

Summer Reliability 2024

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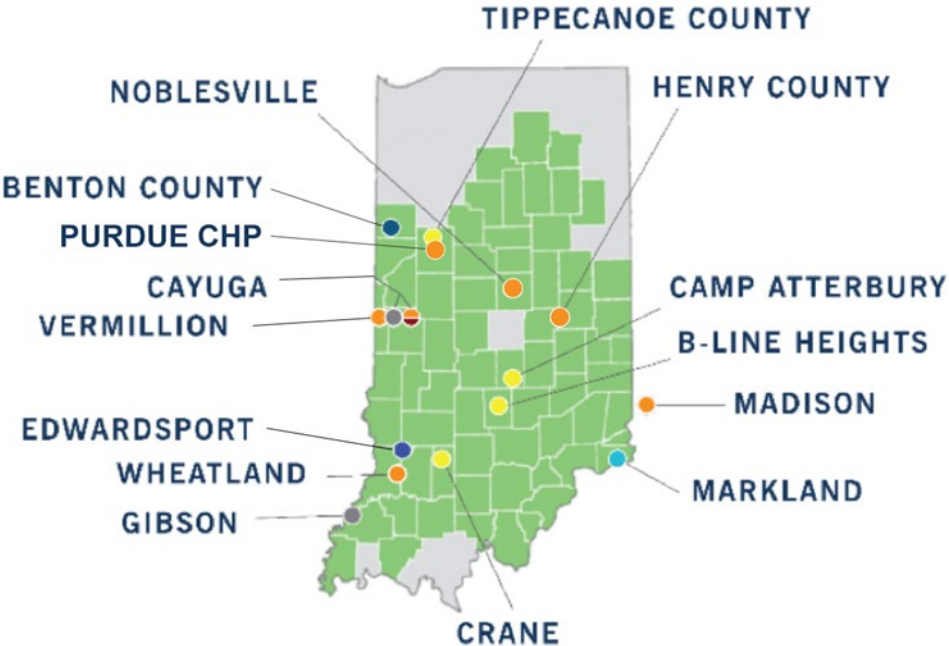
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May 9, 2024



Duke Energy Indiana at a Glance



**Plant Locations
Generation Type**

- Coal
- Syngas/Gas
- Gas CC/CT
- OIL CT
- Hydro
- Wind PPA
- Solar

Largest electric utility in Indiana

23,000 square-mile service area,
covering 69 of 92 counties

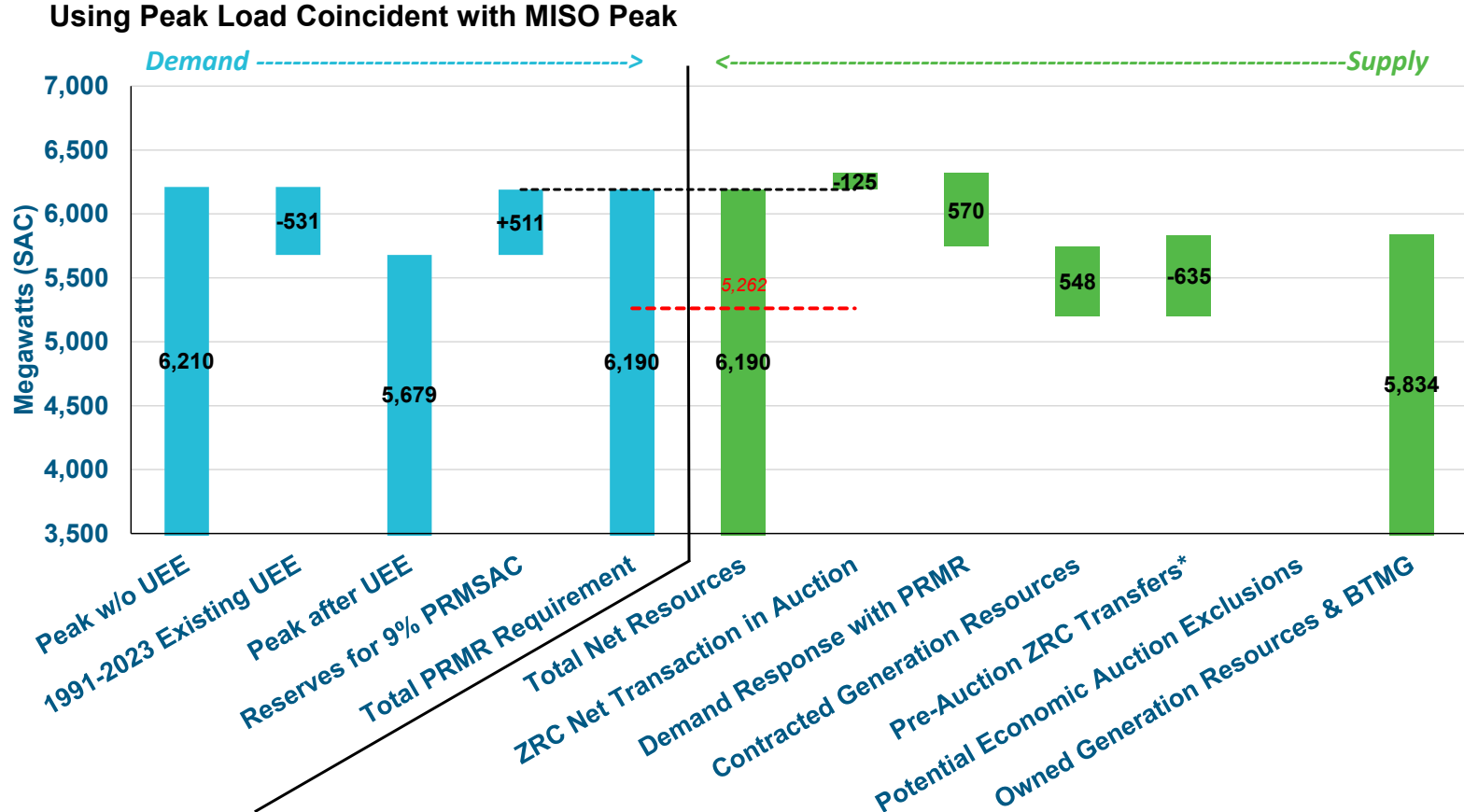
900,000 customers

37,000 miles of transmission and
distribution lines

6,300 megawatts at 12 large power
generation sites

Approximately 2,500 Duke Energy
Employees in Indiana

Preparation for Summer 2024: Capacity Supply–Demand Balance – As Offered



Acronyms:

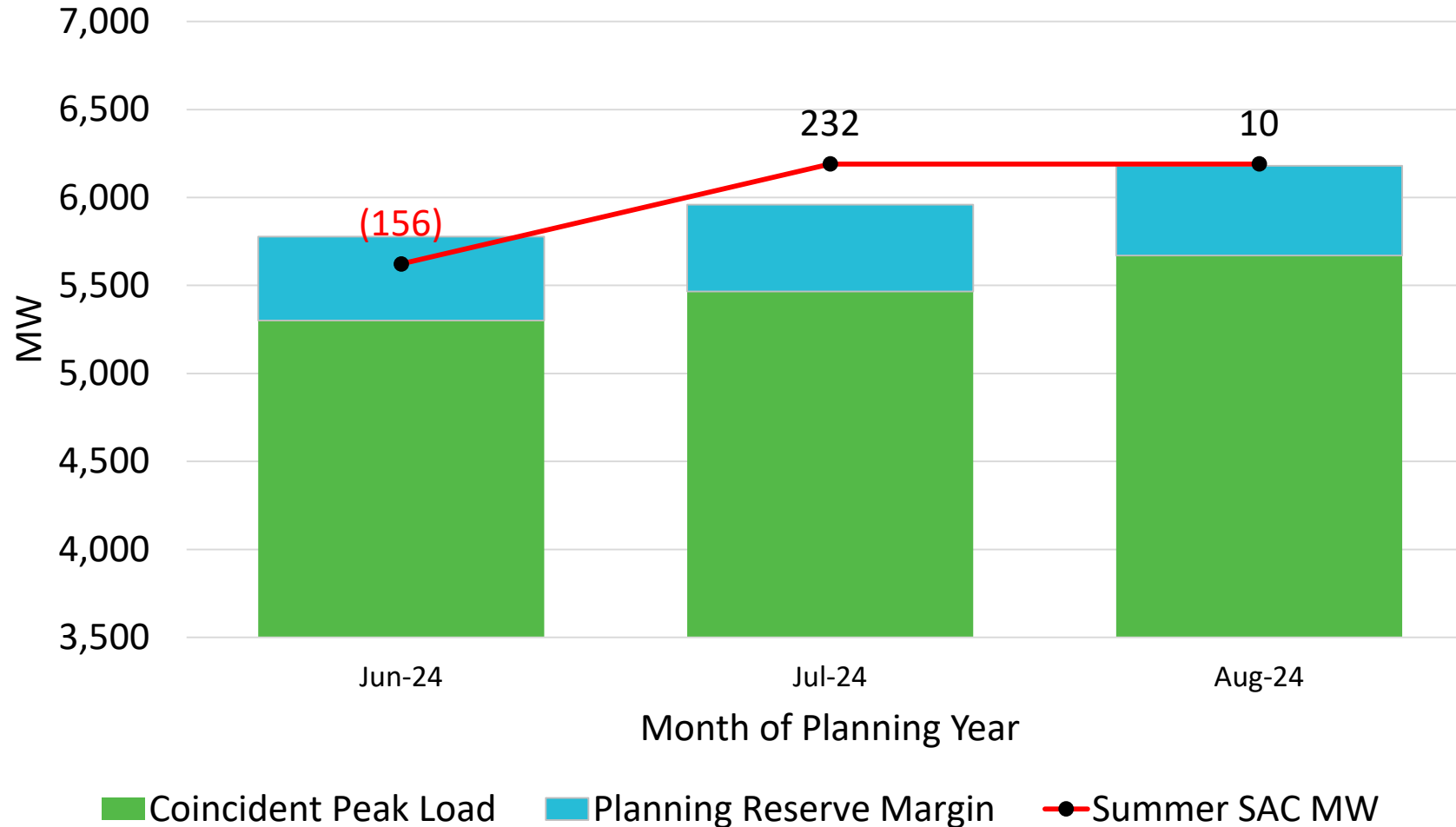
- MISO** – Midcontinent Independent System Operator
- UEE** – utility energy efficiency
- PRMSAC** – planning reserve margin/seasonal accredited capacity
- PRMR** – planning reserve margin requirement
- ZRC** – zonal resource credit
- BTMG** – behind the meter generation
- IMPA** – Indiana Municipal Power Agency
- WVPA** – Wabash Valley Power Alliance
- CT** – combustion turbine
- MW** - megawatt
- STUBNNS** – short term unbundled non-native sales

Summer Total Net Position: 125MW (2.0%) Sale

*IMPA ownership share of Gibson 5; WVPA ownership share of Vermillion CT; 310MW STBNNNS
Note: ZRC Net Transactions: (+) Purchase, (-) Sale

Serving Monthly Peak Loads

SAC Available Capacity on Monthly Peak Day to Serve Monthly Peak Load



Note: Depicts the seasonal SAC available on the monthly peak day to serve the monthly peak load, deducting for actual scheduled outages planned to be in progress on the monthly peak day based on the planned outage schedule. Includes Bilateral and PRA ZRC Purchases/Sales if applicable

2024 Summer Preparedness: MISO

MISO changes to watch

- Accreditation changes including Direct Loss of Load FERC filing, and impacts from federal environmental policies, such as the greenhouse gas rule
- Reliability based demand curve proposal
- Load Modifying Resources (LMR) Accreditation
- Queue reform and timeline
- Changes in Value of Lost Load (VOLL)
- FERC Order 2222

Continued Transition to Seasonal Accredited Capacity (SAC)

- DEI continues to see issues with spring and fall seasons due to outages and the 31-day rule, despite outage coordination efforts.
- The implementation of HEA 1520/1007 15% rule requires purchases from a tightening bi-lateral market.



Obligation to Serve and MISO Resources

- What specific actions does Duke Energy Indiana take to fulfill its obligation to serve?
 - Conducts a robust IRP with stakeholder input
 - Optimizes planned outage timing and capacity offer curves to maximize value and minimize costs
 - Dynamic dispatch fuel procurement to ensure long-term reliable coal supply
 - Developing natural gas pipeline infrastructure and firm transportation contracts
 - Commits long-lead resources ahead of forecasted weather events
 - Proactive natural gas generating unit nomination and combustion turbine staffing
 - Maintains always ready demand response programs
- Company personnel work together in partnership with MISO to ensure reliable and economic electric supply for our customers.
- If a situation arises where MISO provides a backup source of energy to serve Customer load, the Company expects MISO to provide the most economic resources possible to reliably serve customer load.

Preparation for Summer 2024: Production

- About 25 weeks of base load unit outages and over 45 weeks of combustion turbine outages performed Spring 2024
- Execution of capital maintenance plan
- All planned outages are expected to be complete by May 25 except one which will terminate in June
- All MISO capacity resource units available this summer
- Summer preparation activities coordinated through work management system and seasonal procedures
- Managing environmental obligations
 - Ozone Season NOx emission compliance
 - Water Availability & Restrictions
 - Cayuga river temperature



Gibson Unit 1 Boiler Backpass Dampers



Wheatland Generating Station

Coal And Transportation Challenges and Mitigation



Challenges

Coal inventories remain at higher levels driven by continued low gas prices and mild winter

Inelastic supply chain: inability for both coal suppliers and transportation providers to respond quickly to volatility in demand

Decreased demand and increased production costs putting financial pressure on producers reducing future reliability

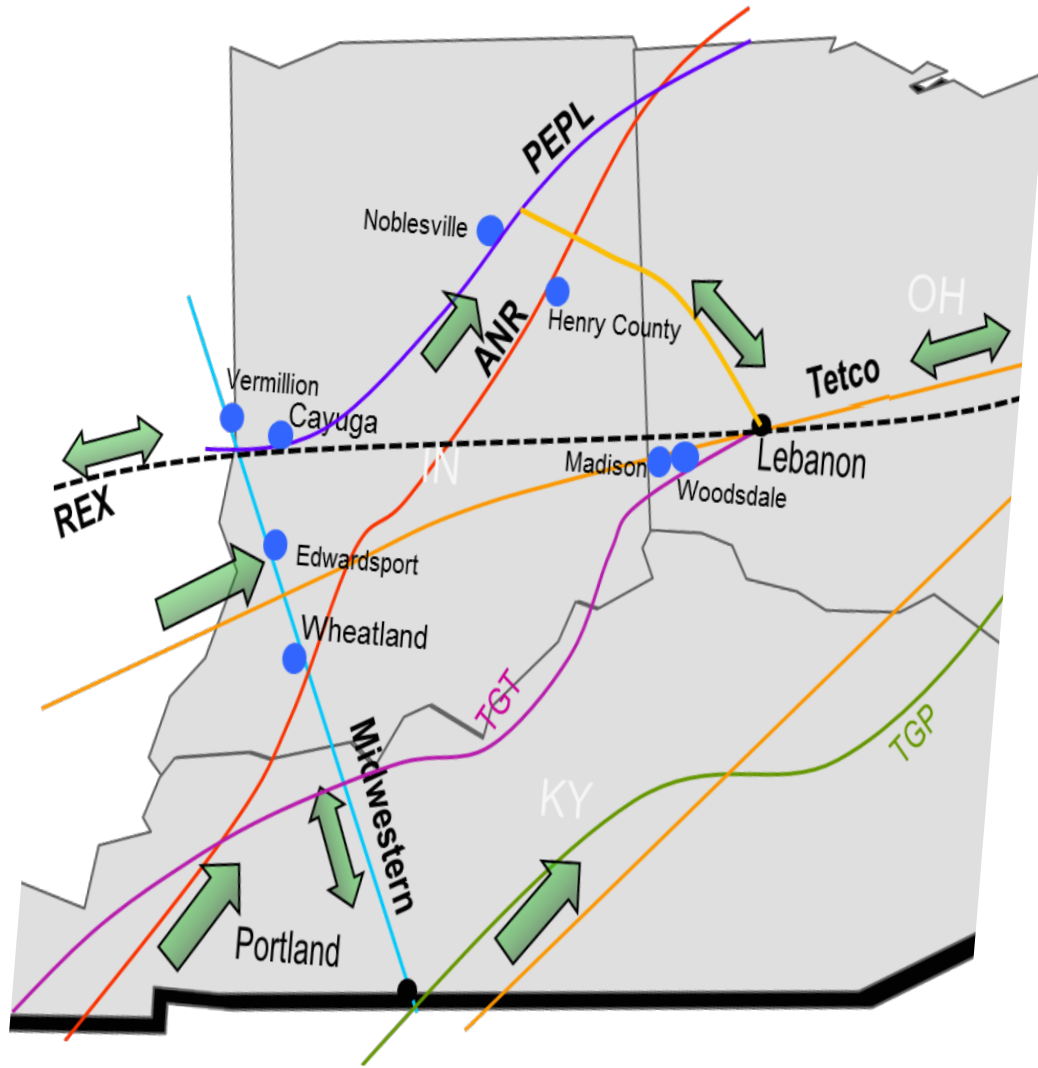
Mitigation

Supply procured to 100% of projected need for 2024 and 2025 with supplier diversity

Continued engagement with railroads and suppliers

Duke Energy Indiana continues to adjust its MISO offer price at Gibson and Cayuga Stations to reflect the economics of the coal landscape subject to power prices, actual coal deliveries and inventory levels to maintain reliable supply of coal and transportation

Gas Supply - Summer Preparations



Natural Gas Supply

- Diverse supply from four pipelines
- Duke Energy Indiana contracts with an asset manager and the market for firm delivered gas supply
- Asset manager provides fuel security, operational flexibility, 24-hour availability, helps mitigate risk
- Contracted Fixed and Indexed daily pricing to align with gas hedging supply locations

Firm Capacity Held

- Following strategic review, Duke Energy Indiana able to increase firm natural gas transportation ensuring greater gas deliverability during times of high demand
 - Midwestern – 80,800 dth/day
 - Panhandle – 45,000 dth/day
 - ANR - 15,000 dth/day

Planning and Operations

- Monitor gas supply, increase communication
- Reflect the price and availability of natural gas through the Company's MISO cost offers
- Day-Ahead economic: Offer unit(s) as must run and buy corresponding gas
- Real Time: Modify unit offers to account for price and amount of natural gas available

Summer Preparedness – Vegetation Management

Transmission

- Continued implementation of Integrated Vegetation Management (“IVM”) strategy
- Prioritizes “grow-in” and “fall-in” threats
- Continue to strategically remove danger trees
- 2023: Completed planned work on ~462 transmission line miles

T Vegetation Caused Outages	Grid Level, All Lines
2021/ 2022/ 2023, w/o MED	32/27/21
2021/ 2022/ 2023, MED Only	7/ 18/63



→2023 Total T&D expenditure of ~\$90M

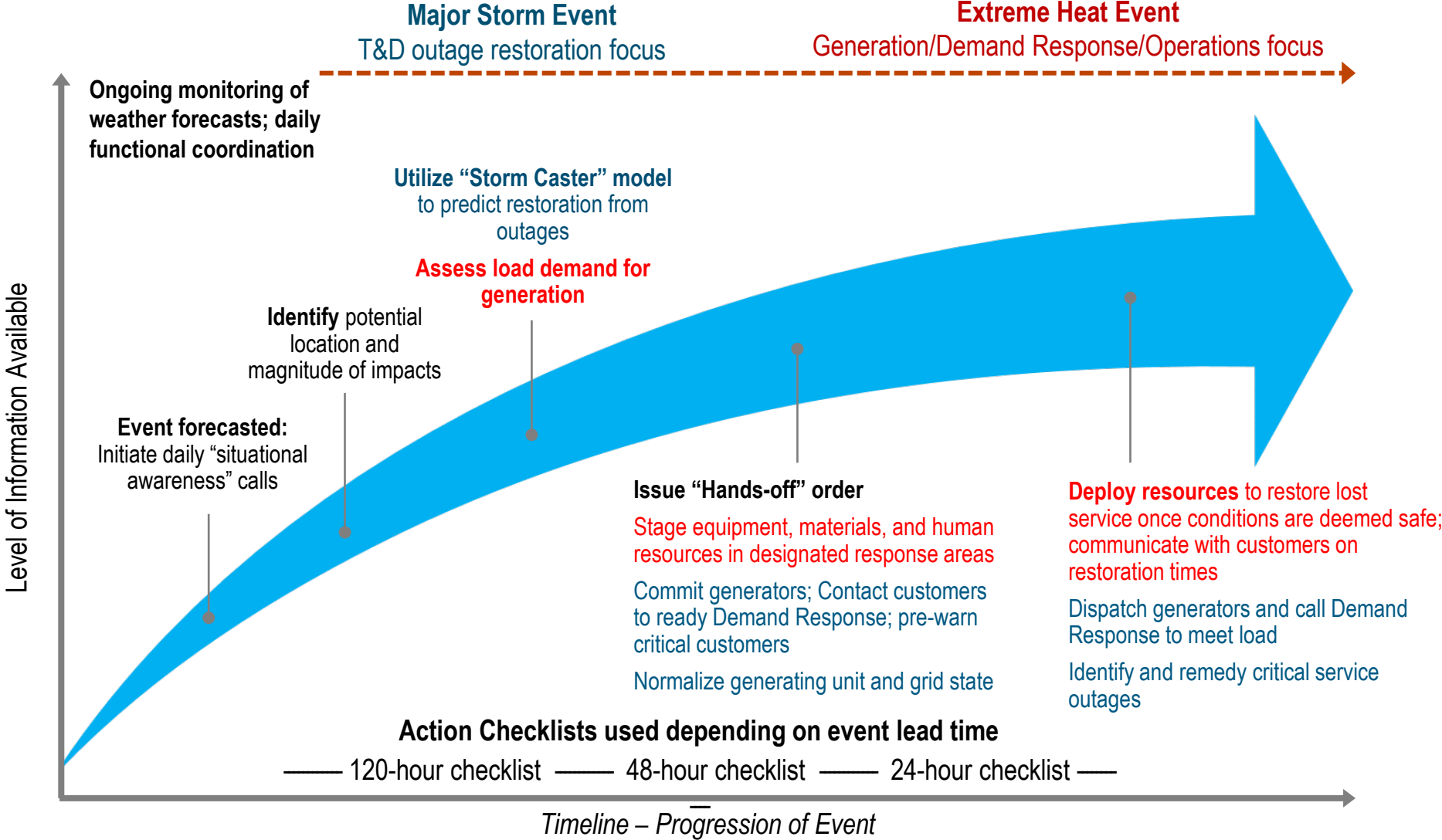
Distribution

- Systematic process identifies and mitigates risks inside and outside of the maintained right-of-way
- 2023: Pruned 1/5th of distribution line miles

D Vegetation Caused Outages	Retail Level, All Lines
2021/ 2022/ 2023, w/o MED	4,592/ 4,632/ 3,687
2021/ 2022/ 2023, MED Only	1,118/ 891/ 3,286

Note: Natural annual variation in the occurrence and severity of outages results in annual volatility of metrics

System Readiness: Event Identification and Response



Preparation for Summer 2024: Supply-Chain Challenges

Duke Energy Supply Chain Challenges

- Global supply chain issues have been an ongoing challenge for our country – and the utility industry is not immune from the impacts.
- Like other utilities, Duke Energy has been faced with material and inventory shortages from suppliers and have done everything possible to manage those challenges.
- As a result of these challenges, we will need to delay certain grid improvement work so that we can ensure sufficient inventories to meet the needs of routine maintenance and new construction.

Prioritization process – In addition to our mitigation efforts, we also have a process in place to use our inventory based on the following prioritization:

1. Outage Restoration
2. Regulatory-required repairs
3. New Customer Work – prioritizing critical and multiple customers
4. Grid improvement work

Storm Communication Basics

While each is unique, most storm events typically have several communication phases.



A variety of communication channels are used throughout a given storm event.



Med-Alert Text Messages

- Text messages and outbound calls are sent to households with individuals who require electrically powered life support equipment

Critical Healthcare Messages

- Text messages and outbound calls are sent to medical facilities, nursing homes and other critical facilities

Preparation for Summer 2024: Energy Efficiency and Demand Response Programs

- From 1991 through 2023, Energy Efficiency (i.e., conservation) programs achieved:
 - Approximately 531 Net MW of annual peak demand reductions (271 MW in the last 10 years)
 - 2,913,822 Net MWh annual energy reductions (1,703,371 Net MWh in the last 10 years)
- About \$175M investment in the current 3-year plan (2024-2026)
- About \$380M invested since 2009



2024 Projected Load Modifying Resource Reductions in July (UCAP):	
■ Total registered demand response UCAP*	■ 569.8 MW
<ul style="list-style-type: none"> ■ PowerShare® and SavingsOnDemand® <ul style="list-style-type: none"> ■ CallOption (customer contractual commitment) ■ QuoteOption (voluntary, yet compensated)** 	<ul style="list-style-type: none"> ■ 238.1 MW ■ 0.7 MW
■ Power Manager – direct load control	■ 75.9 MW
■ Special contracts (i.e., interruptible)	■ 227.3 MW
■ Purdue CHP is BTMG	■ 13.9 MW
■ Integrated Volt Var Control (IVVC) capability	■ 14.6 MW

*UCAP accounts for all MISO factors including losses, XEFORd, and PRMR as appropriate for BTMG and DR

**Due to its voluntary nature, QuoteOption cannot be counted for MISO Resource Adequacy

Supporting Customers and Creating Vibrant Communities

- Nine local Government & Community Relations Managers active in the community
 - Serving on 56 non-profit boards statewide
 - Supporting over 300 local governments
- Dedicated internal teams serve as customer liaisons
 - Statewide community action agencies delivering energy assistance funds
 - Share the Light Fund
 - Contributed over \$600k to help customers who need assistance
 - Low-Income Weatherization program funding (health and safety)
 - Contributed \$100,000 annually to reduce energy costs
 - Neighborhood Energy Saver Program (weatherization)
 - Currently recruiting 1,300 customers in Madison, IN to participate
 - Low-income outreach events hosted by local agencies
 - Home builders (Builder Concierge Program)
 - Infrastructure Stakeholder Engagement team
- In 2023, Duke Energy Indiana was part of efforts to attract \$6.4B in capital investment and more than 4,500 jobs to Indiana
- Philanthropy remains strong:
 - \$2.8M donated in 2023



Recruit, Maintain and Retain Employees

Recruitment/Building the Talent Pipeline

- In 2023 Duke Energy Foundation invested more than \$300,000 in Indiana workforce development
- Internships and Co-op programs in varying fields to allow students to gain insights to working at Duke Energy
- Line-workers training program support

Development, Engagement and Organizational Growth

- Apprenticeships for various craft and technical roles
- Robust Employee Development and Training
 - Internal Employee Development Groups with Instructor led courses
 - Virtual Training – Udemy Business provides on-demand learning platform
- Tuition Reimbursement

Retain Employees

- Internal Gig Program – Short-term business opportunities to contribute and develop new skills
- Employee Resource Groups

Duke Energy Indiana is Prepared to Serve Customers Reliably

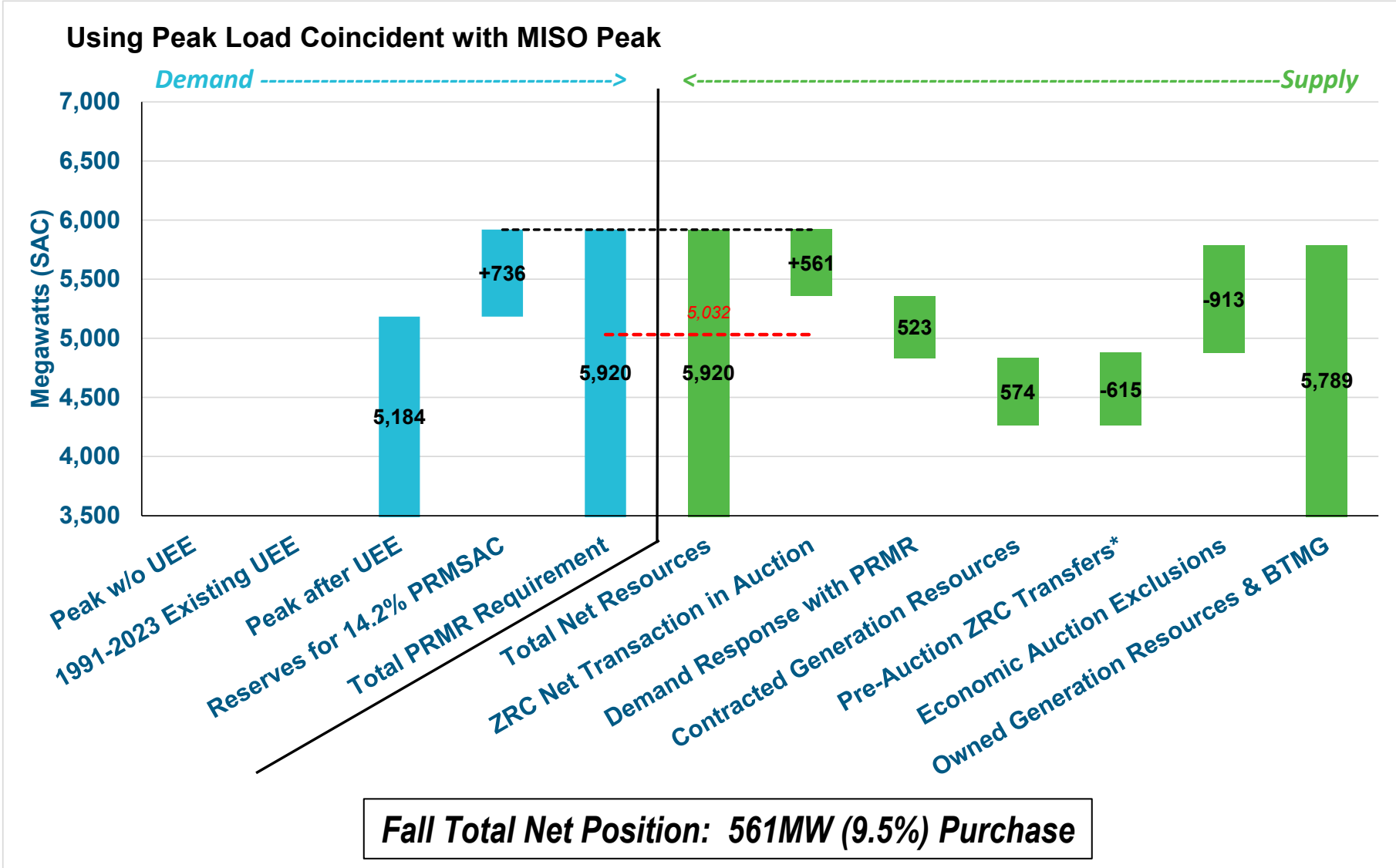




APPENDIX



Preparation for Fall 2024: Capacity Supply-Demand Balance – As Cleared



*IMPA ownership share of Gibson 5; WVPA ownership share of Vermillion CT; 310MW STBNS
 Note: ZRC Net Transactions: (+) Purchase, (-) Sale