

# IURC 2023 WINTER RELIABILITY FORUM

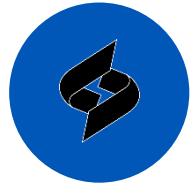
## Indiana Municipal Power Agency

Jack Alvey, President and CEO

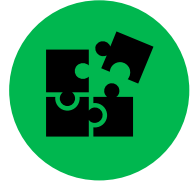
November 27, 2023



# AGENDA



**IMPA Overview**



**Resources**



**Rates**



**Actions for 2023/2024 Winter Season**



**Workforce Challenges**



**MISO/PJM**

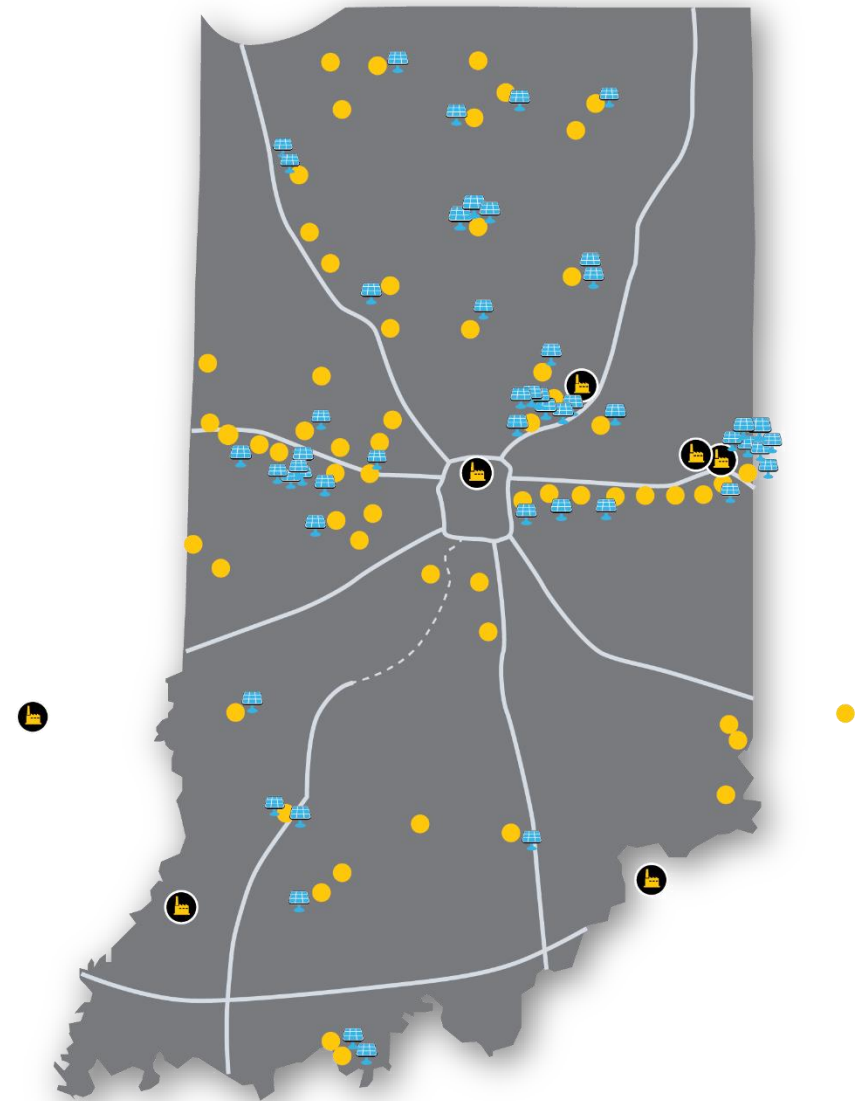
# IMPA OVERVIEW

- 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 at 61 members
  - Created to use economies of scale to acquire, construct and finance a reliable supply of low-cost power
- Not-for-profit, political subdivision of Indiana created by Indiana state statute
- 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
- Serve approximately 350,000 people in 61 Indiana and Ohio communities
- Financially strong
  - Annual revenues of approximately \$530 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



## Solar

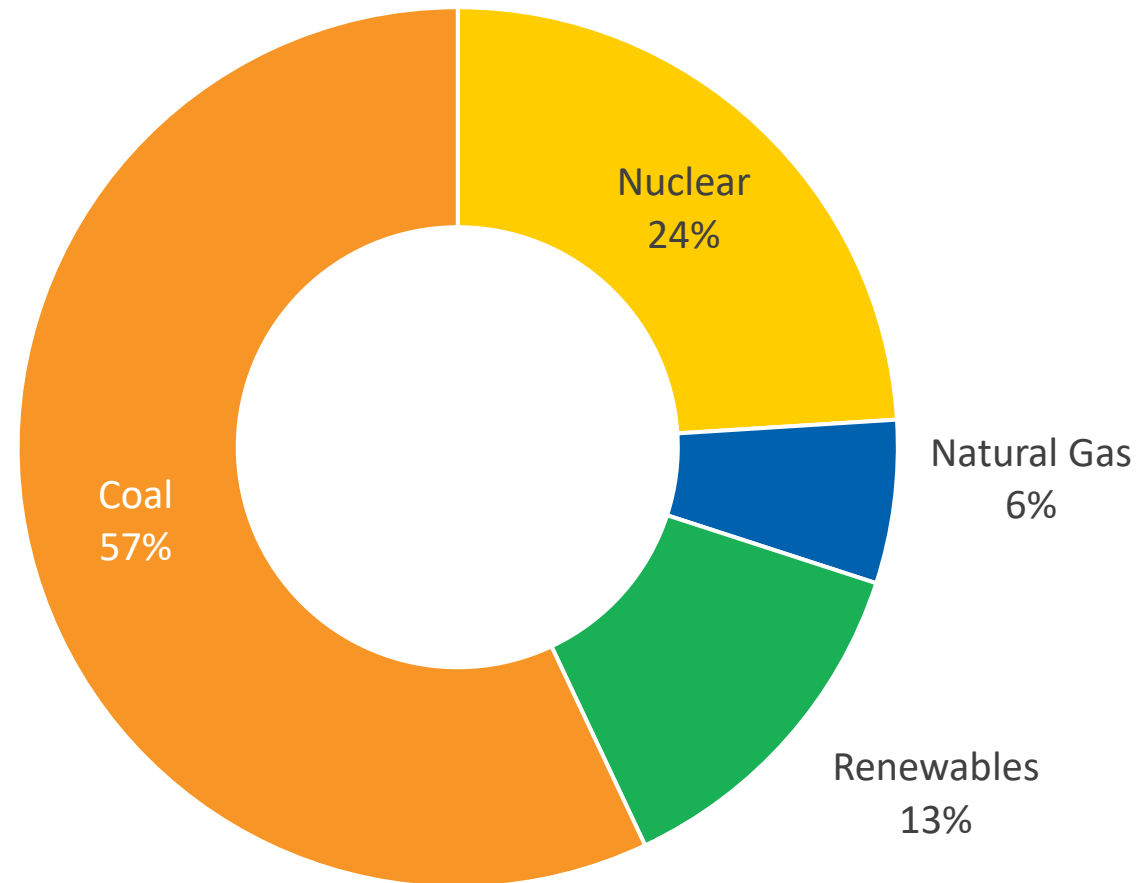
- 50 parks online in 29 communities
- Total capacity of 196.2 MW; additional 13 MW expected in next 1-2 years
- Environmentally-responsible and helps to keep future rates stable



## 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



# WINTER 2023/2024 RATE TRENDS

## IMPA Wholesale Rates

January 2024 - 2.55% average wholesale rate increase

## IMPA Member Utility Retail Rates

Approximate 2% increase in IMPA member communities

Increase driven by continuing increases in the cost of purchased power, transmission service and power plant O&M

# 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
- Outages
  - All maintenance outages should be complete by 12/24/23



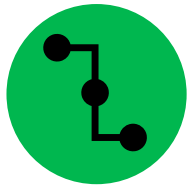


# FUEL AVAILABILITY



## 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 weekly 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
  - RTO Day Ahead operating differences
- 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
- 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

# UTILITY WORKFORCE CHALLENGES

- Retirements and an aging workforce continue to present challenges to IMPA and municipal utilities
  - IMPA and municipal utilities have had success in recruitment and training of younger workers
  - Industry competition among utilities and line construction contractors continues to put upward pressure on employee compensation
- IMPA and municipal utilities continue to use outside contractors for large projects
  - Staffing levels typically inelastic; larger projects and work scopes contracted to outside sources as opposed to increasing staffing
- Technological advancements improve productivity and efficiency
  - Supervisory control and data acquisition (SCADA), advanced metering infrastructure (AMI) and graphic information system (GIS) technologies enhance effectiveness and efficiency of line crews
  - Power system equipment, due to physical and mechanical characteristics, will always require a skilled workforce of trained linemen



# MISO WINTER & SPRING CAPACITY RESULT OBSERVATIONS

- The rules around the Capacity Replacement Non-Compliance Charge (CRNCC) seem to be driving the Fall & Spring clearing
  - As Generation Outage schedules change, uncleared capacity may be available after the Planning Resource Auction (PRA) has finished, causing an uneconomic market
  - The CRNCC may create artificial scarcity due to multiple resources withholding commitment in the PRA in order to avoid a CRNCC

# SUMMARY

All preparations have been made for the 2023/2024 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?