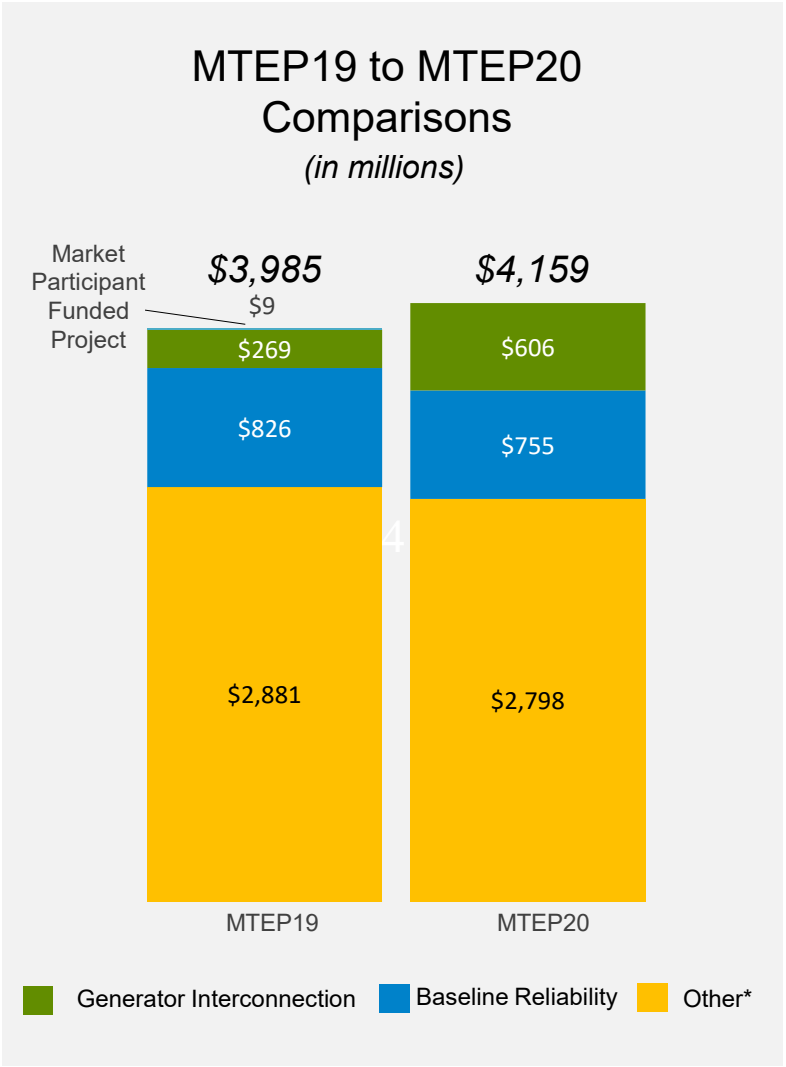
System Planning

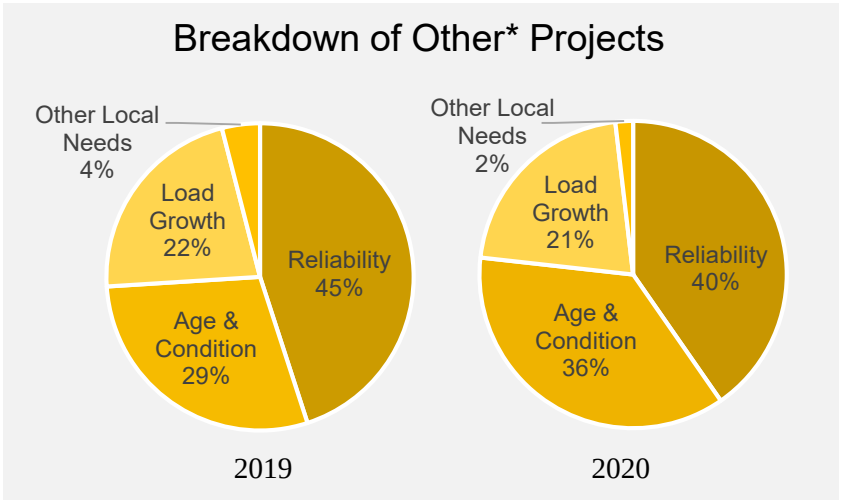
Entergy Regional States Committee

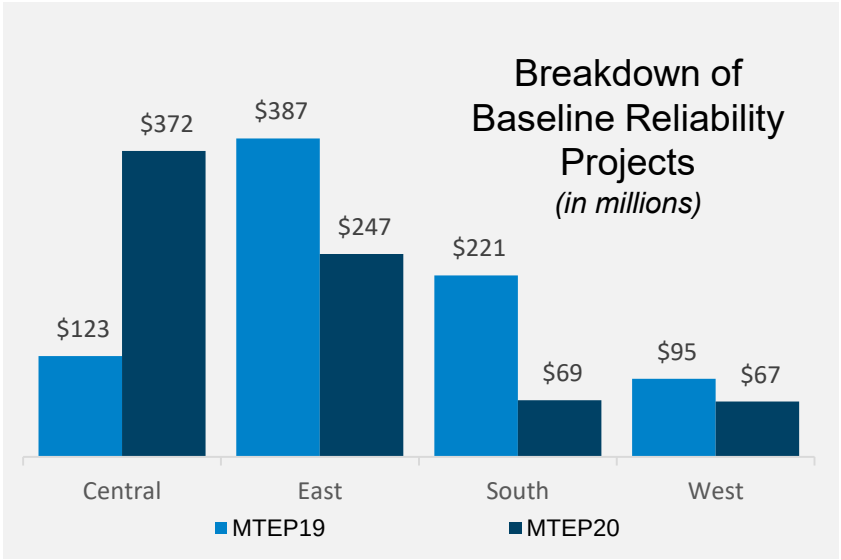
Nov. 20, 2020

MTEP 2020

MTEP20 is focused on reliability



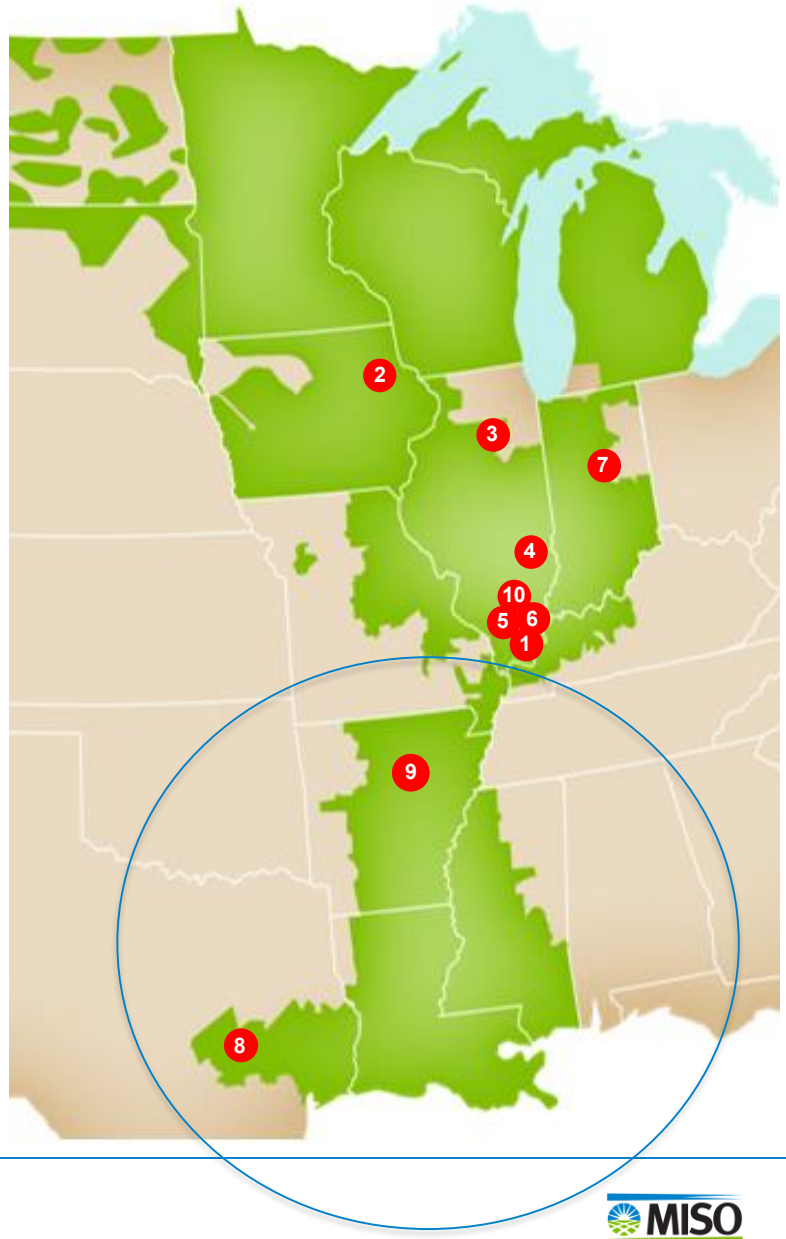




*Other = Projects based on local Transmission Owner needs including reliability, economics, equipment age and condition, environmental, etc. **Breakdown categories are informational only and do not indicate new project types for cost allocation.

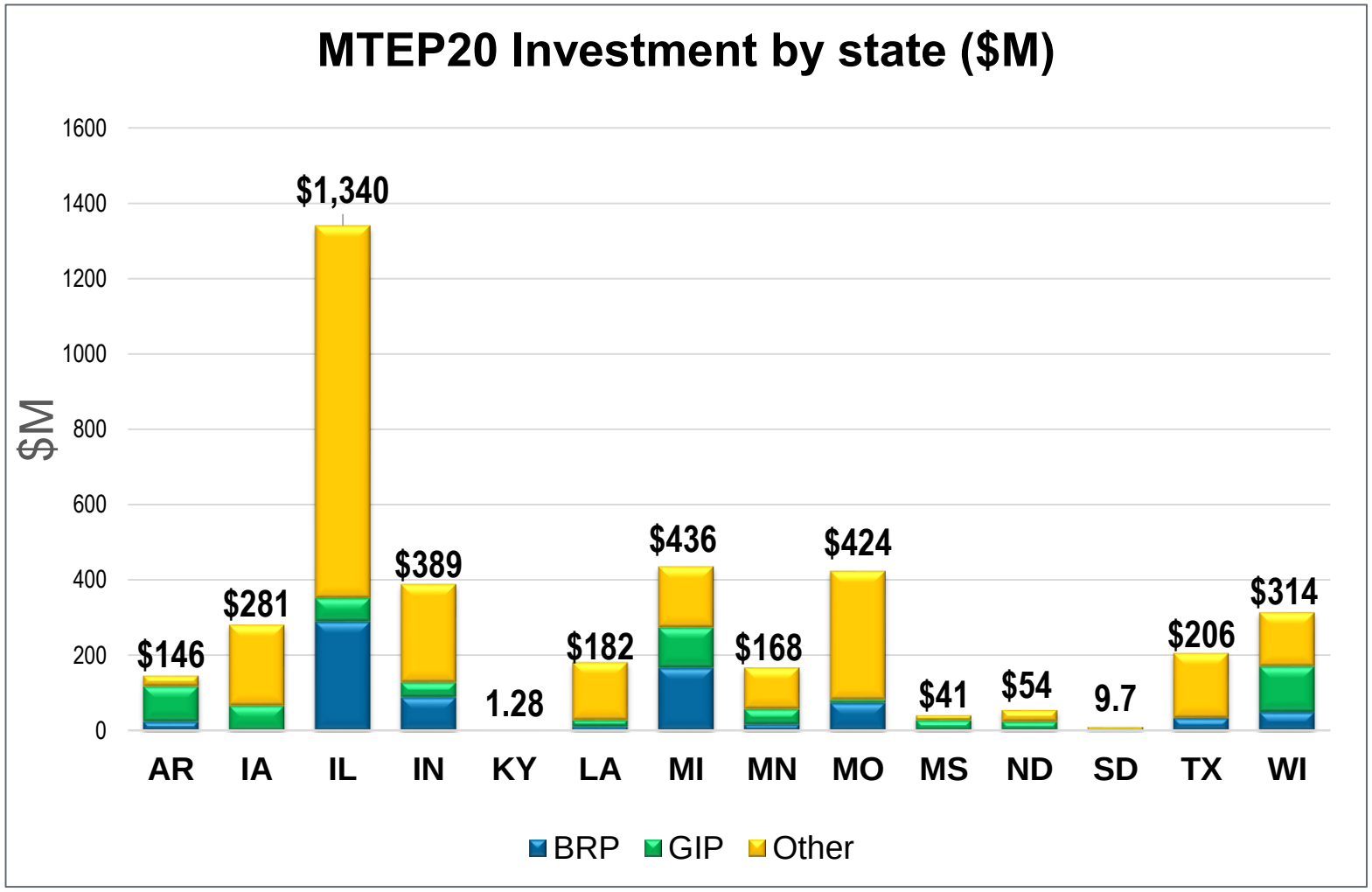
The proposed top ten projects represent 19% of total MTEP20 costs

Rank	Project	Driver	Cost (Millions)
1	New Massac Substation - Convert Joppa 230 kV Substation to 345 kV Substation	Other - Reliability	$112
2	Big Cedar Load Interconnection	Other – Load Growth	$105
3	New LaSalle Area 138 kV Statcom (100 Mvar)	Baseline Reliability	$91
4	New Robinson 138 kV Statcom (70 Mvar)	Baseline Reliability	$78
5	Rebuild Grand Tower-Carbondale NW 138 kV line	Other - Age & Condition	$76
6	Rebuild Albion South-Norris City North 138 kV to Double Circuit	Other - Age & Condition	$74
7	Upgrade Greentown 765 kV Substation	Other - Age & Condition	$70
8	Millbend 138 kV: New Distribution Station	Other - Load Growth	$65
9	Choudrant: New Distribution Substation	Other - Load Growth	$56
10	New Jordan Substation - Convert West Frankfort 230 kV to 345 kV	Other - Reliability	$56



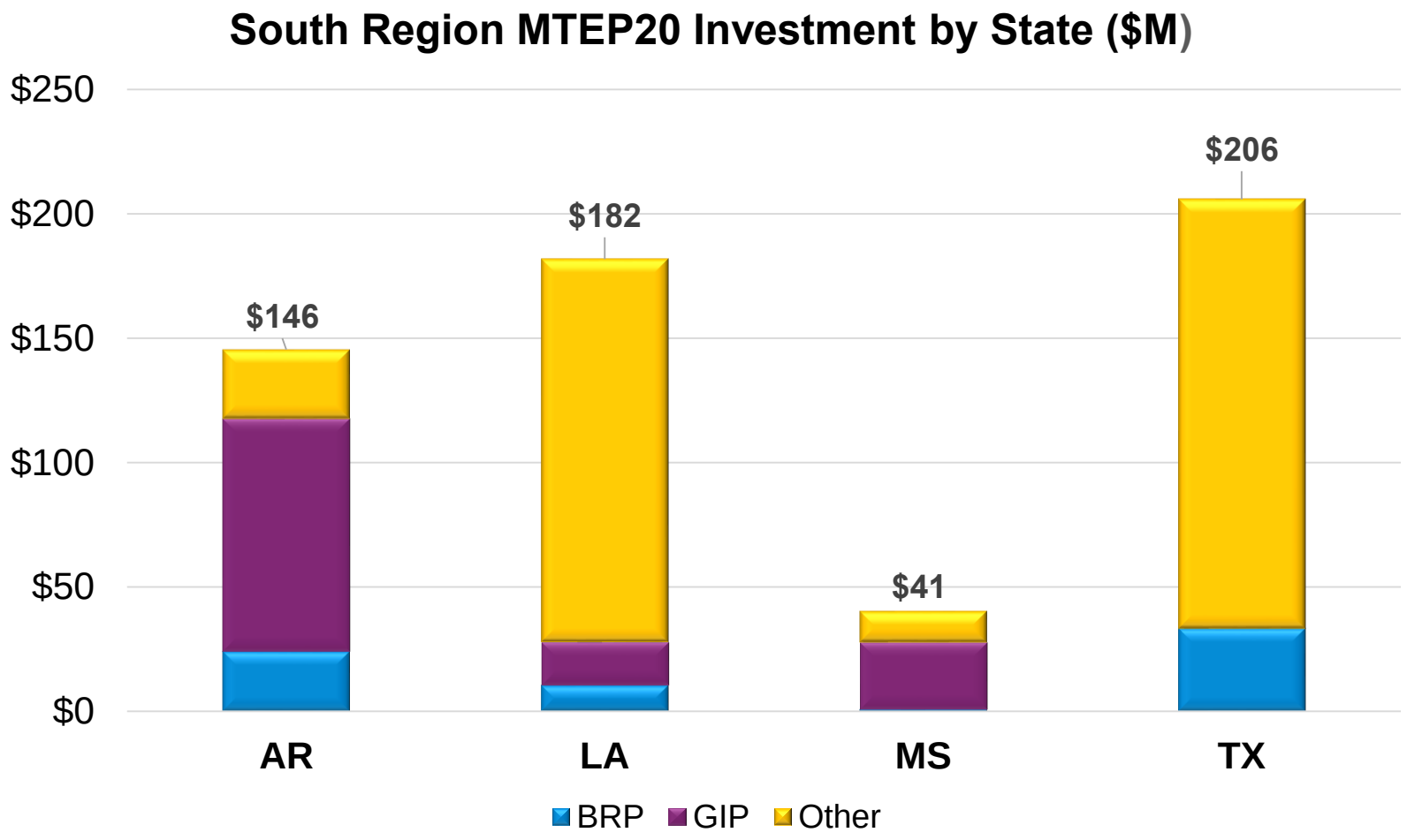
Project information as of October 5, 2020

Proposed MTEP20 transmission investments span the footprint



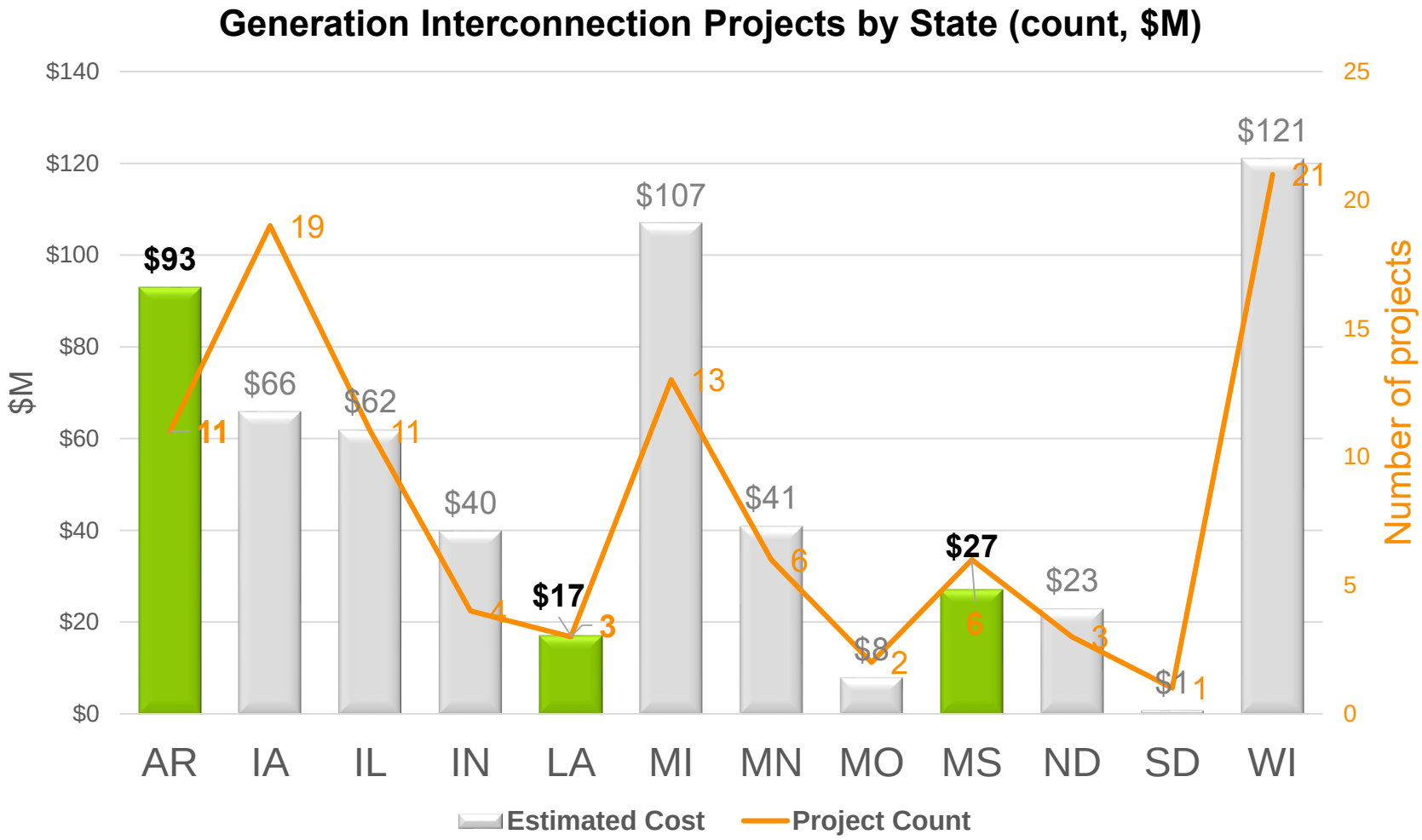
BRP: Baseline Reliability Project **GIP:** Generator Interconnection Project

MTEP20 includes investment in South region



BRP: Baseline Reliability Project **GIP:** Generator Interconnection Project

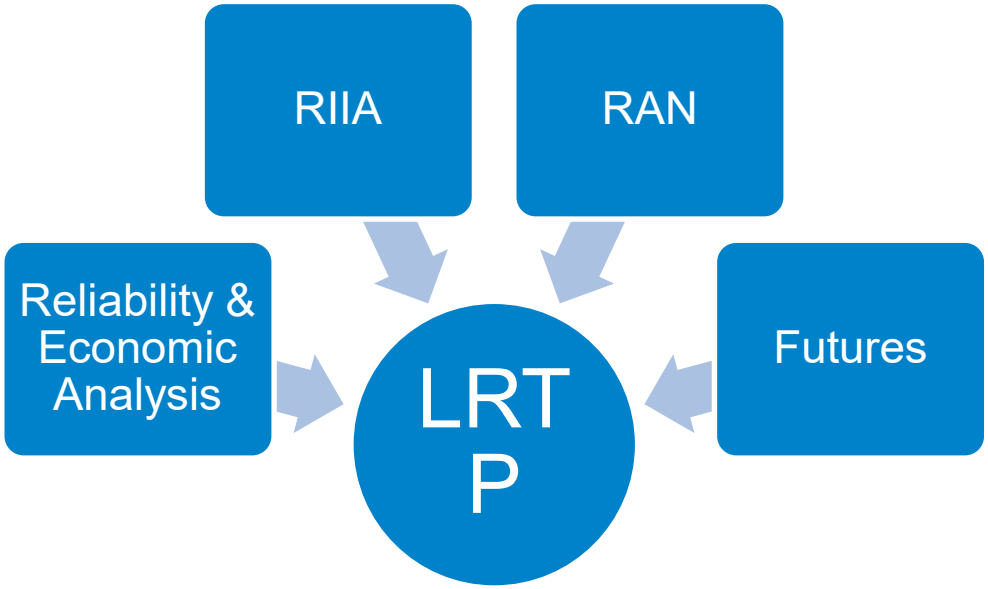
Generator interconnection investments continue in the South region



Long Range Transmission Planning

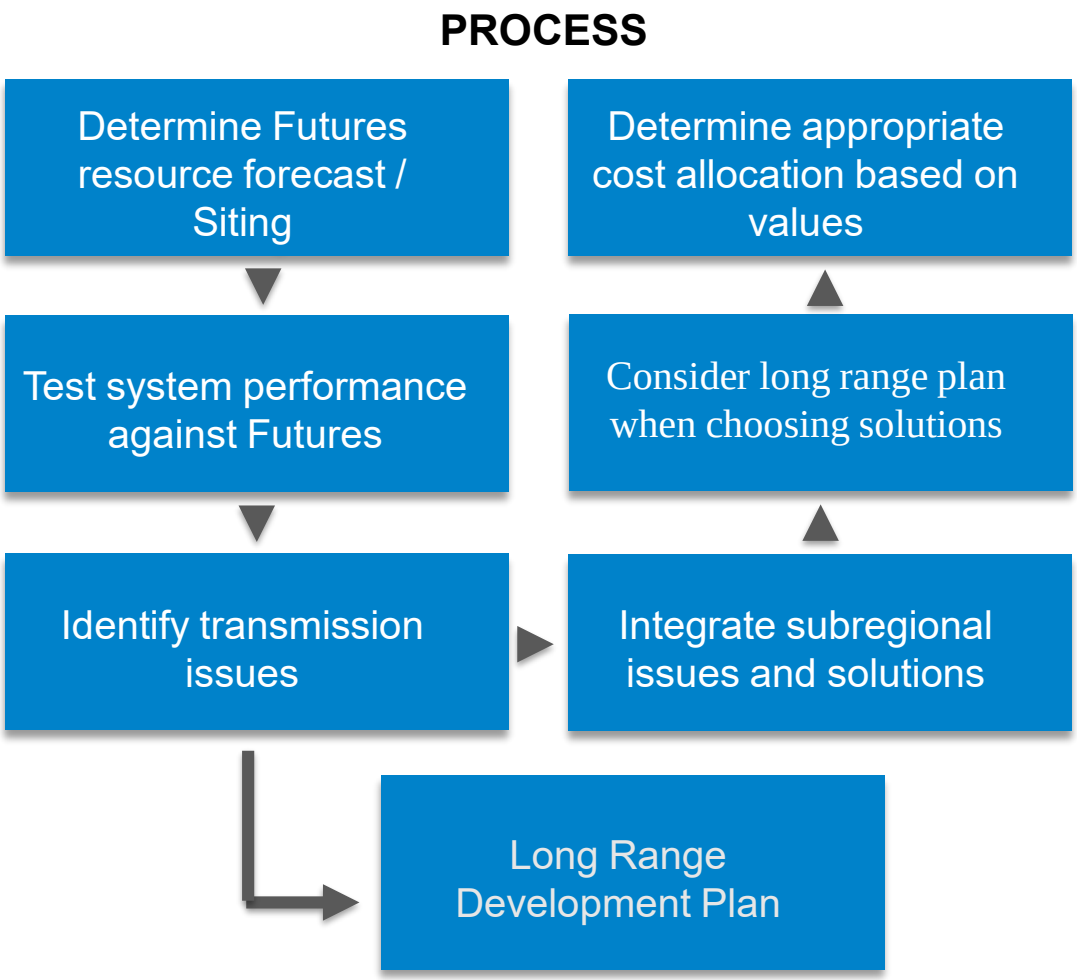
LRTP will be a comprehensive approach under MISO's Reliability Imperative to provide a transmission road map of grid evolution that will be the foundation to drive future investment decisions

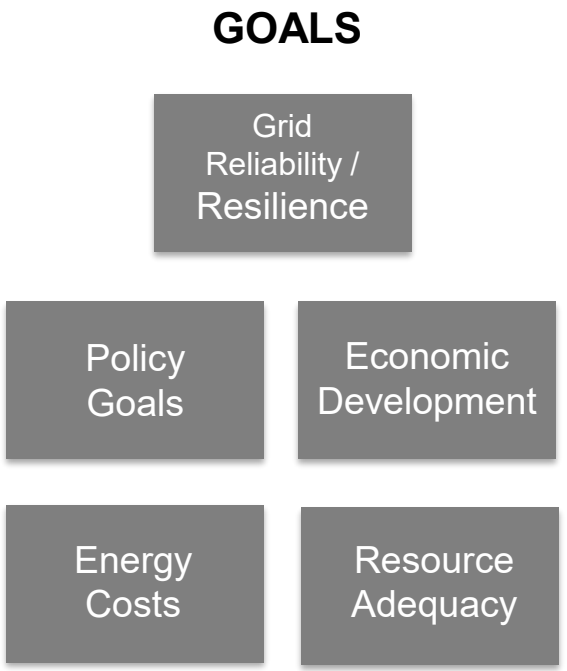
LRTP will focus on several aspects of the grid – reliability, stability, robustness, resiliency, system diversity, economics, and challenges associated with operating the system with the changing fleet (as identified in RIIA and RAN)



What is a Transmission Road Map? MISO envisions this to be a foundational set of regional, subregional and interregional transmission projects that provide insight and direction for future investment

LRTP will utilize MISO's planning process which identifies grid needs based upon Futures, is multi-step, and considers subregional needs and solutions



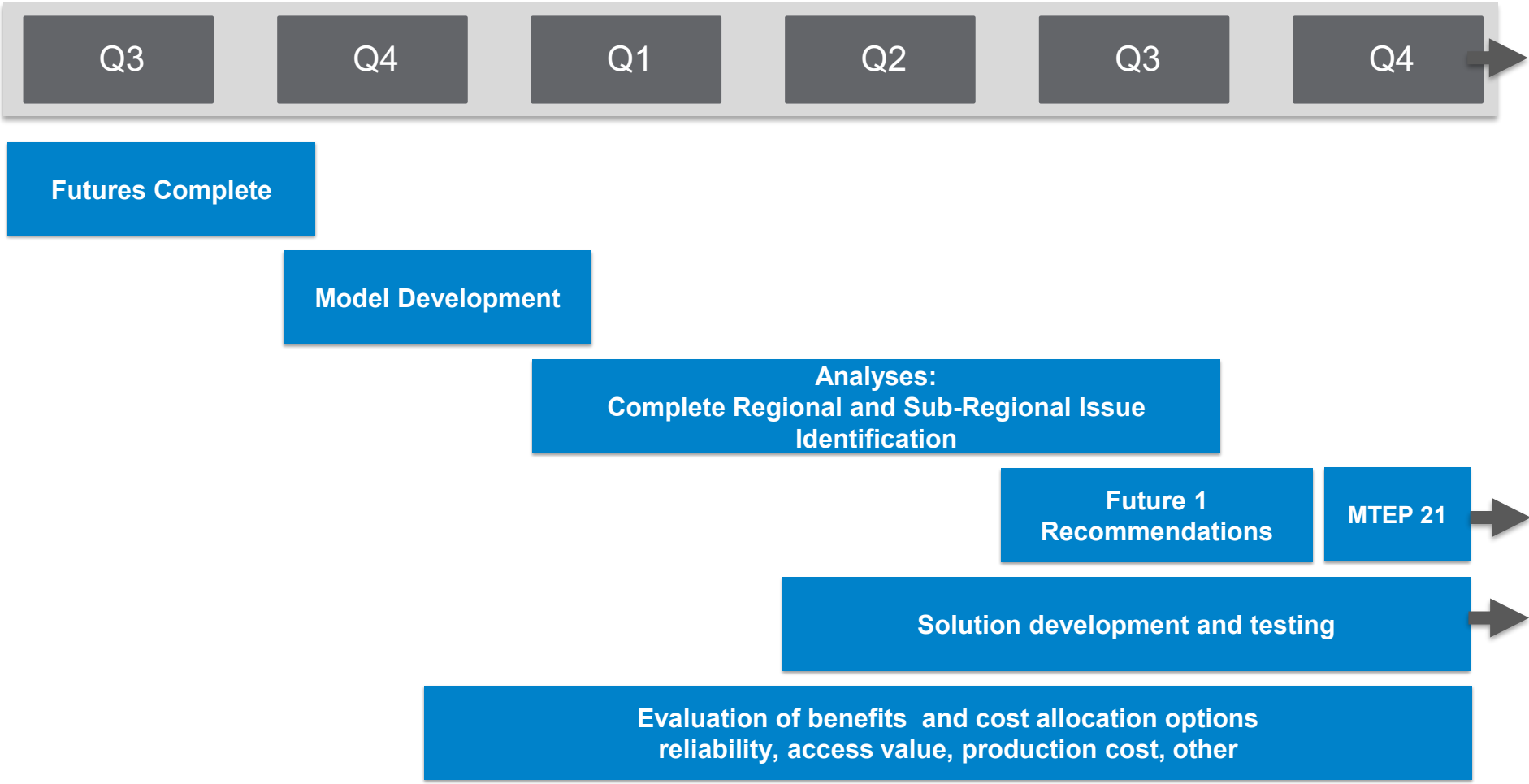


Stakeholder Engagement

- MISO anticipates utilizing workshops and/or PAC and PSC when relevant information is ready to be shared and/or study discussions are warranted

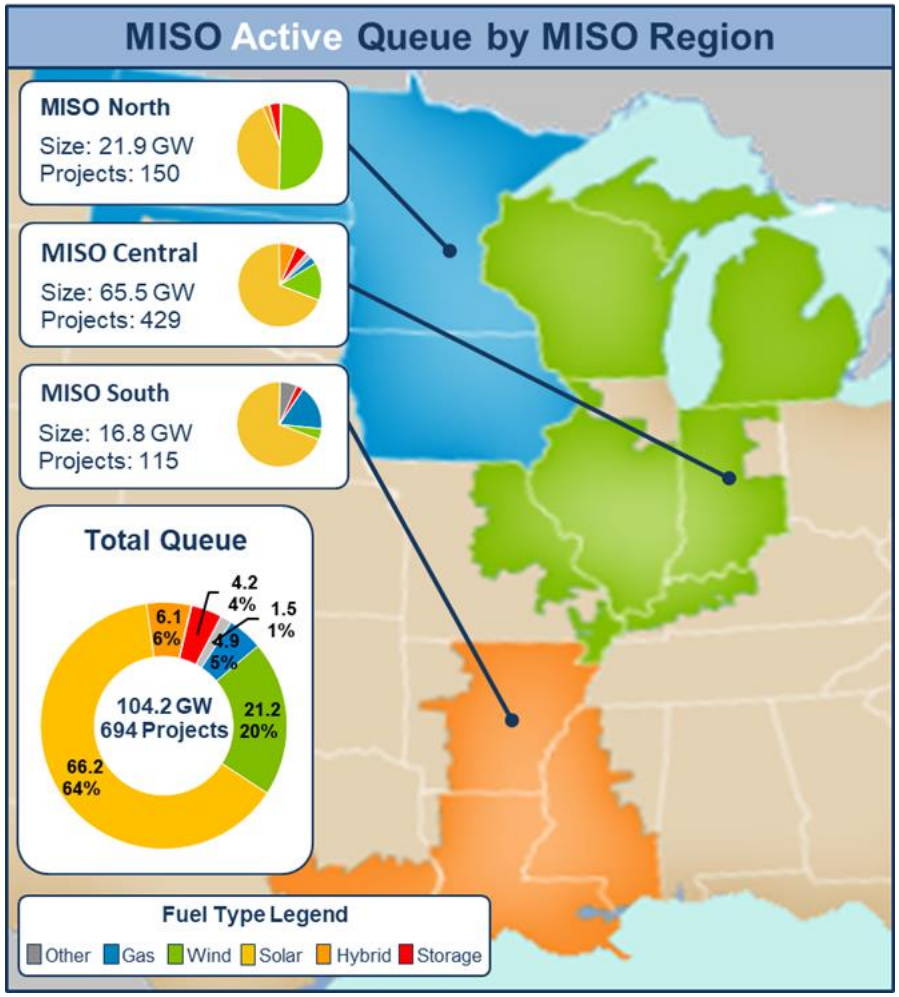
- The RECBWG anticipates cost allocation discussions by 1Q 2021

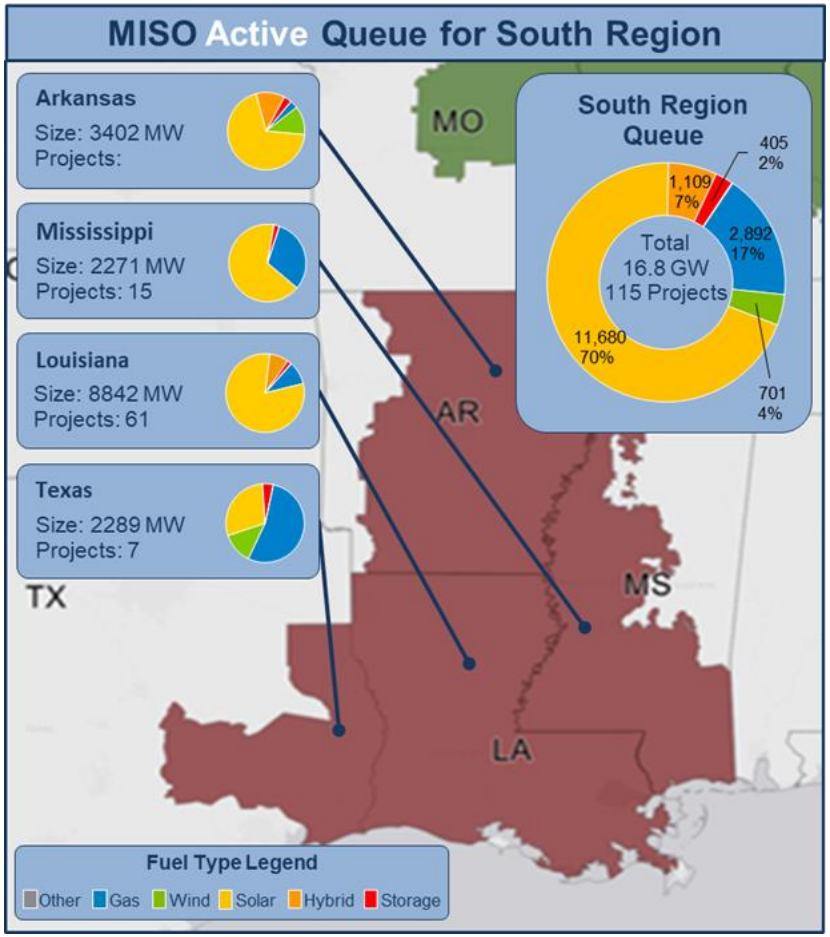
Long Range Transmission Planning
High-level 2020-2021 Timeline



Resource Utilization

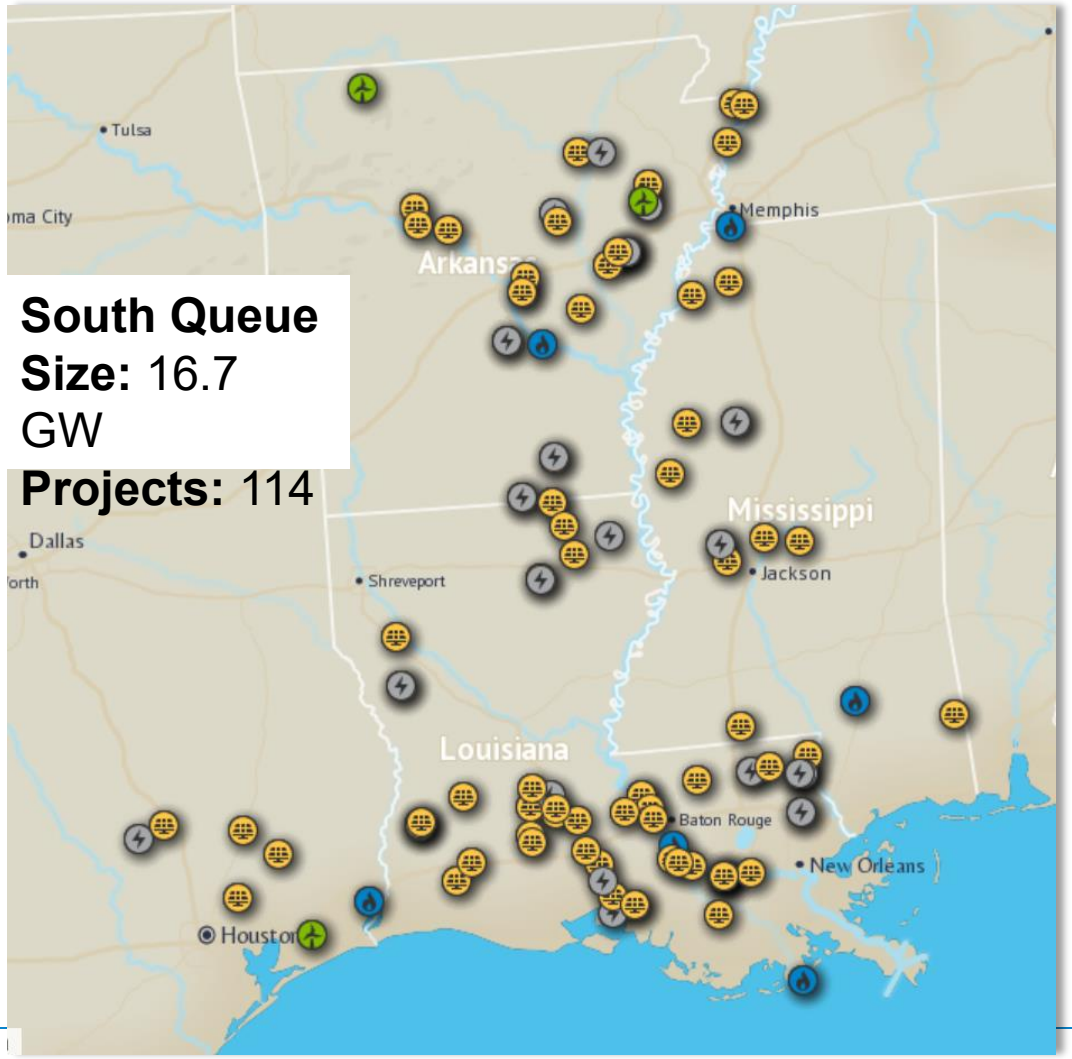
MISO's queue totals 104.2 GW, comprised of nearly 700 projects



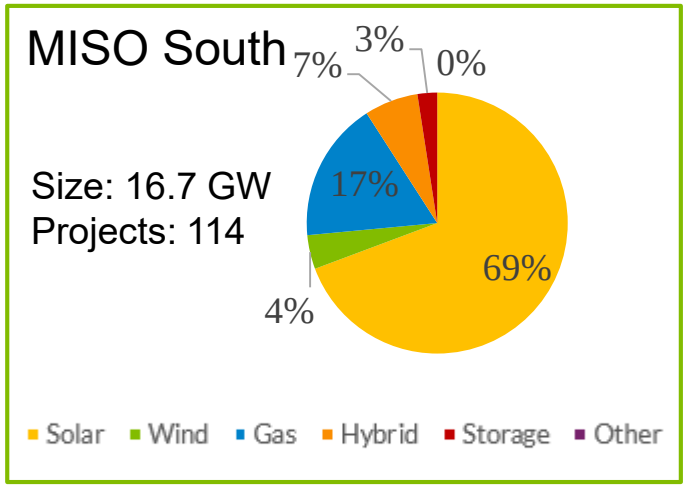


Queue as of 10/28/20

Queue requests in the South are dominated by solar



South Queue
Size: 16.7 GW
Projects: 114

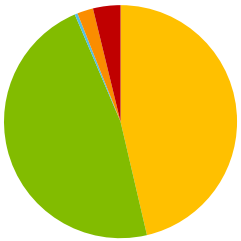


As of 10/28/20

Interconnection Queue: Solar, storage and wind project locations provide geographic diversity throughout the MISO footprint

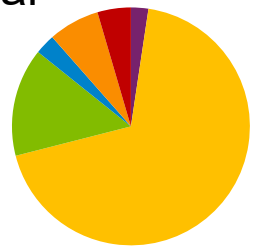
MISO West

Size: 23. GW
Projects: 164



MISO Central

Size: 63.6 GW
Projects: 415



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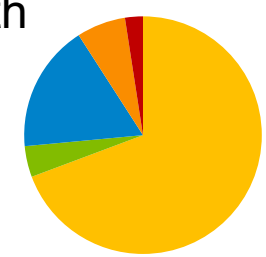

Updated 10/28/2020

Solar Wind Gas Hybrid Storage Other