



Long Range Transmission Planning Strategy

System Planning Committee of the
Board of Directors

June 15, 2021

Executive Summary



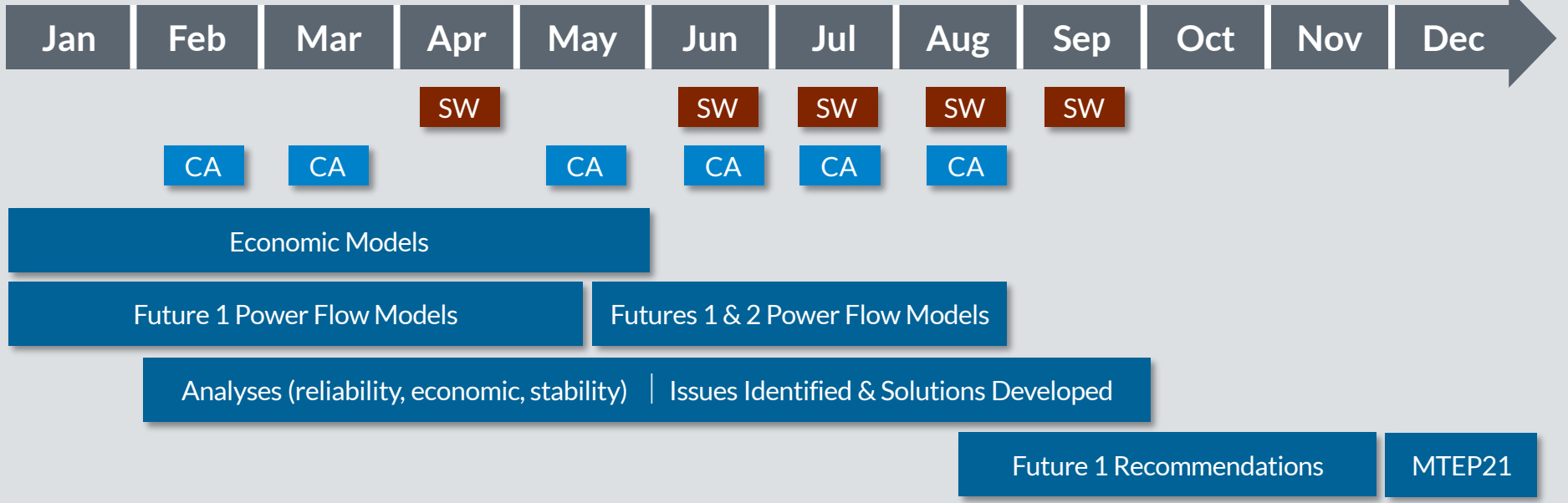
- As part of MISO's Reliability Imperative, Long Range Transmission Planning (LRTP) is essential to ensure continued reliability given the resource portfolio shift contemplated by MISO members and stakeholders
- LRTP efforts are well underway with analysis based on MTEP21 Futures and the initial ideas that were presented in March
- The next steps will be to identify potential solutions that may be part of MTEP21 and to determine cost allocation

Long Range Transmission Planning (LRTP) is well underway to help address emerging operational needs on the system as part of the Reliability Imperative

Planning Process



LRTP Efforts



MISO is following its comprehensive planning process and concurrently conducting key activities



- Continuing analysis of completed models based on MTEP21 Futures
- Testing indicative roadmap solutions
- Performing analysis using NERC reliability criteria with a focus on identifying regional solutions
- Considering non-transmission alternatives (NTAs)

- Determining initial focus area based on the most significant issues, voltage stability needs and congestion
- Quantifying the plan value and resource evolution (new vs. no new transmission)
- Performing sensitivity around siting alternatives and transmission

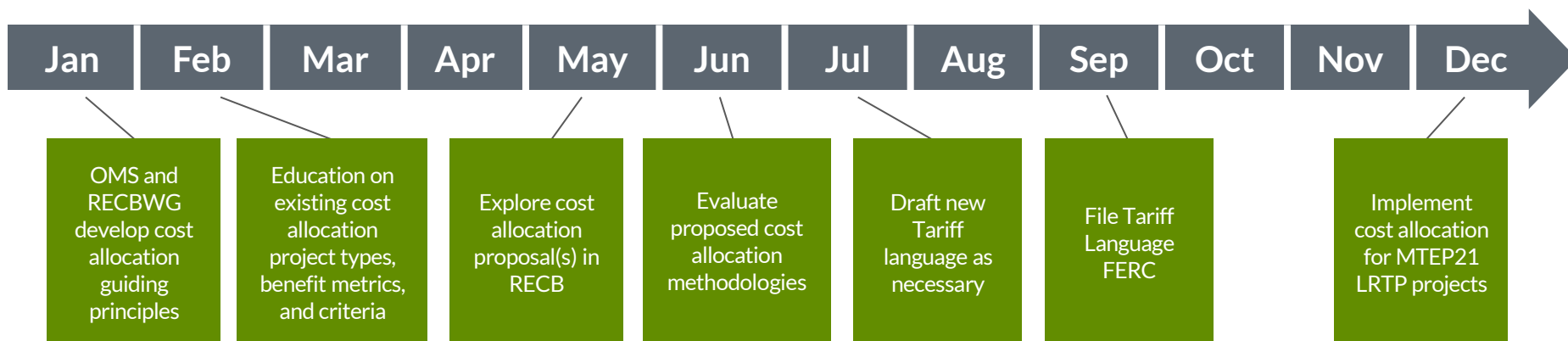
- Factoring in Renewable Integration Impact Assessment (RIIA) conclusions and the LRTP with each MTEP planning cycle

- Working with Transmission Owners and analyzing their data
- Planning holistically by weighing potential LRTP solutions with Baseline Reliability Projects, Generator Interconnection Projects and Market Efficiency Projects and ensuring alignment with other processes

- Evaluating the ability to economically enable reliable system performance using current tariff criteria
- Assessing Market Efficiency Project (MEP) benefit metrics and allocation methodology
- Considering Multi-Value Project (MVP) benefits

The values of identified transmission solutions for LRTP may not be fully captured in existing applicable project types and mechanisms

- LRTP projects will be identified and evaluated first for their ability to reliably support the ongoing and expected resource evolution contemplated by stakeholders and captured in the Futures, and then further evaluation will assess economic value
- Projects will promote regional bulk energy transfer, interzonal support, resource integration and retirement



2021 efforts utilize Future 1 assumptions and consider the Renewable Integration Impact Assessment (RIIA) and current queue studies to identify drivers and solutions

Future 1 Generator Capacity (GW)

