



2022 Summer Reliability Forum

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- **Coal Units – 1,032 MWs**

- AB Brown Units 1 and 2 – 490 MWs
- FB Culley Units 2 and 3 – 360 MWs
- Warrick Unit 4 – 150 MWs out of 300 MWs
- Ohio Valley Electric Cooperative (OVEC) – 32 MWs



- **Gas Peaking Units – 160 MWs**

- AB Brown Units 3 and 4 – 160 MWs

- **Renewables – 137 MWs**

- Troy Solar – 50 MWs
- Volkman Road Solar – 2 MWs
- Evansville Urban Solar – 2 MWs
 - Includes 1 MW/4 MWhr Battery
- Blackfoot Landfill Gas – 3 MWs
- Fowler Ridge Wind PPA – 50 MWs
- Benton County Wind PPA – 30 MWs



Generation – Summer Reliability Preparedness



- Preparing units for summer reliability
 - Year-round preventive and predictive maintenance program
 - Planned outages completed by May 1st
 - Timing coordinated through and approved by MISO
 - Inspection and maintenance performed on boiler, turbine, generator, heat exchangers, coal conveyers, river water intake pumps and screens, compressors, HVAC, environmental and other critical balance of plant equipment
 - Reverse all winterization activities
 - Ensure chemicals and reagents inventory is adequate and deliveries are scheduled to maintain environmental compliance
 - Review Emergency Action Plan for extreme weather conditions
 - Complete annual refresher training on critical equipment and procedures
- Extreme Summer Weather
 - Hands off equipment (MISO emergency conditions)
 - Increase employee attention to monitoring equipment trends
 - Review heat stress safety and ensure adequate supply of hydrating fluids

- Historical Annual Equivalent Forced Outage Rate (EFOR)*

2021	2020	2019	2018	2017
4.14%	4.64%	4.58%	5.56%	2.04%

- Coal Supply Challenges
 - Illinois Basin (ILB) coal mine cutbacks in production and recent increase in demand has resulted in ILB mines being sold out in 2022.
 - ILB mines attempting but struggling to increase productivity to take advantage of high market prices.
 - RFP's resulted in a couple of small spot purchases.
 - Current market appears to be well above \$100 (delivered to plant).
 - Coal conservation strategy implemented.

CEI South's Electric Footprint



• **Customers** ~150,000

• **2021 Retail Sales 4,645 (GWh)**

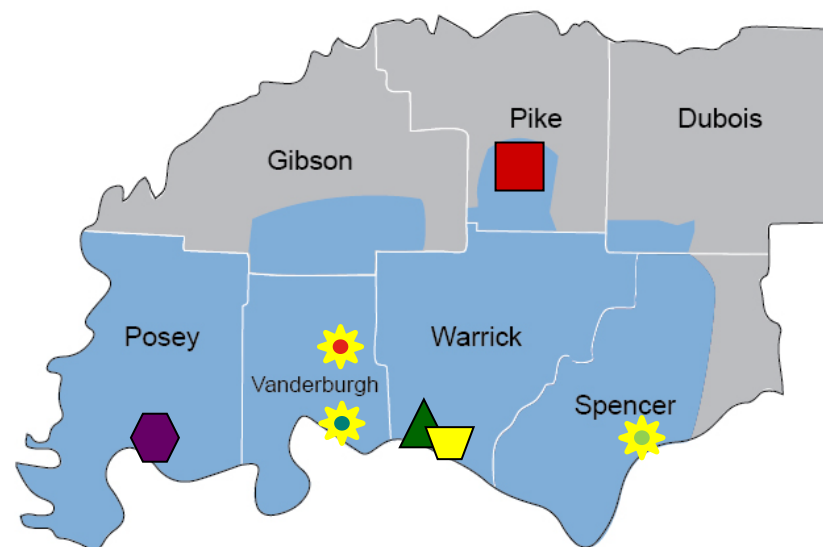
- Residential 1,417 GWh
- Commercial 1,165 GWh
- Industrial 2,041 GWh
- Other 22 GWh

• **Transmission System**

- 1,004 miles of transmission lines
- 33 transmission substations

• **Distribution System**

- More than 4,362 circuit miles of distribution lines
- 29% of distribution underground
- 78 distribution substations

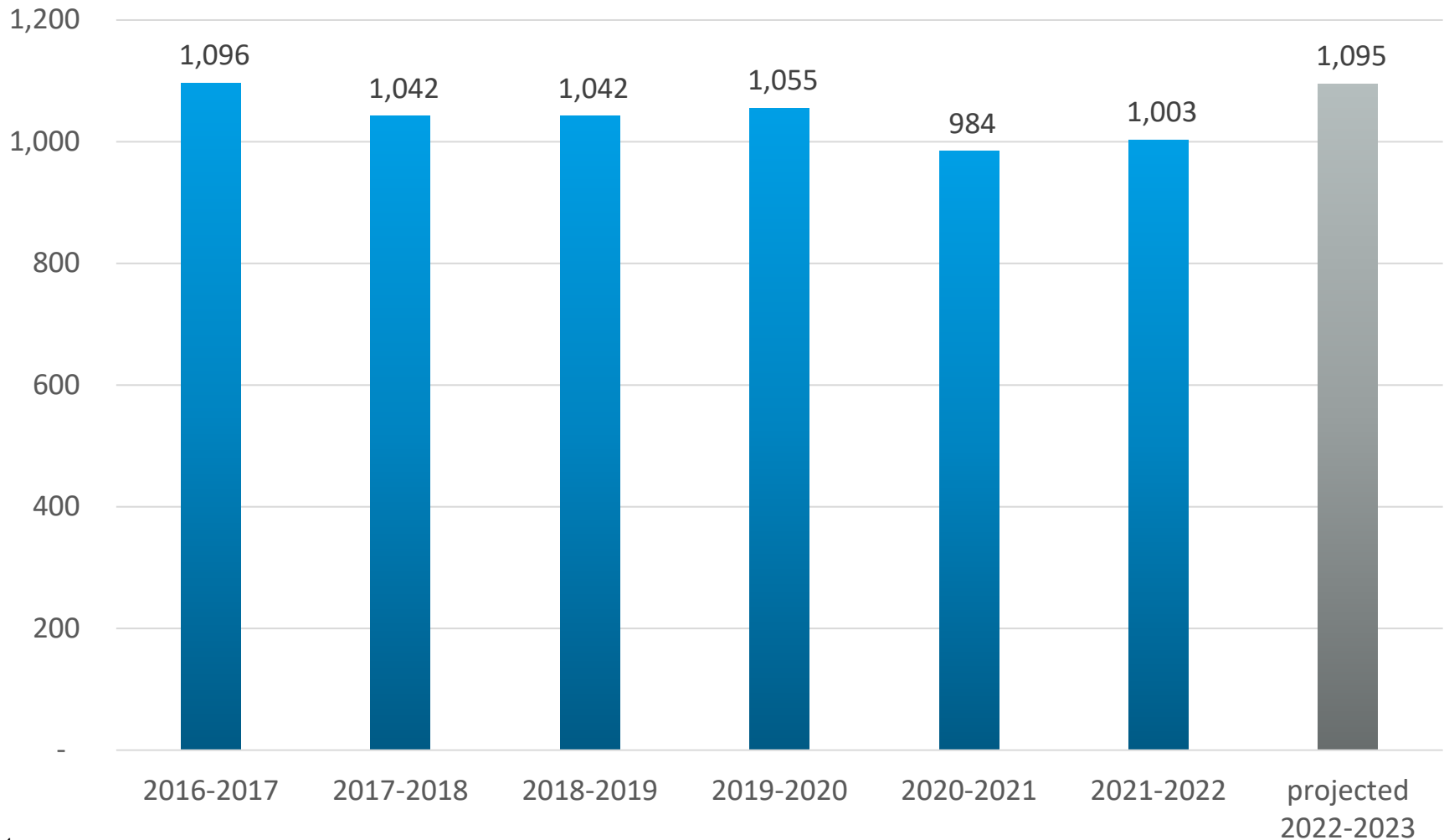


Power plants¹

- AB Brown
- FB Culley
- Warrick Unit 4
- Blackfoot Clean Energy Plant
- Troy Solar
- Oakhill Solar
- Volkman Rd Solar

¹Fowler Ridge & Benton County Wind Farms not shown

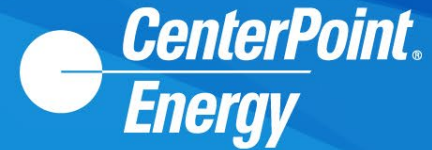
CEI South's Historical¹ and Projected² Summer Peak Load (MW)



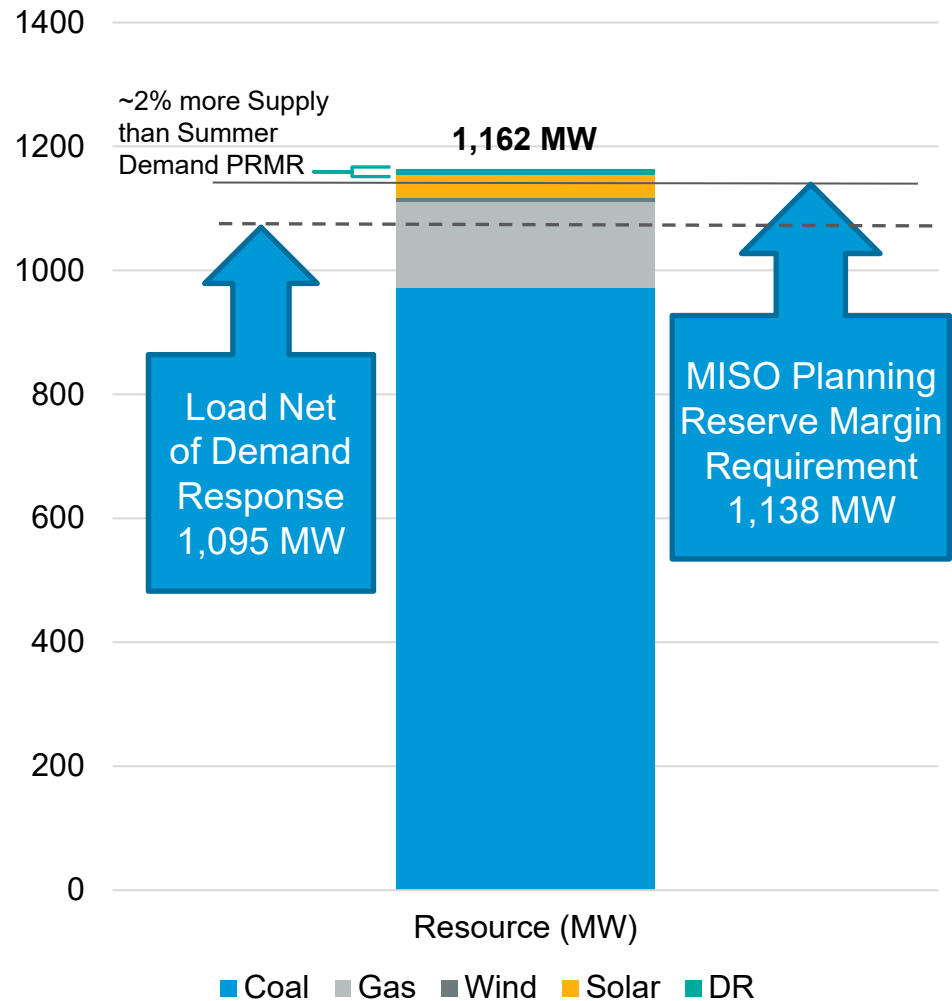
¹ Actual historical peak load value, not normalized peak load value

² June 2022-September 2022

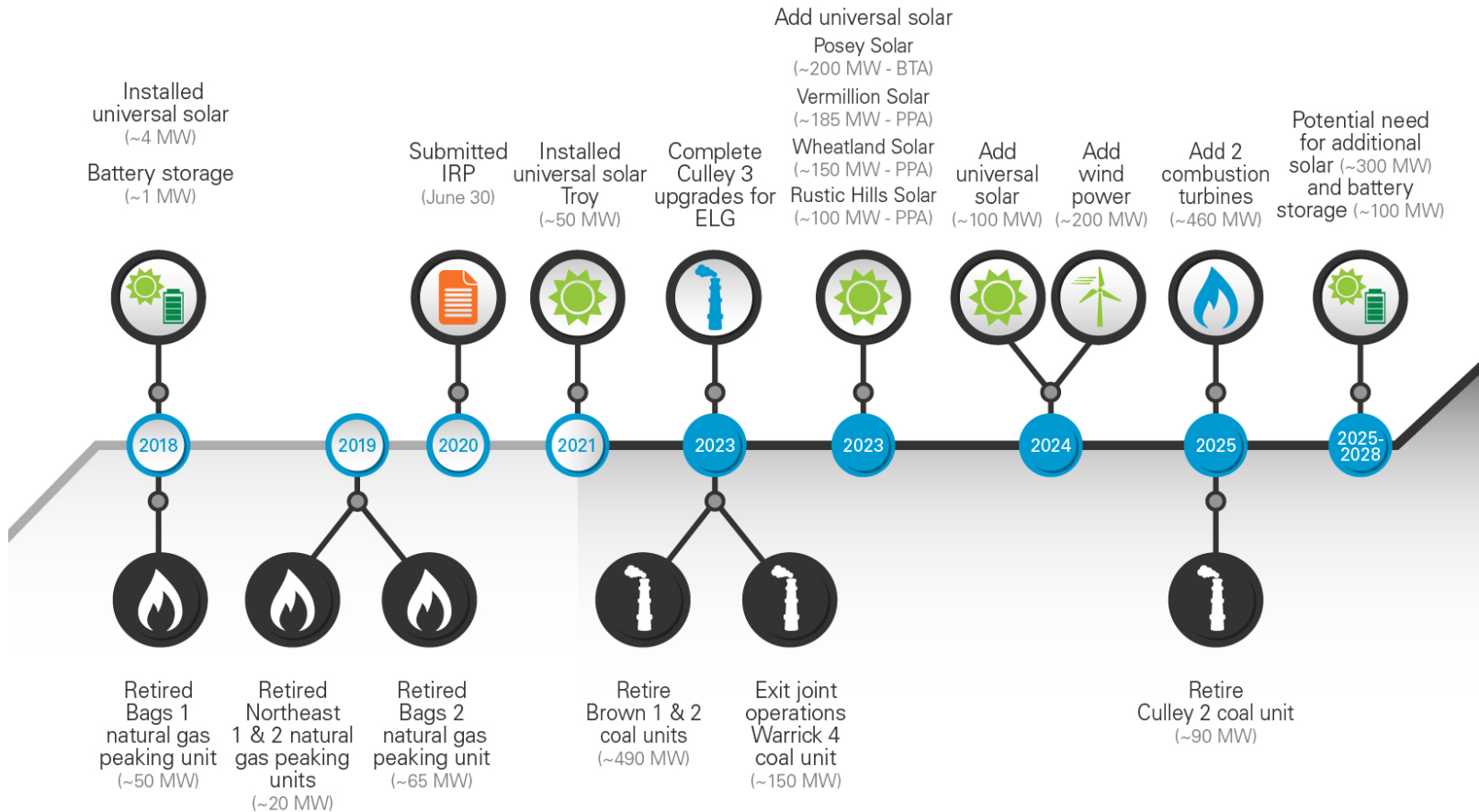
CEI South Accredited Capacity Resources for 2022 – 2023 Summer Season



- **MISO Accredited Capacity:**
1,162 MW
- **CEI South Accredited Capacity:** 1,117 MW
 - Coal – 941 MW
 - Natural Gas – 140 MW
 - Troy Solar – 36 MW
- **Other Accredited Capacity:** 45 MW
 - Wind Purchases – 6 MW
 - OVEC – 30 MW
 - Summer Cyclor – 9 MW
- **Behind the Meter Capacity:** 5 MW
 - Blackfoot Renewable Gas – 3 MW
 - Volkman Road Solar (BTM) – 1 MW
 - Evansville Urban Solar (BTM) – 1 MW



Update on Generation Transition



Bags = Broadway Avenue Gas Turbines
 BTA = Build Transfer Agreement/Utility Ownership
 ELG = Effluent Limitations Guidelines
 MW = Megawatt
 PPA = Power Purchase Agreement
 RFP = Request for Proposal

Seasonal Resource Adequacy Construct

CEI South remains supportive of MISO's move to a seasonal resource adequacy construct, which supports the generation transition plan

Notice of Inquiry on Dynamic Line Ratings

CEI South maintains that DLRs should be implemented where they are cost effective and beneficial to customers and the utilities

Implementation of FERC Order 2222

CEI South has been actively participating in the MISO DERTF and looks forward to taking part in the Commission's upcoming stakeholder process

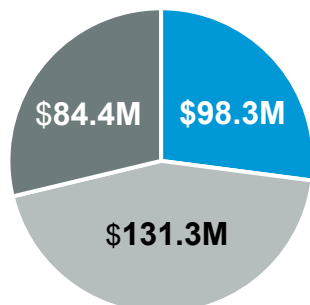
Long Range Transmission Plan

CEI South continues to follow the LRTP stakeholder process and looks forward to further discussion regarding cost allocation; we continue to believe that LRTP (which generally includes some level of postage stamp cost allocation) should be reserved for high quality, high voltage, cost effective projects, where regional benefits are less speculative

2017-2021 TDSIC Investments

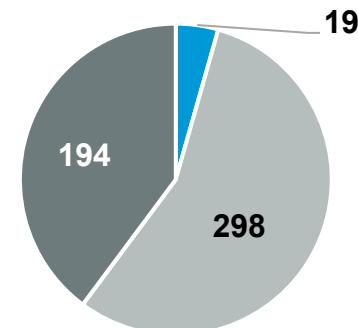


\$314.0M Total Investment



- Transmission
- Distribution
- Substation

511 Projects Completed



Substation

- 112 Circuit Breakers Replaced
- 31 Power XFMR Replaced
- 42 SCADA Systems Upgraded
- Other Replacements
 - 200 Arrestors
 - 146 Instrument XFMR

Distribution

- 7,590 Structures Replaced/Installed
- 203.4 Miles OH Conductor Installed
- 108.2 Miles UG Conductor Installed
- 2,980 Distribution XFMR Replaced/Installed
- 83 Distribution Circuit Rebuild and Looping Projects Completed

Transmission

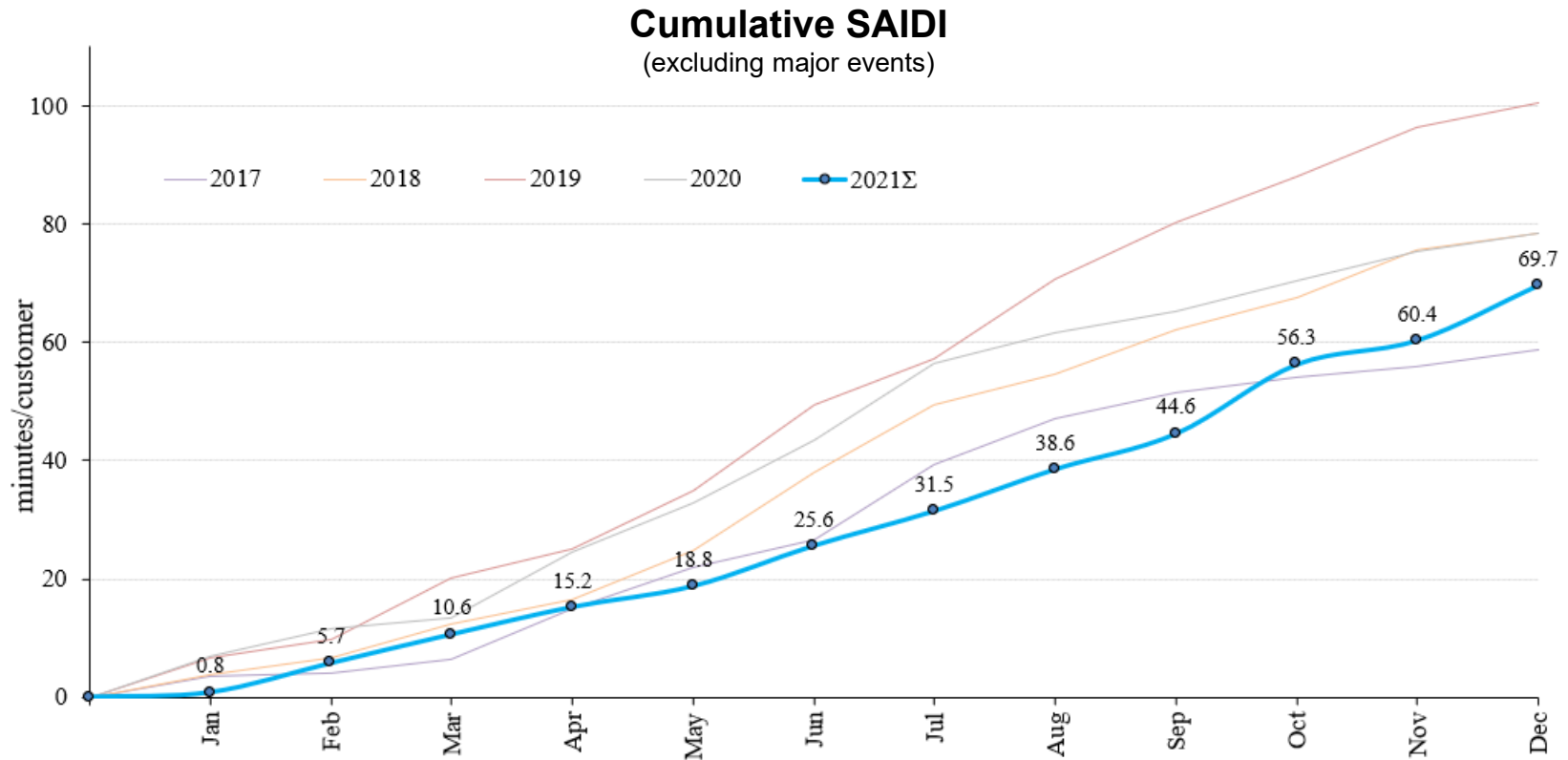
- 2,149 Structures Replaced/Installed
- 72 Miles 69kV Rebuilt
- 133 Miles OPGW Installed
- 6 Transmission Looping Projects Completed

Commitment to Customer Reliability – Metrics



End of Year 2021 – Reliability Metrics

- SAIDI 69.77 minutes
- SAIFI 0.8182 interruptions
- CAIDI 85.41 minutes



Commitment to Customer Reliability – Notable Reliability Initiatives



Started Electric
TDSIC in 2017

Proactive
replacement of
aging/failing
underground cable

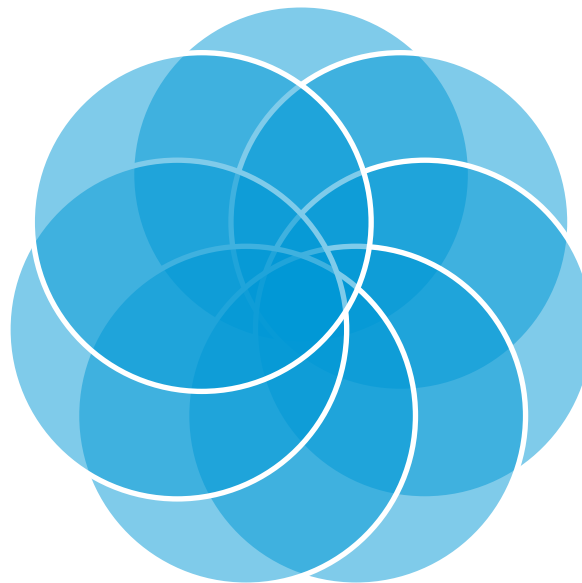
10-year cycle
wood pole
inspection program

Distribution
automation
program

Quarterly CEMI
reports with
remediation efforts

Performance based
vegetation
management

Worst performing
circuit program



Preparation For Severe Weather-Related Events



- CEI South electric field operations prepares for severe weather through annual drills such as Emergency Operations Plan (EOP) drills and Storm Response Plan drills
- Electric field operations has standing work orders that are automatically issued in the spring to be completed prior to the summer season
 - See Appendix for a list of activities completed
- Prior to a severe weather event, plans are executed to ensure planned outages are restored, providing maximum redundancy for the system
- Electric field operations keeps an inventory of spare equipment specifically for storm restoration efforts to provide assurance that equipment is available in time-sensitive situations
- Vehicles are stocked and maintained to ensure readiness
- Options identified in anticipation of need for additional materials (laydown yards, increased min/max levels, & agreements with vendors to get us emergency material)



Distribution

- Inspect capacitor banks
- Ensure maximum redundancy



Transmission

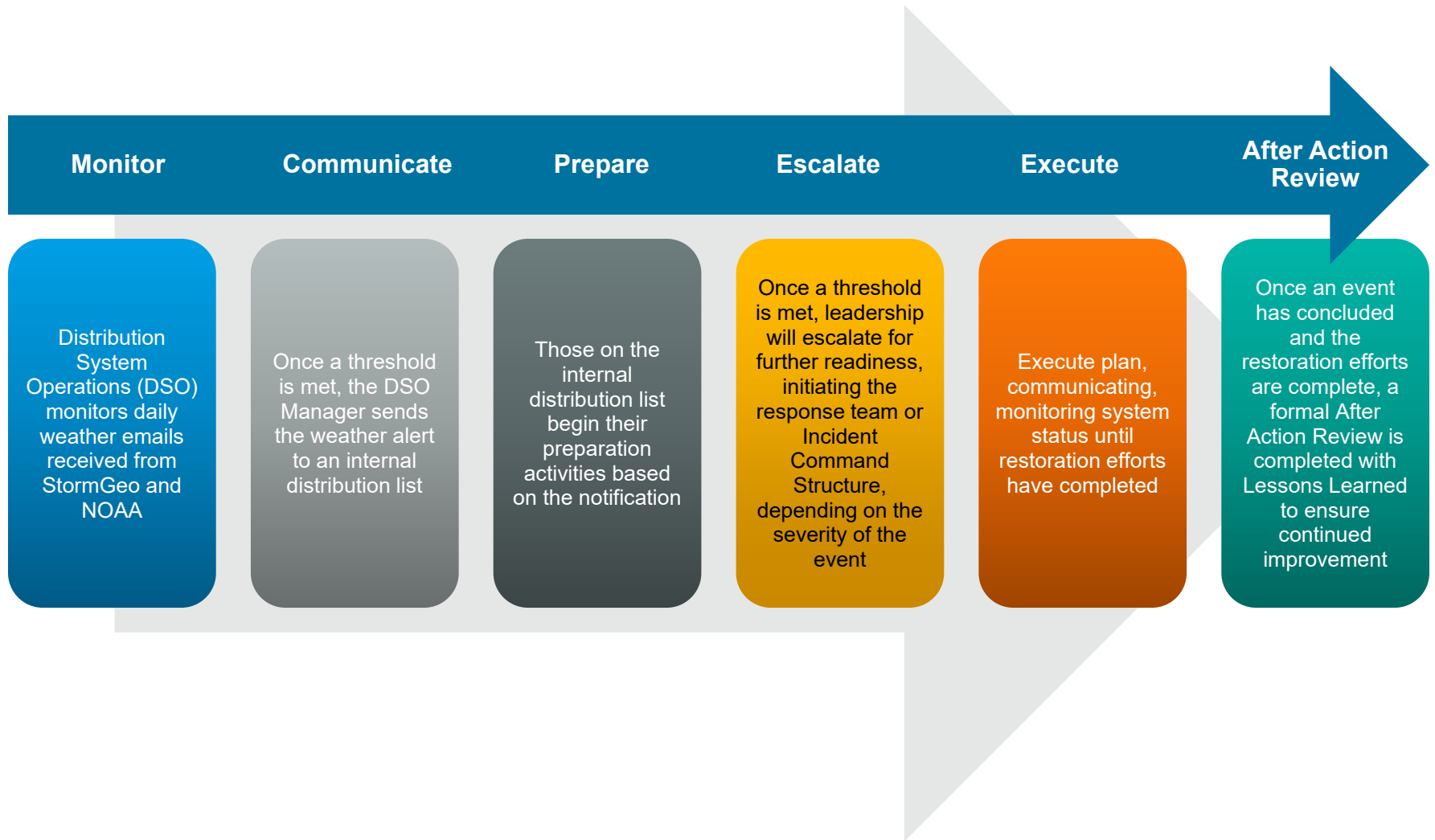
- Ensure maximum redundancy



Substation

- Complete inspection work orders
- Gather load data during peak months

Timeline For Weather-Related Events



- Extended Moratorium & expanded payment arrangement criteria
- Executing on the hiring and retention strategy to ensure full complement in the contact center
- Contact center representatives on standby to respond to severe weather-related events, as part of CenterPoint's Emergency Operating Procedures
- Implementing technology enhancements to provide additional self-service options, virtual hold, and enhance electric outage experience

Cyber Security Enhancements and Preparedness



- Russia – Ukraine
 - Heightened alert posture in cyber security operations with 24/7 coverage
 - Frequent threat intelligence sharing with federal, state and local partners as well as industry associations and peer utilities
 - No increase in malicious attempts to date on CenterPoint Energy's critical assets – actual decrease since the beginning of hostilities
 - CenterPoint Energy has implemented all the Cybersecurity and Infrastructure Security Agency (CISA) "Shields Up" measures
- Cyber Security Hardening includes but is not limited to:
 - Enhanced phishing tests and proactive communications to all employees
 - Network segmentation
 - Monitoring and sensor improvements

APPENDIX

CEI South's Resources at Summer Peak & PRM Requirement



CEI South's Retail Summer Peak Demand & Requirements

Peak Demand	MW
CenterPoint Energy Retail	1095
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Forecasted Coincident Peak	MW
CEI South	1022.7
MISO PRM of 8.7%, Transmission line loss 2.4%	115.7
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Total Requirements	1138.4

• Supply exceeds CEI South's Summer Retail Peak Demand by 67.4 MW (6.2%)
 • Summer Supply exceeds Demand Requirement by 24 MW (2.1%)

Supply

	UCAP MW
Steam Generation	
Brown 1	237.5
Brown 2	224.1
Culley 2	86.2
Culley 3	260.6
Warrick 4	132.6
Total Steam	941
Peaking Generation	
Brown 3	74.6
Brown 4	65.3
Total Peaking	139.9
Purchases	
Firm	30.3
Wind	6.1
Total Purchase	36.4
Solar	
Troy Solar	36.4
Total Solar	36.4
Demand Resource	
Summer Cycler	8.7
Total Other	8.7
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Total MISO Accredited Capacity	1,162.40

- Turn on AC units, replace thermostat batteries if applicable, replace filters, remove vent covers if applicable (all covered under our standing maintenance order)
- Turn on transformer fans for distribution transformers identified as heavily loaded during summer peak. List provided by DSO. (Done during routine sub inspections or during first bullet)
- Load readings taken during peak months. This activity includes Transmission and Distribution circuits and transformers. It also includes span hands on all LTC transformers and regulators. (This work charged to our standing maintenance WO)
- Temp readings taken, temp. span hands checked, and transformer fans operation checked during sub inspections on 4 month cycle (sub inspection WO)
- Complete substation yard infrared performed on 4 month cycle (sub inspection WO)
- Oil samples taken 2 times a year on transmission transformers and 1 time a year on distribution transformers (oil sample WO)

2021 Foundation State Overview Indiana



2021 GRANT HIGHLIGHTS

Downtown Evansville Community Development Corporation | **\$1 million**
CenterPoint Energy Square (*Community Vitality*)

Hoosiers Read | **\$1 million**
Dolly Parton Imagination Library (*Education*)

Boys and Girls Club of Evansville | **\$250,000**
Bellemeade Park Renovation (*Community Vitality*)

- Community Vitality 75%
- Education 21%
- Local Initiative 4%

