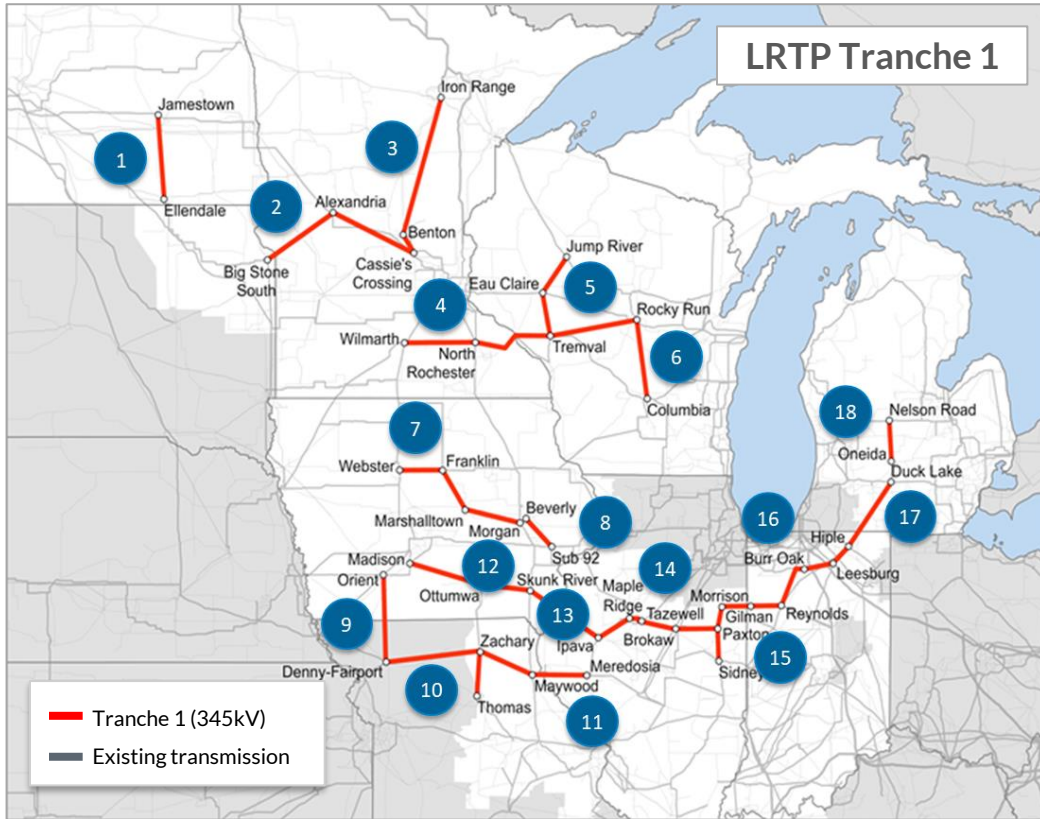




Executive Update

July 26, 2022

Tranche 1 of LRTP represents a historical level of grid investment of ~\$10.3 billion, both for the MISO Region and more broadly



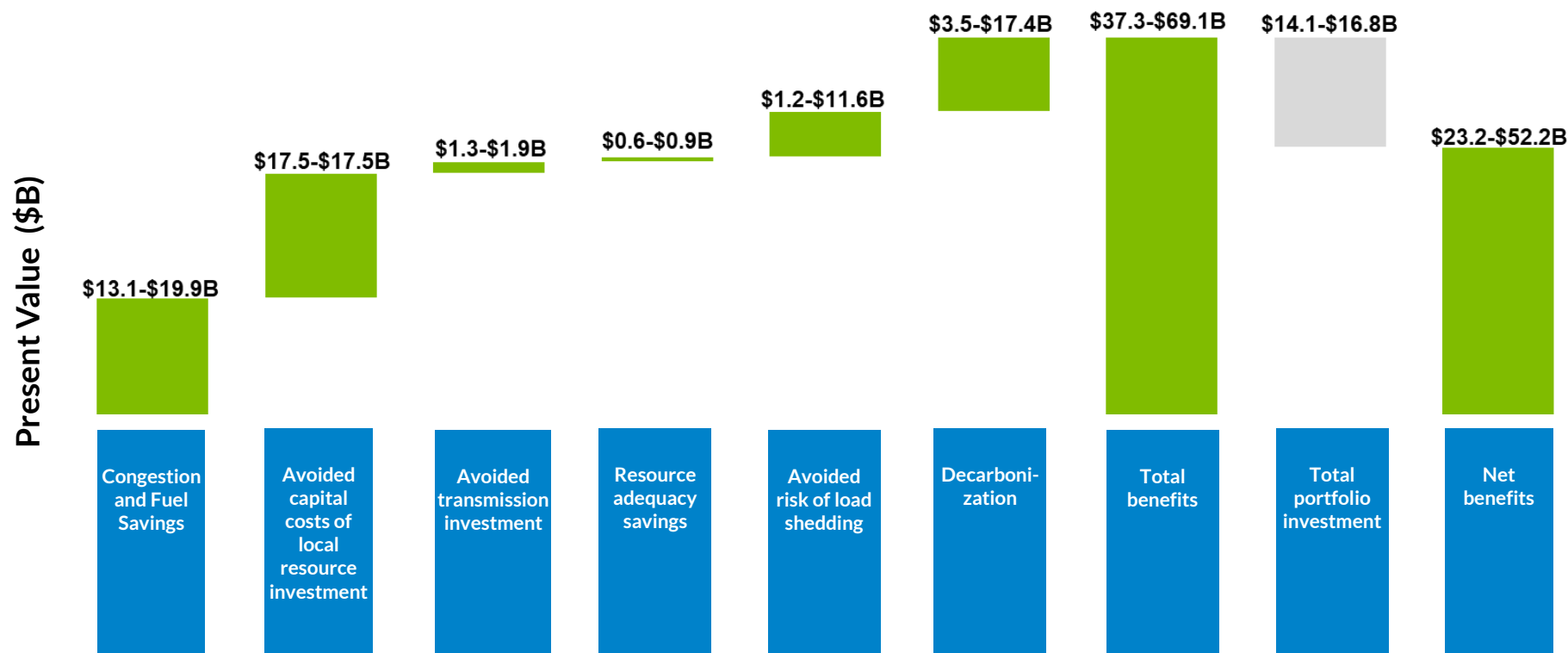
Assumption on all in-service dates is by 2030

ID	Project Description	Est. Cost (\$M, 2022)
1	Jamestown – Ellendale	\$439M
2	Big Stone South – Alexandria – Cassie's Crossing	\$574M
3	Iron Range – Benton County – Cassie's Crossing	\$970M
4	Wilmarth – North Rochester – Tremval	\$689M
5	Tremval – Eau Clair – Jump River	\$505M
6	Tremval – Rocky Run – Columbia	\$1,050M
7	Webster – Franklin – Marshalltown – Morgan Valley	\$755M
8	Beverly – Sub 92	\$231M
9	Orient – Denny – Fairport	\$390M
10	Denny – Zachary – Thomas Hill – Maywood	\$769M
11	Maywood – Meredosia	\$301M
12	Madison – Ottumwa – Skunk River	\$673M
13	Skunk River – Ipava	\$594M
14	Ipava – Maple Ridge – Tazewell – Brokaw – Paxton East	\$572M
15	Sidney – Paxson East – Gilman South – Morrison Ditch	\$454M
16	Morrison Ditch – Reynolds – Burr Oak – Leesburg – Hiple	\$261M
17	Hiple – Duck Lake	\$696M
18	Oneida – Nelson Rd.	\$403M
Total Project Portfolio Cost		\$10.3B

Current analysis indicates total economic benefits of the Tranche 1 portfolio significantly exceed costs

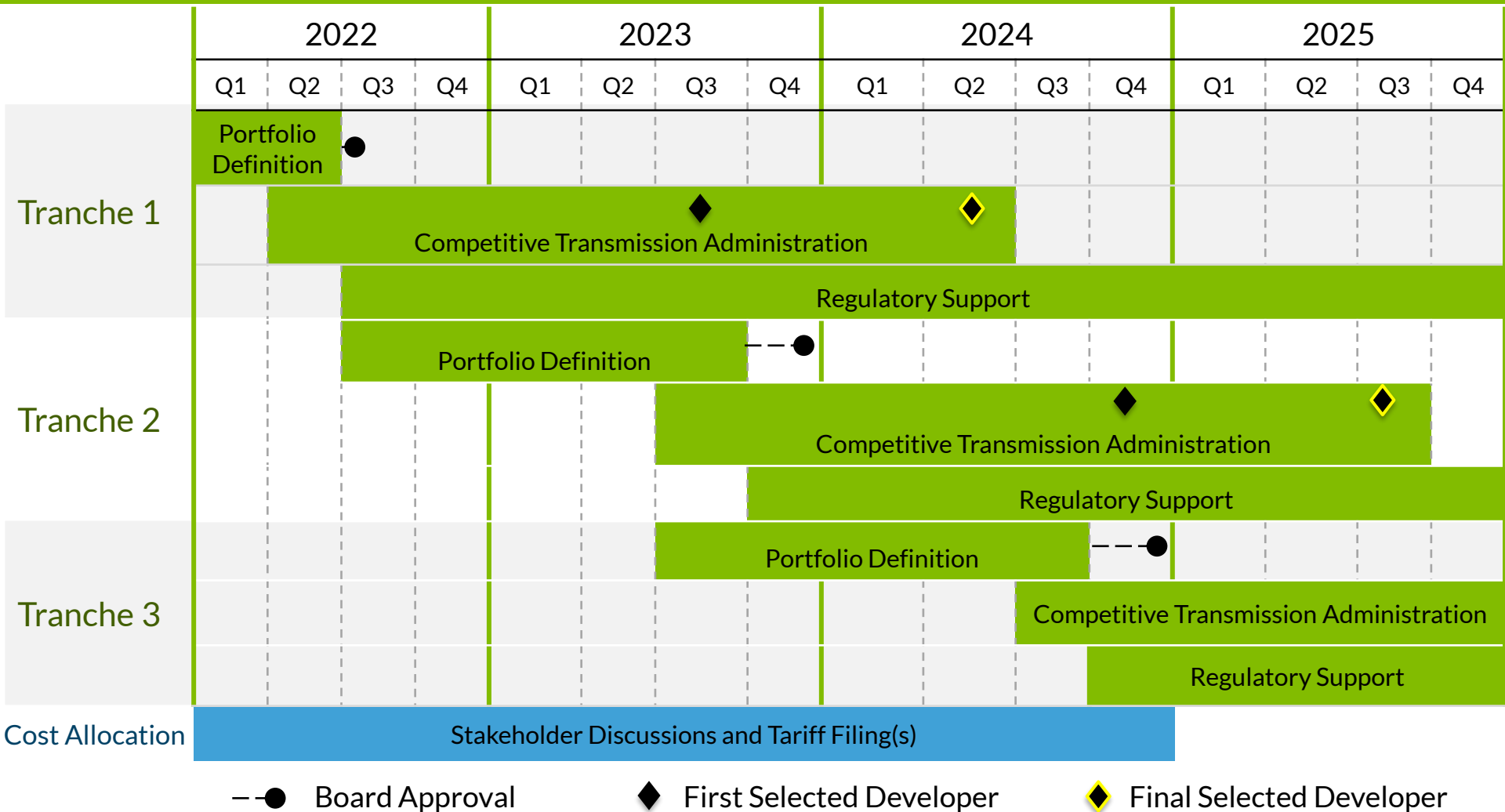
L RTP Tranche 1 Benefits vs. Costs 20 – 40-Year Present Value (2022 \$B)

Calculations are generally based on conservative assumptions including the analysis period and discount rate



Continued collaboration and coordination will be needed as we continue to identify solutions to support and enable the future fleet

Preliminary Long Range Transmission Planning Roadmap



As the industry continues transforming, MISO's role as reliability coordinator and the partnership with our members and states will become even more important

Adapting to fleet change

- Federal and state policies, along with member goals and consumer preferences, are driving significant fleet changes that are enabled through MISO's regional approach to planning and operations

Optimization of energy markets and resources

- The value derived from MISO's energy markets and resource optimization will increase further as the fleet transforms

Enablement of decarbonization goals

- MISO helps members and states achieve decarbonization goals by enabling renewable energy resources to be located in optimal locations and by efficiently utilizing these assets every day

Enhanced flexibility

- As the MISO system decarbonizes, complex flexibility needs will arise and the sharing of diverse resources available across MISO's large footprint can help satisfy those needs

The ability to share both carbon-free and traditional resources will be critical and contribute to the benefit-to-cost ratio of MISO membership increasing substantially



QUANTITATIVE BENEFITS

MISO provides approximately **\$3.4 billion in annual benefits** to members

QUANTITATIVE BENEFITS

By 2030, MISO will provide approximately **\$4.3-\$5.8 billion in annual benefits** to members

QUANTITATIVE BENEFITS

By 2040, MISO will provide approximately **\$11.6-\$14.3 billion in annual benefits** to members

As the complexity of the power grid grows, the benefit of sharing across the large MISO footprint will also grow – allowing all areas to meet their decarbonization and efficiency goals while enjoying continued reliability. Even using a conservative growth of MISO costs, the ratio of costs-to-benefits for MISO members is expected to increase from 1:11 to 1:26.

We collectively need to be prudent in our actions to ensure sufficient resources and flexibility during the fleet transition

States

- Factor regional consideration into state resource adequacy, resource attribute, and market construct requirements
- Inform the broader policy and statutory discussion at the state level
- Implement NERC recommendations for resiliency and reliability

Members

- Collaborate with MISO and States on timely resource adequacy, market enhancements and regional transmission
- Share resource plans with MISO to enable accurate regional view

MISO

- Enhance transparency of resource evolution and regional outlook
- Improve Resource Adequacy construct
- Visibility into and reviewing impacts of resource retirements
- Inform the broader policy discussion with federal policymakers and agencies