IURC 2023 SUMMER RELIABILITY FORUM

Indiana Municipal Power Agency

Jack Alvey, President and CEO

May 3, 2023

IMPA

AGENDA

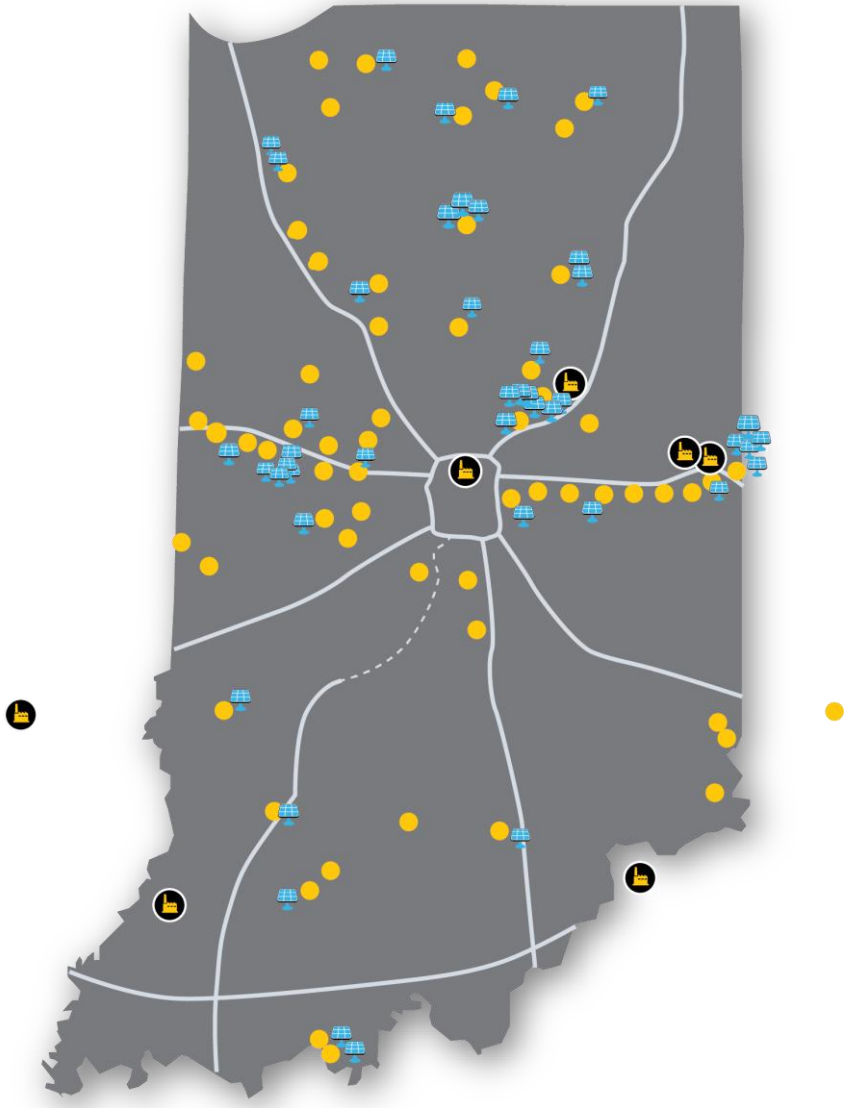
- IMPA Overview
- Actions for 2023 summer preparedness, including severe weather events
- Resources
- MISO/PJM

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 & currently at 61 members
  - 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 through a diverse power supply portfolio
- Wholesale electric rates are among the lowest in the state
- Serve approximately 350,000 people in 61 communities
- Financially strong
  - Annual revenues of approximately $530 million
  - Total assets, approximately $2.0 billion
  - A1/A+ Bond Ratings



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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

- 44 parks online in 26 member communities
- Total capacity of 173 MW; additional 33 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

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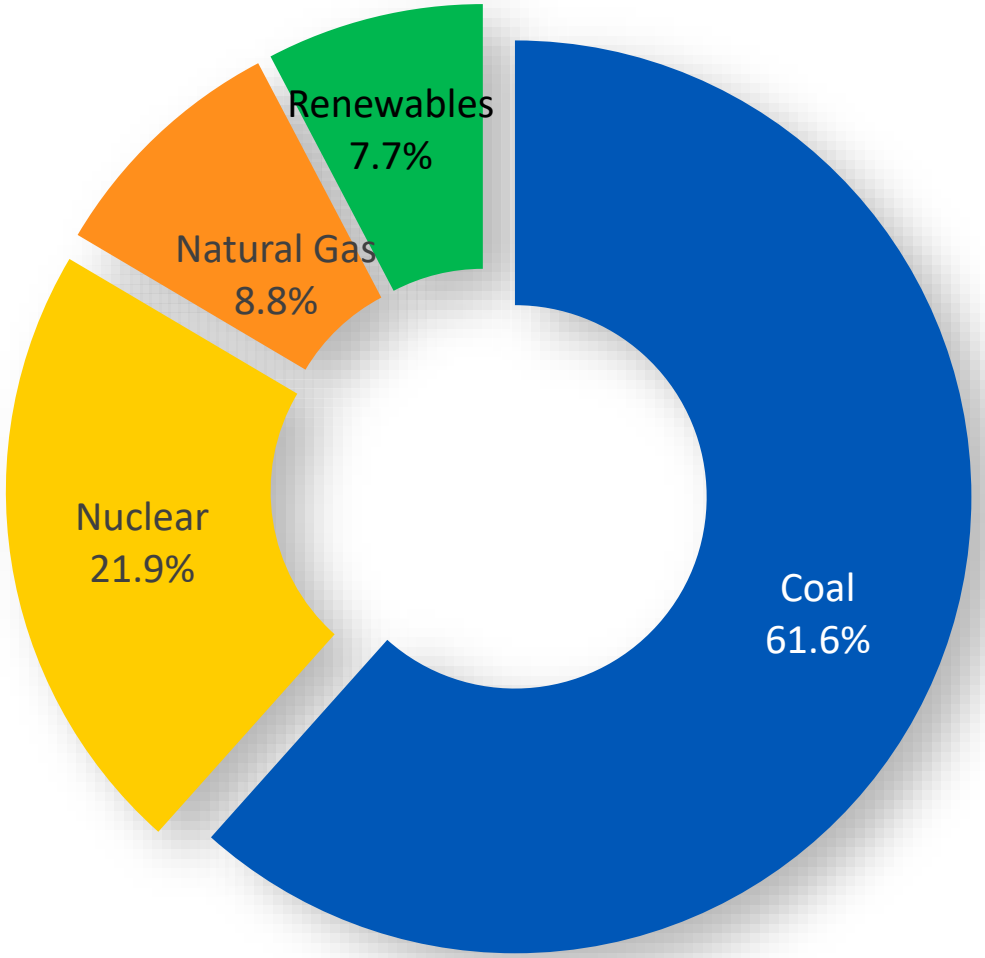
CURRENT IMPA POWER SUPPLY FUEL SOURCES



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FUEL AVAILABILITY – SUMMER 2023

Coal Inventories

- 7 out of 7 units – 35 days

Natural Gas

- Reliant on pipeline availability and local gas distribution company
- National natural gas inventory greater than 5-year average (as of mid-April 2023)

Fuel Oil – Peaking Units

- Anderson Station (CT) – 60+ hours on hand
- Richmond Station (CT) – 60+ hours on hand

SUMMER PREPAREDNESS GENERALLY

- Outage Schedule
  - All outages complete by 5/31/2023
- Operations Personnel
  - Schedule modifications as needed
  - Hot weather alerts – staffing 24/7
- Heat stress training
- Peaking and intermediate units ready to run when called upon

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SEVERE WEATHER EVENTS

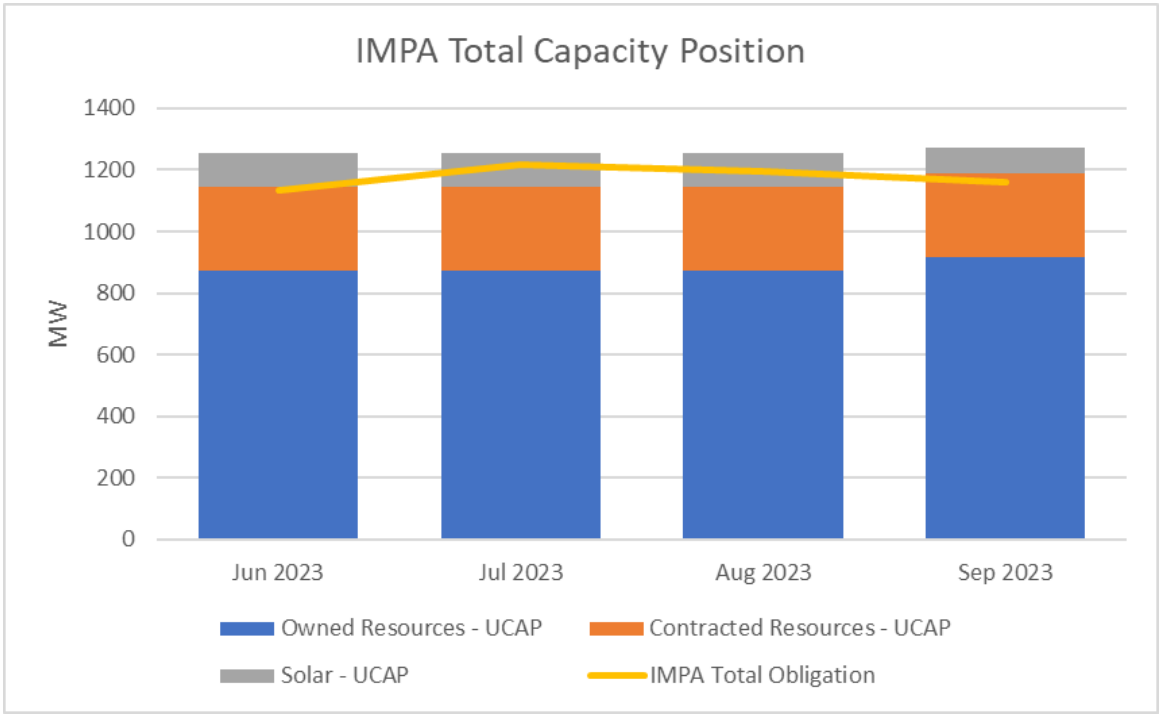
- Indiana municipal electric communities have a strong mutual assistance network
- IMPA provides operational assistance to IMPA members
  - IMPA Service Corp provides assistance to all IMPA members as needed
  - IMPA Service Corp has maintenance agreements with 14 member communities to perform ongoing operations & maintenance on member electric distribution systems – emergency/non-emergency
  - Significant vegetation management project completed in 2022 under maintenance agreements resulting in reduced frequency and severity of weather-related outages
- March 31, 2023 severe weather event
  - Mutual aid response from several municipal communities to other municipals throughout Indiana – members helping each other
  - IMPA Service Corp provided restoration assistance to eight municipal communities

SUPPLY CHAIN CHALLENGES

- No known issues for generation
- Distribution Equipment
  - Distribution poles (wood) – 12 week lead time (stable)
  - Distribution pole mounted transformers – 52 week lead time (stable)
  - Distribution pad mounted transformers – 52 week lead time (trending down)
  - Pad mounted transformers (3-phase) – 6 week lead time (trending down)
  - Underground primary (large) cable – 52 week lead time (stable)

IMPA AGGREGATE

IMPA remains slightly long capacity for this summer.



IMPA Company				
	Jun 2023	Jul 2023	Aug 2023	Sep 2023
Owned Resources - UCAP	873.3	873.3	873.3	916.8
Contracted Resources - UCAP	271.5	271.5	271.5	271.5
Solar - UCAP	107.49	109.95	110.14	85.66
Total IMPA UCAP	1252.3	1254.8	1254.9	1274
IMPA Total Obligation*	1134.0	1219.2	1195.6	1158.4
Net Resource Balance	118.3	35.6	59.3	115.6

* Load Obligation is after RTO adjustments

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MISO SEASONAL CONSTRUCT IMPA PERSPECTIVE

- MISO's seasonal construct continues to appropriately emphasize year-round resource adequacy.
- IMPA continues to have concerns:
  - Implementation timeline
  - Lead time
  - Backward looking accreditation
  - Restrictions/replacement rules on planned outages
  - Uncertainty that is caused adds high risk to future resource planning decisions

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MISO SEASONAL CONSTRUCT: IMPA PERSPECTIVE

- IMPA believes that it is unnecessarily complicated and administratively burdensome. Furthermore, as it assigns resource capacity credit through a backward looking mechanism, it is unlikely to address reliability concerns.
- As IMPA works through its 2023 IRP modeling, it is becoming apparent that winter planning requirements will be the determining factor in many utilities' resource plans.
- With resource accreditation for renewables being at risk for winter months, this means natural gas fired generation will likely be the fuel of choice for new generation investment.
- IMPA believes that an increased reliance on natural gas does not necessarily equate to increased reliability and much more will have to be improved with respect to gas/power coordination in the marketplace.

RTO CHANGES GOING FORWARD: IMPA PERSPECTIVE

- Ongoing MISO Seasonal changes
- PJM Capacity Market Reform
- Generation Interconnection queue delays in both MISO & PJM
- Renewable resource accreditation
  - MISO aggressively lowering solar capacity value
  - Favor “dispatchable” generation

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SUMMARY

All preparations have been made for the 2023 summer, including fuel supply adequacy, completed planned and maintenance outages, and additional system checks to ensure reliable delivery of power to our customer base.

Questions?

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