

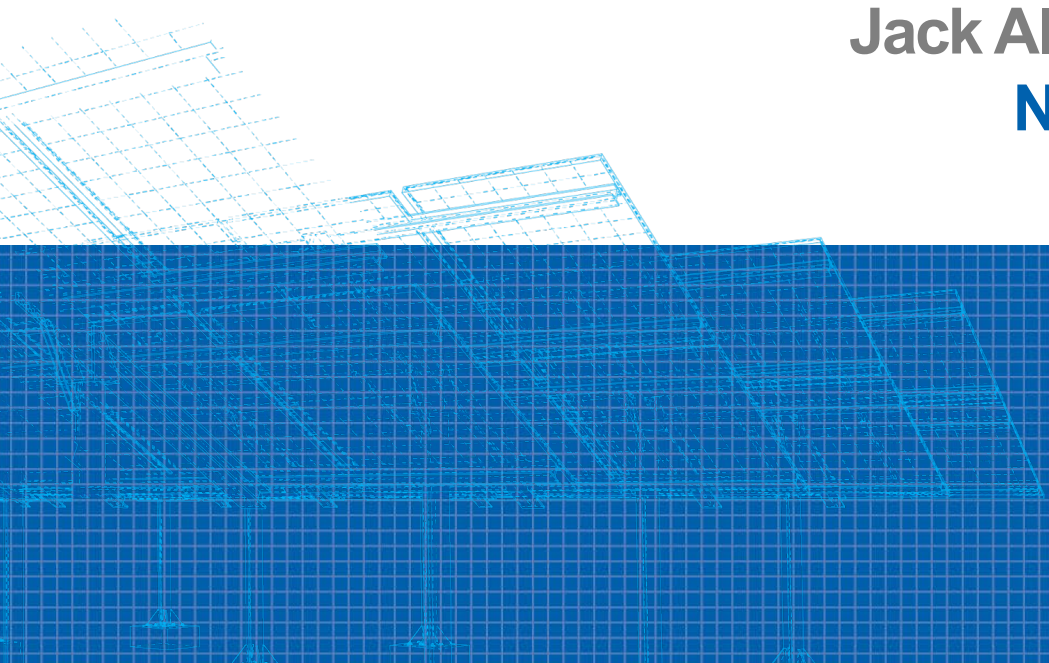
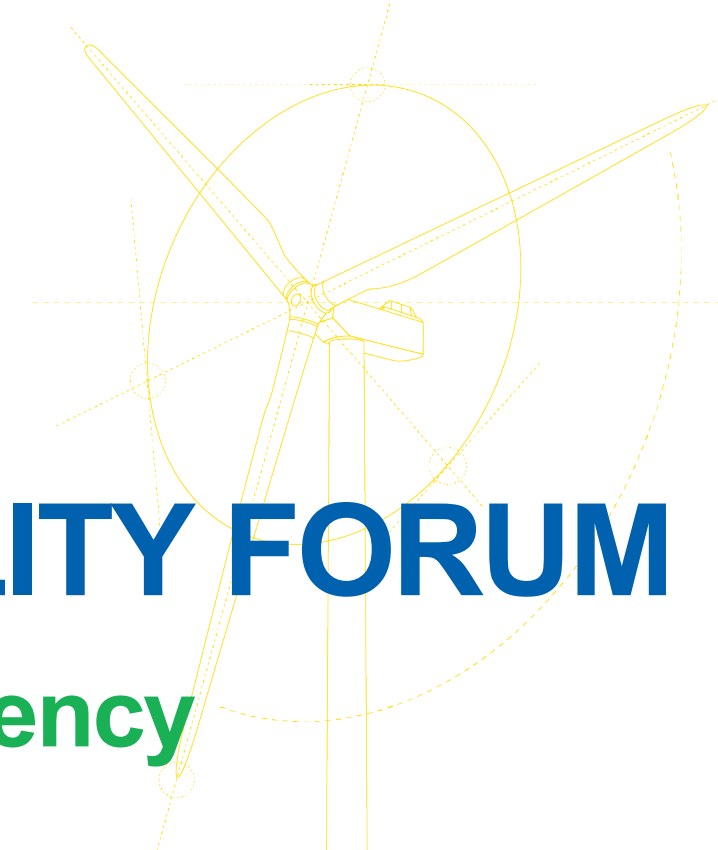


IURC 2024 WINTER RELIABILITY FORUM

Indiana Municipal Power Agency

Jack Alvey, President and CEO

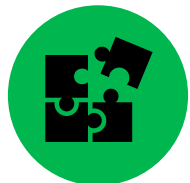
November 22, 2024



AGENDA



IMPA Overview



Resources



Rates



Actions for 2024/2025 Winter Season



MISO/PJM

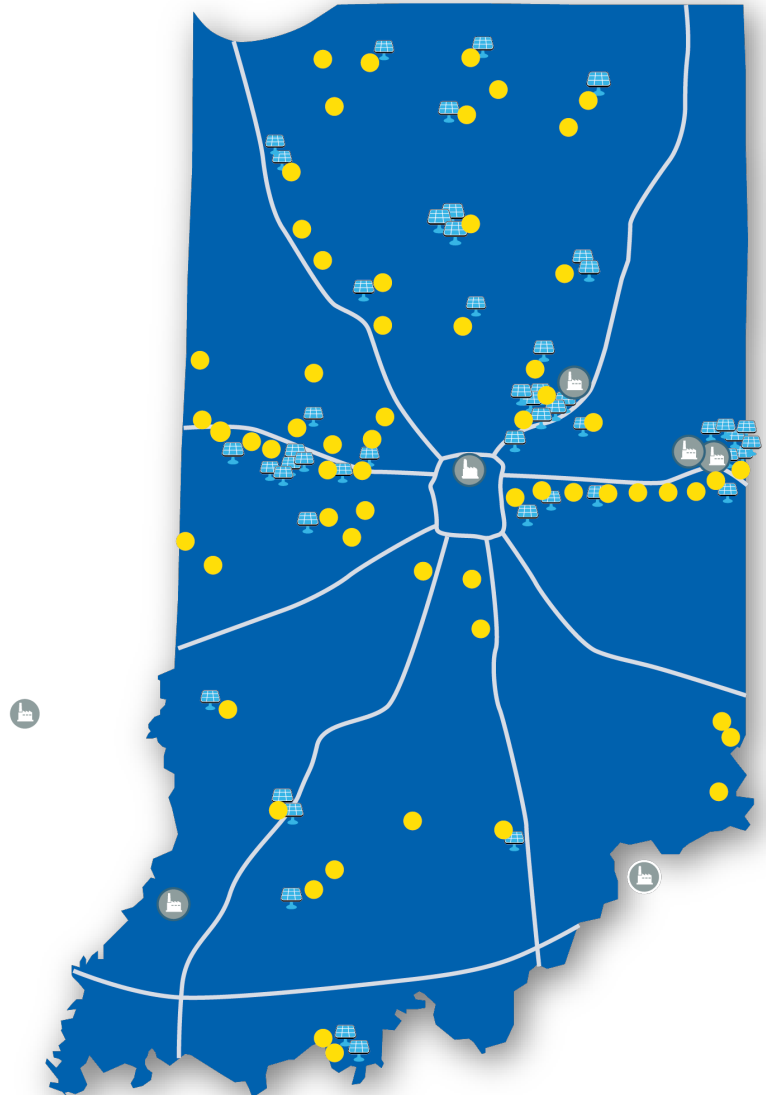
IMPA OVERVIEW

- IMPA is a wholesale power provider
 - Generation assets
 - Purchased power contracts
 - Deliver power to our member communities
 - 1200 MW system load
- IMPA was formed as an Indiana joint action agency in 1980 by 11 communities & is currently serving approximately 350,000 people in 61 member communities in Indiana and Ohio
 - Created to use economies of scale to acquire, construct and finance a reliable supply of low-cost power
- Created by Indiana state statute
- Not-for-profit, political subdivision of Indiana
- Municipal electric utilities distribute the power to residents, businesses and industries
- IMPA operates in BOTH the MISO and PJM markets



IMPA OVERVIEW

- Longstanding mission - Provide low-cost, reliable and environmentally-responsible power supply through a diverse power portfolio
- Wholesale electric rates are among the lowest in the state
- Financially strong
 - Annual revenues of approximately \$500 million
 - Total assets, approximately \$2.0 billion
 - A1/A+ Bond Ratings



IMPA PORTFOLIO OF RESOURCES



Gibson Station

- IMPA owns 156 MW
- Co-owned with Duke Energy and Wabash Valley Power Alliance



Trimble County Station

- IMPA owns 164 MW
- Co-owned with LG&E and Illinois Municipal Electric Agency



Prairie State Energy Campus

- Online in 2012; Mine mouth plant with 30-year supply of coal
- IMPA owns 200 MW (12.64%) of plant's 1600+ MW output



Whitewater Valley Station

- Operational control assumed by IMPA in 2014
- Two generating units (35 MW and 65 MW)



Peaking Stations

- IMPA owns 7 combustion turbine units – approximately 400 MW
- 3 in Anderson, 2 in Richmond, 2 in Indianapolis



Alta Farms II Wind Farm

- 75 MW PPA
- Located in Dewitt County, Illinois



Solar

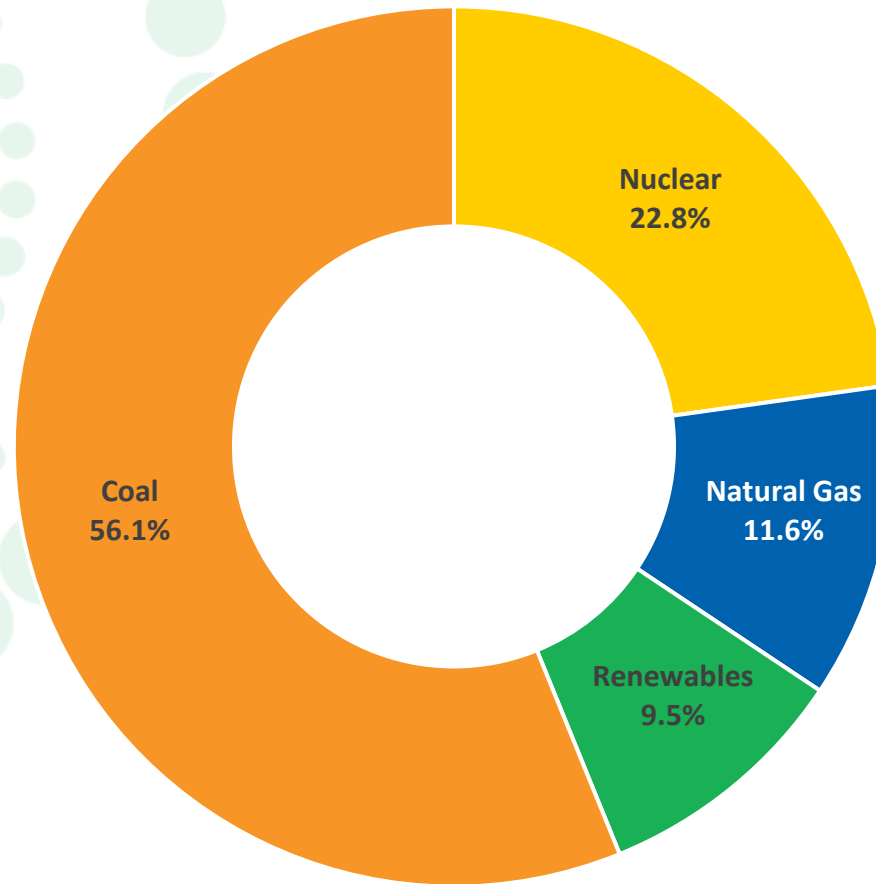
- 50 parks online in 29 member communities
- Total capacity of 196 MW; additional 15 MW expected in the next 1-2 years
- Environmentally-responsible and helps to keep future rates stable



Joint Transmission System

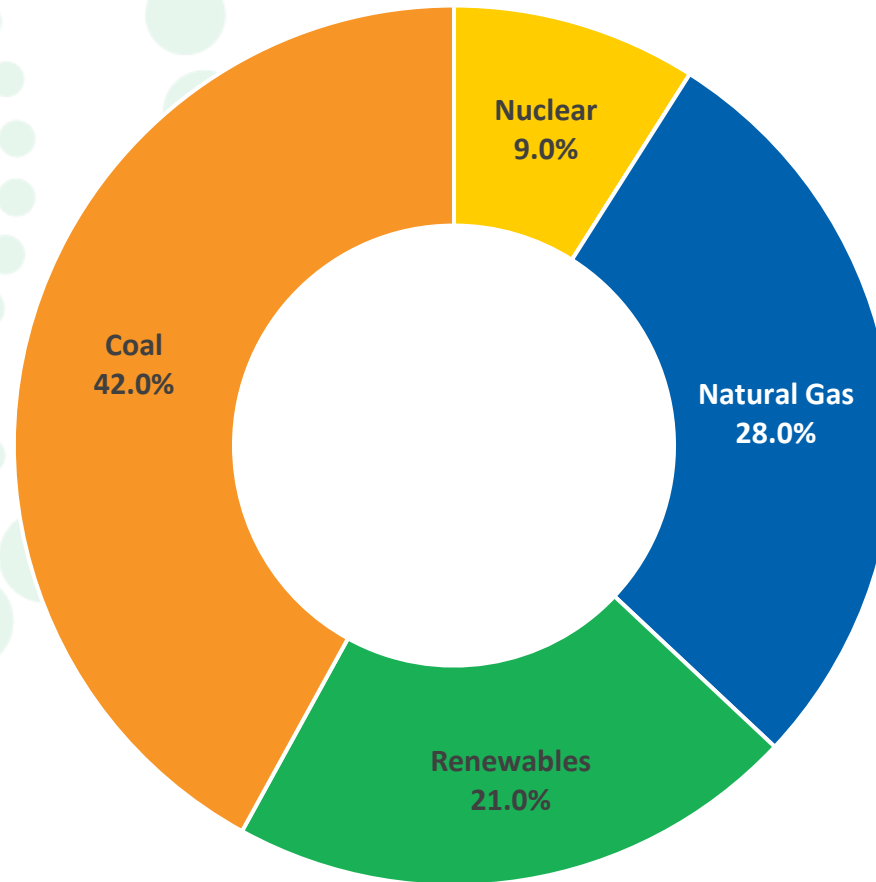
- Indiana and Ohio
- IMPA owns approximately 5.5% of the Joint Transmission System and has invested approximately \$83 million in transmission assets
- Covers approximately two-thirds of the state of Indiana

CURRENT IMPA POWER SUPPLY FUEL SOURCES (ENERGY)*



*2023 Actual

CURRENT IMPA POWER SUPPLY FUEL SOURCES (ICAP)



WINTER 2024/2025 RATE TRENDS

IMPA Wholesale Rates

Jul 2024: **-2.78%**

Jan 2025: **-4.96%**
average wholesale rate decreases

IMPA Member Utility Retail Rates

Approximate **6%** decrease in IMPA member communities compared to last winter

Driven by decreases in purchased power costs and IMPA's energy cost adjustment

WINTER PREPAREDNESS GENERALLY

- Geographic location in Midwest
 - IMPA prepares every year
- Generating units are enclosed
 - Designed for Midwest ambient conditions
- Year-round maintenance on all facilities
- Increased IMPA CT staff levels to provide us the flexibility to cover the increased demands on the peaking units
- Outages
 - All maintenance outages should be complete by December 15, 2024
 - Outage scheduling challenges: Tighter fall reserve margins are leading to increased run times and constrained outage scheduling

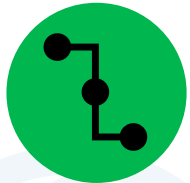


FUEL AVAILABILITY



Coal Inventories as of 10/24

- 7 out of 7 units – 30+ days



Supply Chain

- Trucking constraints have lessened, but fuel surcharges continue to apply upward pressure to delivery costs
- Rail congestion near mines, manpower concerns of the summer are easing



Natural Gas

- Reliant on pipeline availability and local gas distribution company



Fuel Oil

- Anderson Station (CT) – several days on hand
- Richmond Station (CT) – several days on hand



Onsite/Firm Fuel Capacity

- 85% of all fuel types available for winter generation

COMBUSTION TURBINE WINTER ACTIONS

Standard Operations:

- Complete fuel surveys for MISO and PJM
- Natural gas agreements and pipeline access
 - Utilize marketer
 - Local distribution

Procedures if event occurs:

- Communicate potential needs with staff and natural gas suppliers in advance of event
- Additional checks of compartment heating and systems
- During Emergency Event
 - CT Generation sites staffed 24-hours
 - Operational staff prepared for short lead time start-ups
 - Coordinate daily with natural gas providers on scheduled availability



NATURAL GAS SCHEDULING

- During periods that the supply of natural gas tightens, combustion turbines become more difficult to schedule and are at risk to higher scheduling fees
 - CTs rely on non-firm gas supply to remain economical in the market, but this comes with scheduling risks
 - Intra-day nomination timing puts early morning gas supply at risk in colder conditions
 - Operational Flow Orders (OFO) require more accurate nomination schedules which are coupled with increased balancing fees
 - Pipelines declaring Force Majeure during extreme weather forces non-firm supply into an outage
- Our IRP & Operational models optimize the economics between firm gas supply and curtailed winter operations while adhering to environmental limitations. The IRP model also includes sensitivities around no gas availability during winter seasons
- RTO resource accreditation reforms account for CT fuel flexibility
 - PJM ELCC Class Rating: 62% for Gas CT compared to 79% for Dual Fuel CT
- Actions to increase flexibility
 - Work with gas suppliers to schedule gas **prior** to RTO commitment
 - Add a second fuel to avoid reliance on natural gas

MISO WINTER & SPRING CAPACITY RESULT OBSERVATIONS

- MISO Resource Adequacy Hours (RA Hours) are weighted toward traditional peak months or months cooling load is likely to occur
 - May thru September
 - 250% more observed RA Hours in May-Sep compared to Dec-Jan
- Outage season/Cooling season overlap is playing a larger role in reliability.
- The rules around the Capacity Replacement Non-Compliance Charge seem to be driving the Fall & Spring clearing price
- MISO's implementation of the Reliability Based Demand Curve will place upward pressure on clearing prices.

SUMMARY

All preparations have been made for the 2024/2025 winter, including fuel supply adequacy, completed planned and maintenance outages, and additional system checks to ensure reliable delivery of power to our customer base.

Questions?