

# Indiana Utility Regulatory Commission

2024 Winter Reliability Forum



November 22, 2024



# AES Indiana Team

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**Brandi Davis-Handy**  
President



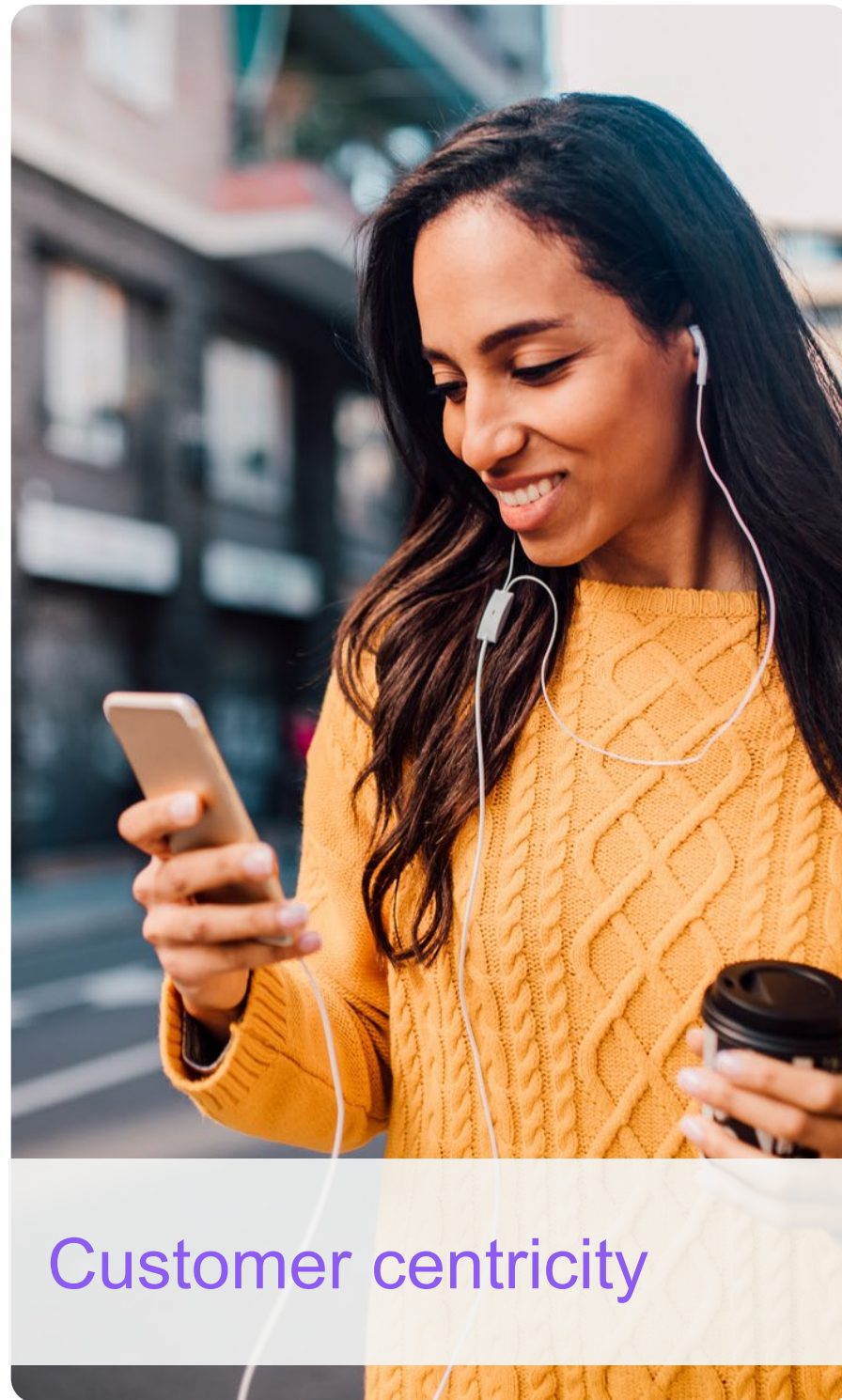
**Patrick Maguire**  
Senior Director,  
Commercial



**Greg Ellis**  
Plant Manager,  
Harding Street



**Mike Holtsclaw**  
Director, Power  
Delivery Operations



Customer centricity

Create exceptional customer-focused experiences



Economic and community development

Community investments improving quality of life



Sustainability

Transforming to cleaner, greener technologies



Reliability

Modernizing our grid



528  
square miles

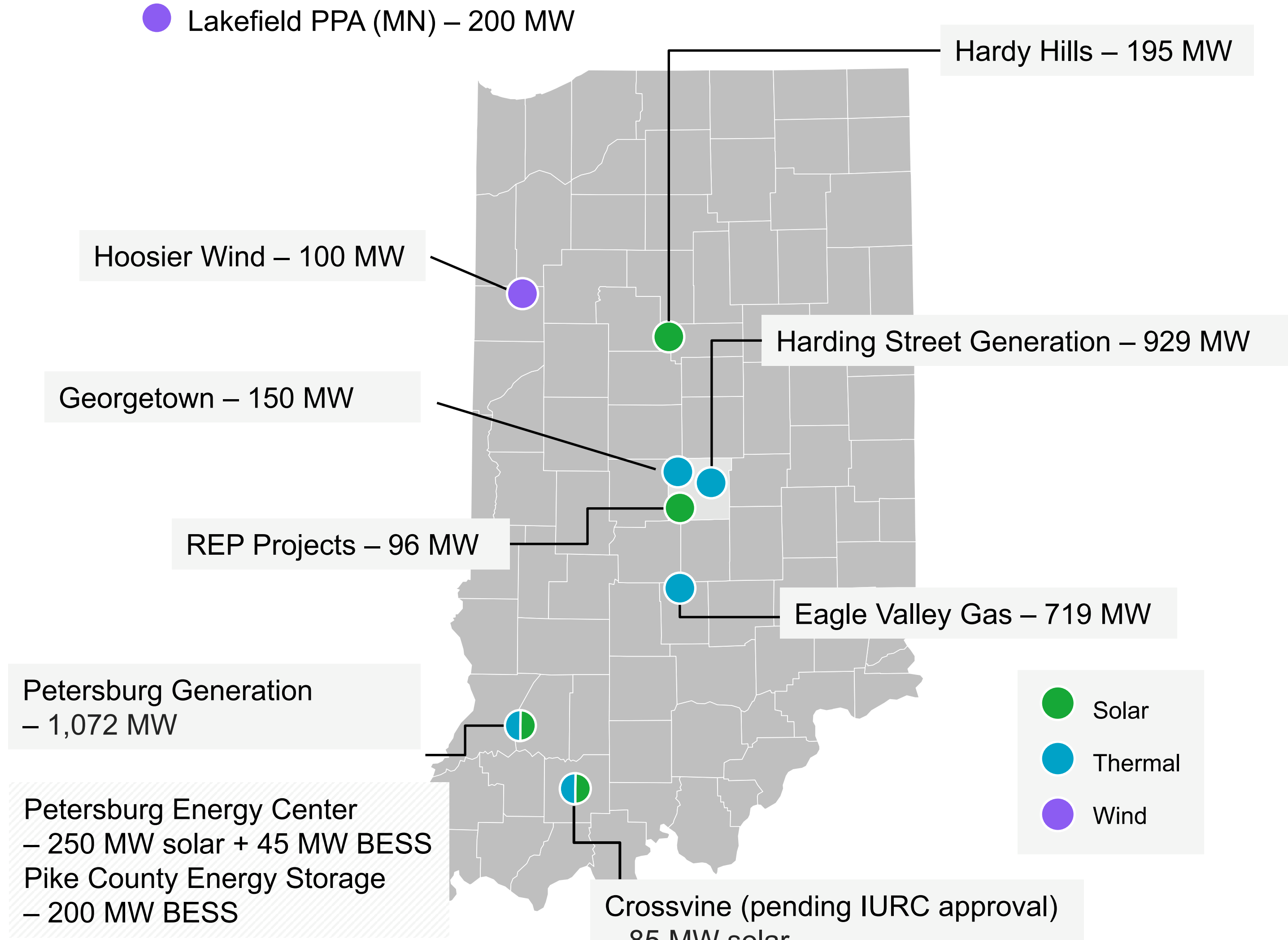


530,000  
customers



3,956  
MW of Generation

● Lakefield PPA (MN) – 200 MW



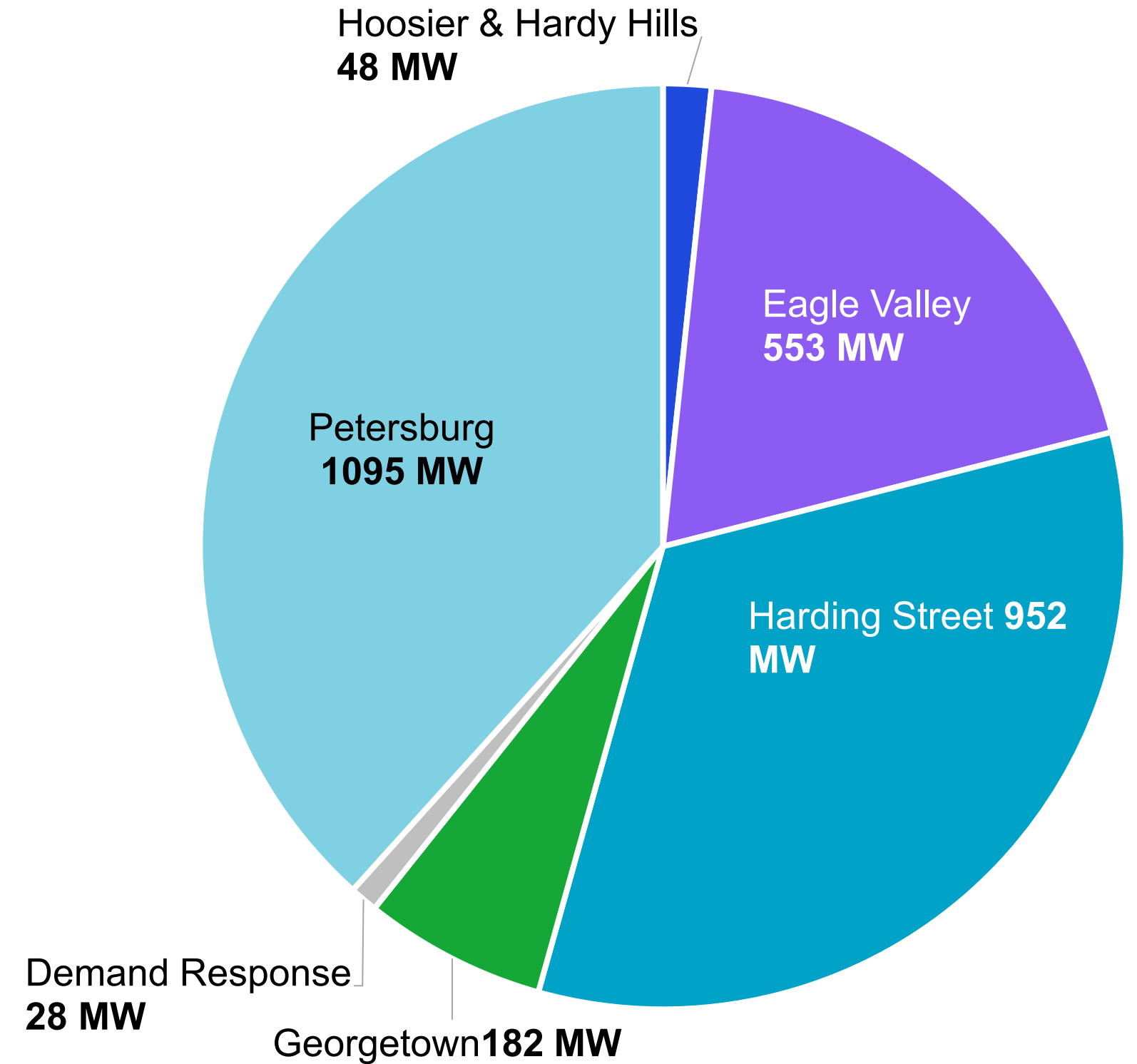
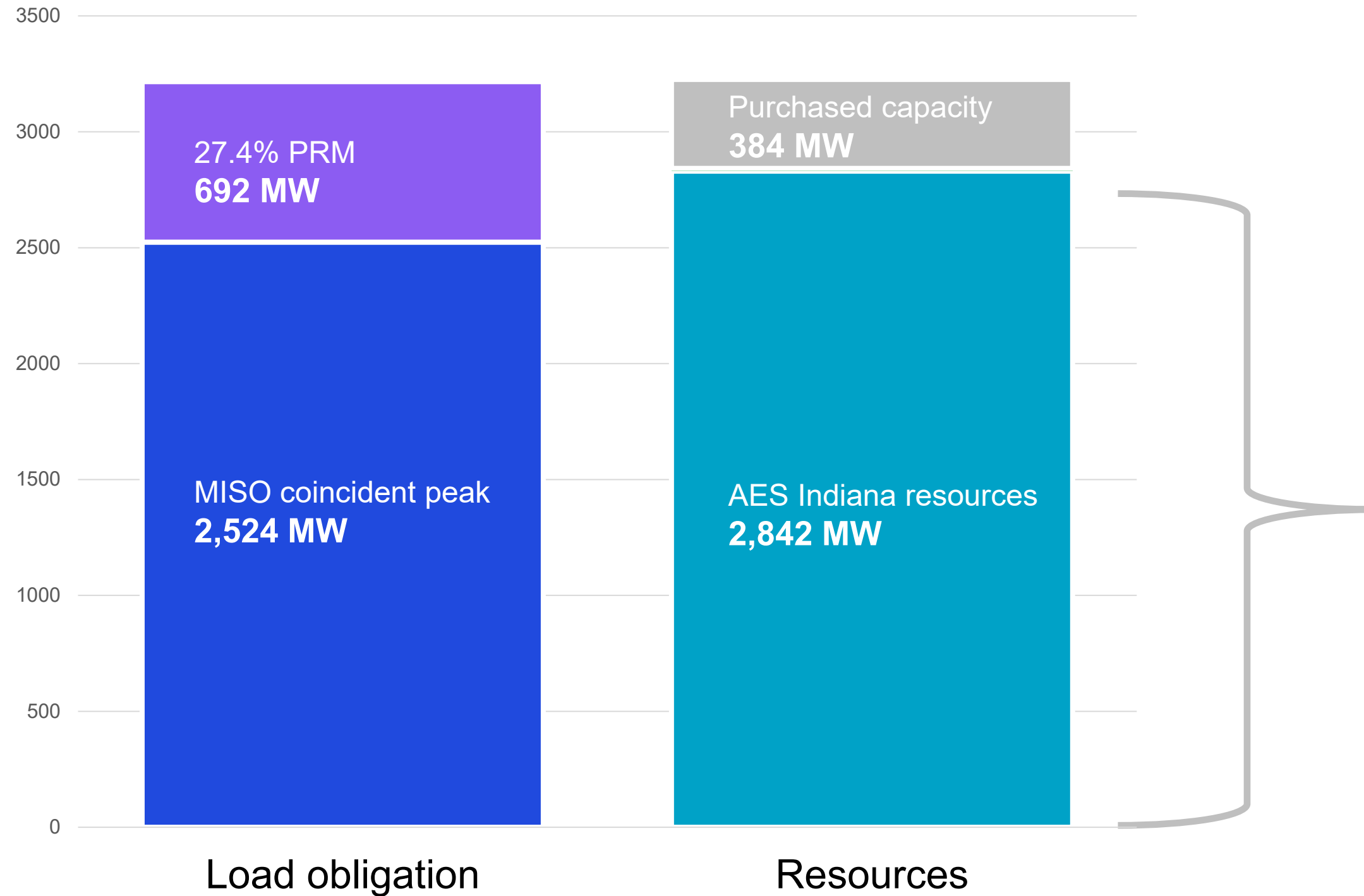
Capacity levels are based on the installed capacity.

# Winter capacity margin

*AES Indiana has secured sufficient capacity to meet its load obligation for Winter 2024.*

MISO: Midcontinent Independent System Operator, Inc.  
 PRM: Planning Reserve Margin  
 SAC: Seasonal Accredited Capacity

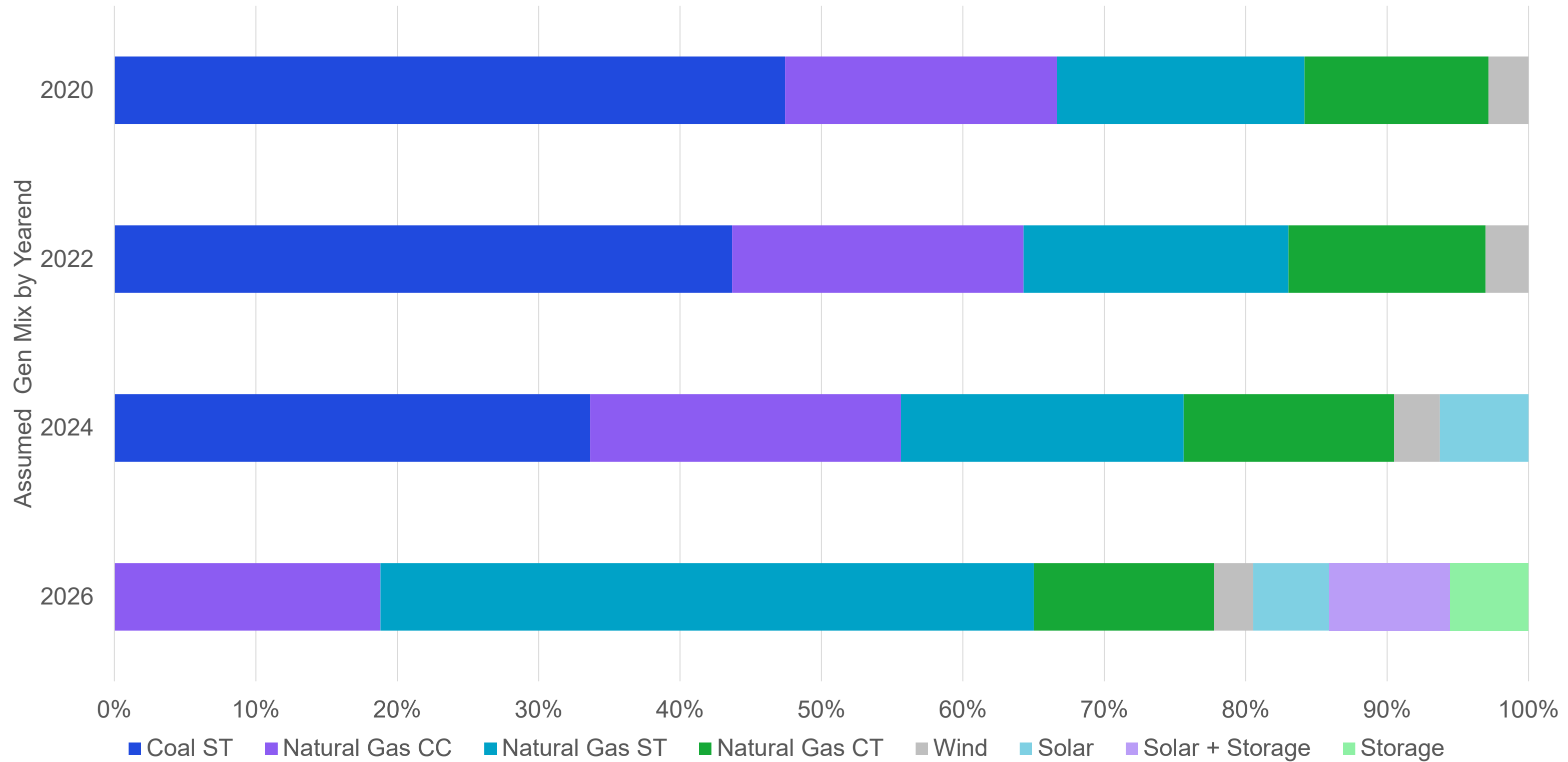
## Winter 2024



# Generation Diversity

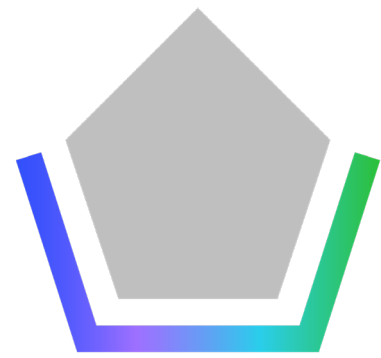
*AES Indiana has secured sufficient capacity to meet its load obligation for Winter 2024*

## Winter 2024



# We are prudently managing our fuel supply in current market conditions

## Onsite inventories



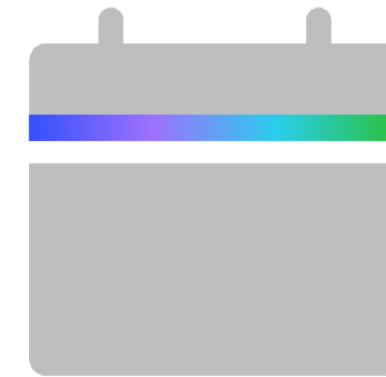
- Maintain onsite coal inventories to address potential supply disruptions
- Coal 100% contracted for Winter 2024-25
  - including high range of inventory for winter
- Maintain fuel oil onsite for Harding Street dual fuel units

## Natural gas transportation



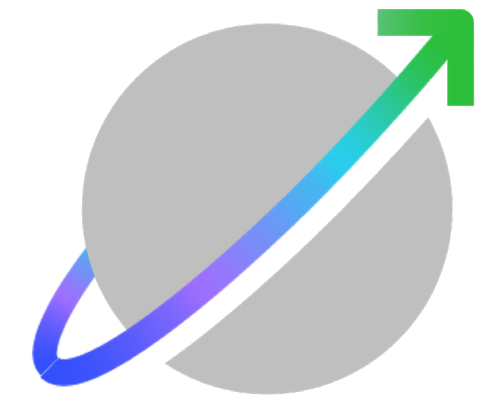
- Firm transportation on Texas Gas Transmission, PEPL, Trunkline, and Rockies Express ("REX") pipelines
- Fixed price natural gas hedge for Eagle Valley CCGT
- REX supply purchases include firm pipeline transportation
  - Increases firm capacity overall – supports firm transport and reliability for Harding Street
- Contracted Citizens storage

## Communication with supply and logistics



- Be prepared – get ready for the season internal and external
- 20-day look forward – monitor weather and plan for potential events
- During an event – hyper-communicate as appropriate to recognize and address issues in addition to normal daily calls

## MISO



- Follow MISO protocol
- Generation operators in continuous contact with MISO
- Monitor Multiday Operating Margin Forecast Report to anticipate critical days

# Fuel supply and firm natural gas transportation include needed flexibility to ensure **reliable and efficient operations.**

Combination of on-site fuel and firm natural gas transportation for 100% of conventional generation resource requirements.



## Eagle Valley has **firm transportation.**

- 100% firm transportation via Texas Gas contracts – can be utilized at other AES Indiana facilities
- Natural gas hedge purchases include firm delivery and provide up to 80% of Eagle Valley's daily needs during the winter
- Pipeline capacity provides hourly flexibility and remainder of firm needs



## Harding Street and Georgetown have **firm transportation** from Citizens Gas.

- Firm transportation is enough to cover a peak day for all gas-only units, and provides hourly flexibility to meet peak hour needs
- On site inventory for dual fuel units – four day burn equivalent
- Firm transportation + onsite oil inventory = 100% capacity



## Petersburg has **sufficient on-site coal inventory** for winter.



# Impacts from pipeline requirements

## Nomination deadlines can create overnight challenges

- The gas nomination cycle can create some limitations for generation, particularly in the winter
- Mismatch between Electric Day (ED) and Gas Day (GD)

## Modeling and planning impacts

- Contractual mitigations reduce probability of consequential impact for long-term modeling

## RTO resource accreditation process

- The Loss of Load Expectation (LOLE) study determines a minimum planning reserve margin for each season that would result in MISO system experiencing <1 day loss of load event every 10 years, as per the MISO Tariff – presumably captures, among other things, historic outages due to fuel supply
- Recent MISO proposed adjustment to seasonal Planning Reserve Margin (PRM) values

# MISO transition to seasonal capacity construct

## Construct design

- Seasonal Design accounts for differing seasonal resource availability and peaks vs the previous summer-focused annual design
- Resource Adequacy Hours metric that focuses on 65 hours per season increases volatility of accreditation values seasonally and from year-to-year

## Construct implementation

- Accreditation values and Planning Reserve Margins have gone through revisions during the implementation
- Planned outages to support reliability that last longer than 31 days in a season are penalized, and outages may have a more dramatic impact on future accreditation



# Generation: Ready for winter

- Fall Maintenance will be completed by December 18, 2024.
  - Last outage falls into both Fall and Winter seasons so to not impact accreditation.
- Winter safety topics
- Winter preventative maintenance
  - Freeze protection
  - Weather enclosures
  - Thaw sheds for coal unloading
- Winter cooling tower operation
- Recent Updates
  - Hardy Hills (195 MW) reached commercial operation in spring 2024.
  - This was our first year with Hoosier Wind (106 MW).
  - Generation upgrades coming to Pike Co & Petersburg from 2024-2026: Pike Co BESS, Pete Energy Center, Pete Units 3 & 4.



# Power Generation: Proactive preparation for extreme weather conditions

Safety is always first.

## 1 week out

- Review status of equipment and lineups
- Review applicable Emergency Action Plans
- Verify weather radios in control rooms work
- Monitor weather
- Plan staffing requirements
- Wastewater Treatment Plant in winter operations mode

## 2 days out

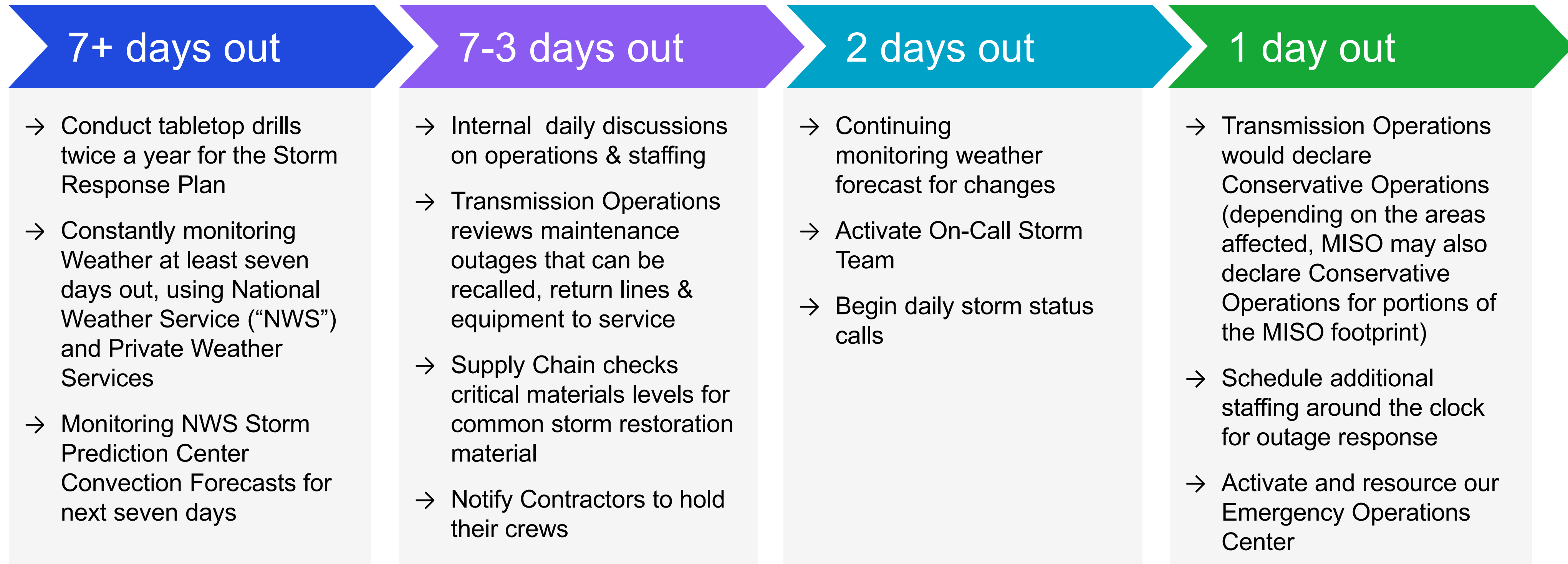
- Monitor weather
- Schedule additional staff for winter event
- Test run gas turbines 4 and 5 at Harding Street on oil
- Implement cold weather operator rounds
- Ensure fuel storage for heaters has been topped off

## 1 day out

- Schedule additional staffing for emergency response in extreme weather events
- Monitor weather
- Run coal conveyors continuously
- Run pumps on vulnerable systems continuously

# T&D Operations: Proactive management of extreme weather

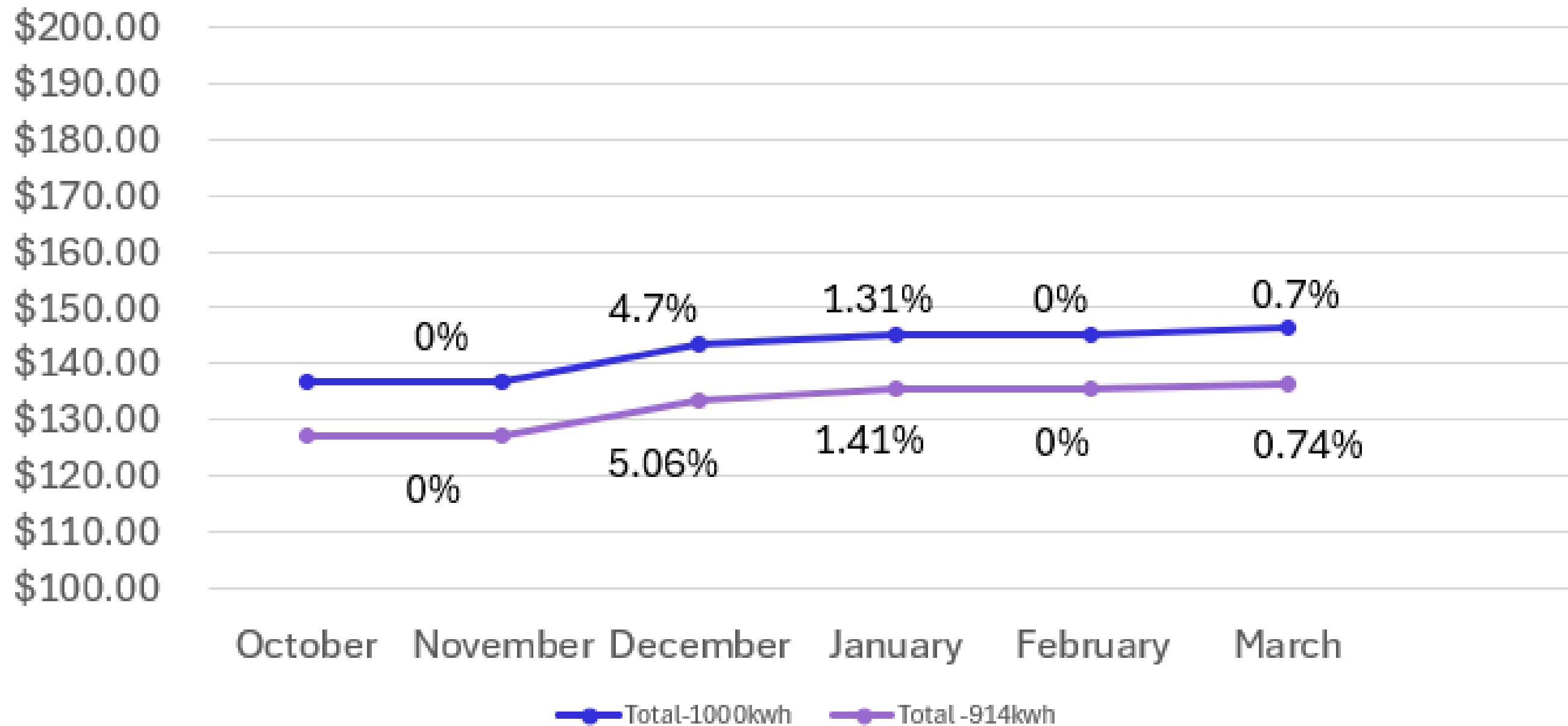
Safety is always first.



Throughout this process, **T&D** and **Communications** partner to prepare customers for extreme weather that could cause power outages.

# Winter 2024-2025 customer bill trends

## Forecast of total monthly residential bills:



	October	November	December	January	February	March
<b>Residential- 1000 kWh</b>	\$136.91	\$136.91	\$143.34	\$145.22	\$145.22	\$146.23
<b>Residential- 914 kWh</b>	\$127.12	\$127.12	\$133.55	\$135.43	\$135.43	\$136.08

### Customer Rate Drivers:

- December: Increase in FAC rates due to shift fuel prices in advance of winter season
- January: Increase in DSM due to projected program costs.
- March: Projected decrease in FAC rates due to shift fuel prices for shoulder season, projected increase in ECR due to new generation/storage (Hardy Hills, Hoosier Wind, and Pike BESS)

### Payment Assistance Programs:

- Energy Assistance Program (EAP)
- United Way of Central Indiana's Winter Assistance Fund (WAF)
- Community Assistance Programs
- Budget Billing
- Extended Payment Plans
- Preferred Bill Due Date

# We are providing support to our customers this winter

AES Indiana is working with community partners to go on site to provide support to customers to sign up for payment assistance options.

## Flexible Payment Options

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**3**

### **3-Month Plan**

Pay off your balance with 3 equal payments added to your regular monthly payments.

**6**

### **6-Month Plan**

Pay off your balance with 6 equal payments added to your regular monthly payments.

**9**

### **9-Month Plan**

Pay off your balance with 9 equal payments added to your regular monthly payments.

**12**

### **12-Month Plan**

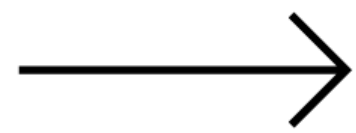
Pay off your balance with 12 equal payments added to your regular monthly payments.

**Business customers** qualify for 3 and 6 month payment extensions and budget billing is available to small commercial customers. A \$10 upfront payment is required for residential and commercial customers under Indiana Administrative Code.

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# Providing *ways to save* this winter

AES has  
ways to save.



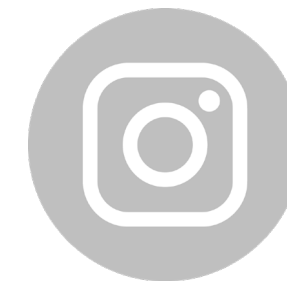
Stay warm and  
save money with  
*cold weather  
efficiency tips.*



Radio



Streaming  
Platforms



Social Media



# Q&A