, MISO, other transmission owners
- How much does it cost?
 - Network
 - Included in your hydro bill (approx 15% for GSL >100 kV in MB)
 - Based on prorata load share ratio of transmission costs included in tariff
 - Firm - Point to Point
 - Depends on where to where
 - \$57,000 MW-year from MB to NSP
 - Non Firm - Point to Point
 - Hourly (\$10.00/\$4.70 per MWh)
 - Daily (\$156/\$112 per MW-day)
 - Monthly (\$3400/MW-mth)
- Can others use your TX Service Reservation?
 - Yes, it is assignable or can be sold

What Happens at a Border?

- Borders are referred to as seams
 - Manitoba - Saskatchewan
 - Manitoba - MISO
- Transmission Service is required on both sides of border
 - MH owns
 - 20 long term TSRs under the MH Tariff
 - 10 long term TSRs under MISO Tariff
 - Many short term TSRs
- MH - MISO Coordination Agreement
 - Pancaking of tariffs avoided
 - Tariff of the load applies



Questions?

