



# IURC Summer Reliability Forum

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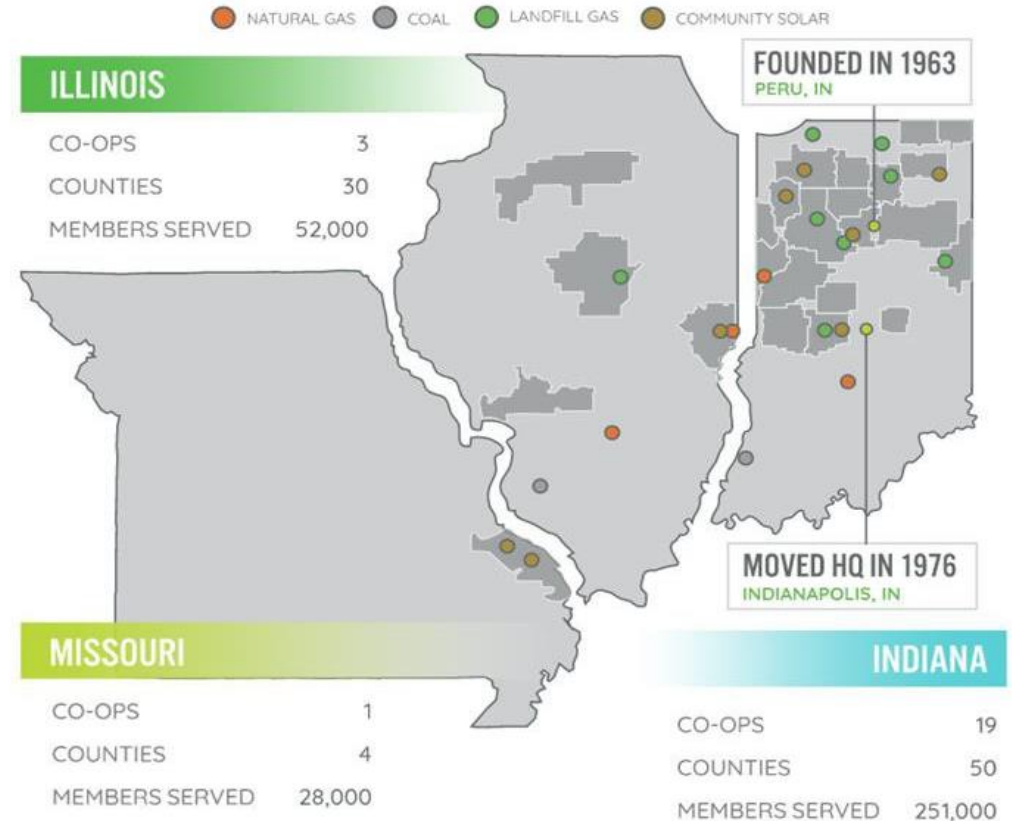
Albert Taylor  
Director of Generation

May 2023

## WVPA at a Glance

- Serves **23** locally-owned distribution cooperatives in **3** states with **331,000** members
- Peak load ~**1,500** MW
- **6** transmission zones
- Diverse portfolio of jointly owned and solely owned resources and contracts

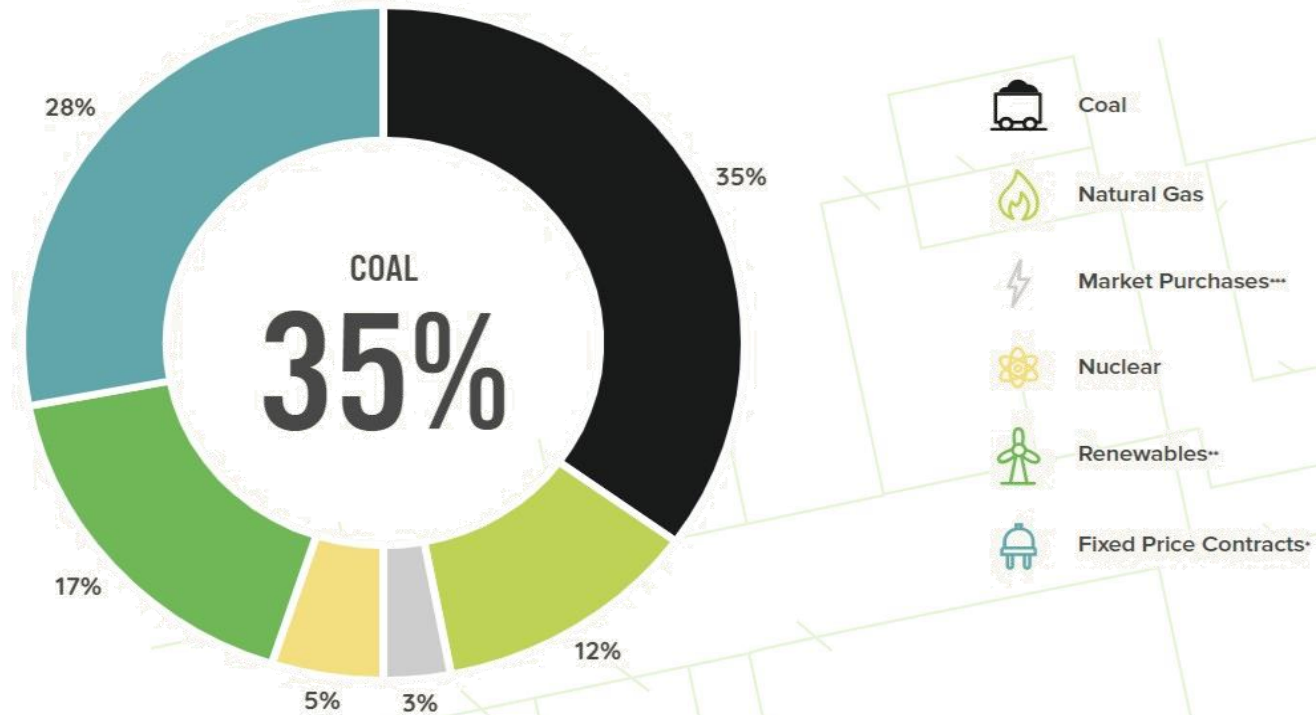
## 17<sup>TH</sup> LARGEST GENERATION AND TRANSMISSION COOPERATIVE IN AMERICA



# WVPA Portfolio

## OUR FUEL MIX

2022  
2021  
2020  
2019  
2018  
2017



See <https://esg.wvpa.com/environmental/>

\*\* RENEWABLE DISCLAIMER- Wabash Valley Power supports renewable energy by owning landfill gas and solar generation and purchasing the output from wind, solar and biogas facilities. Wabash Valley Power sells, separately, the environmental attributes associated with this generation to third parties, and therefore does not claim the generation as renewable within our own supply portfolio.



# Discussion Topics

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## **WVPA Summer Forecast and Readiness**

- Monthly peaks and resources
- Fuel Supply

## **Facility Preparations and Severe Weather Plans**

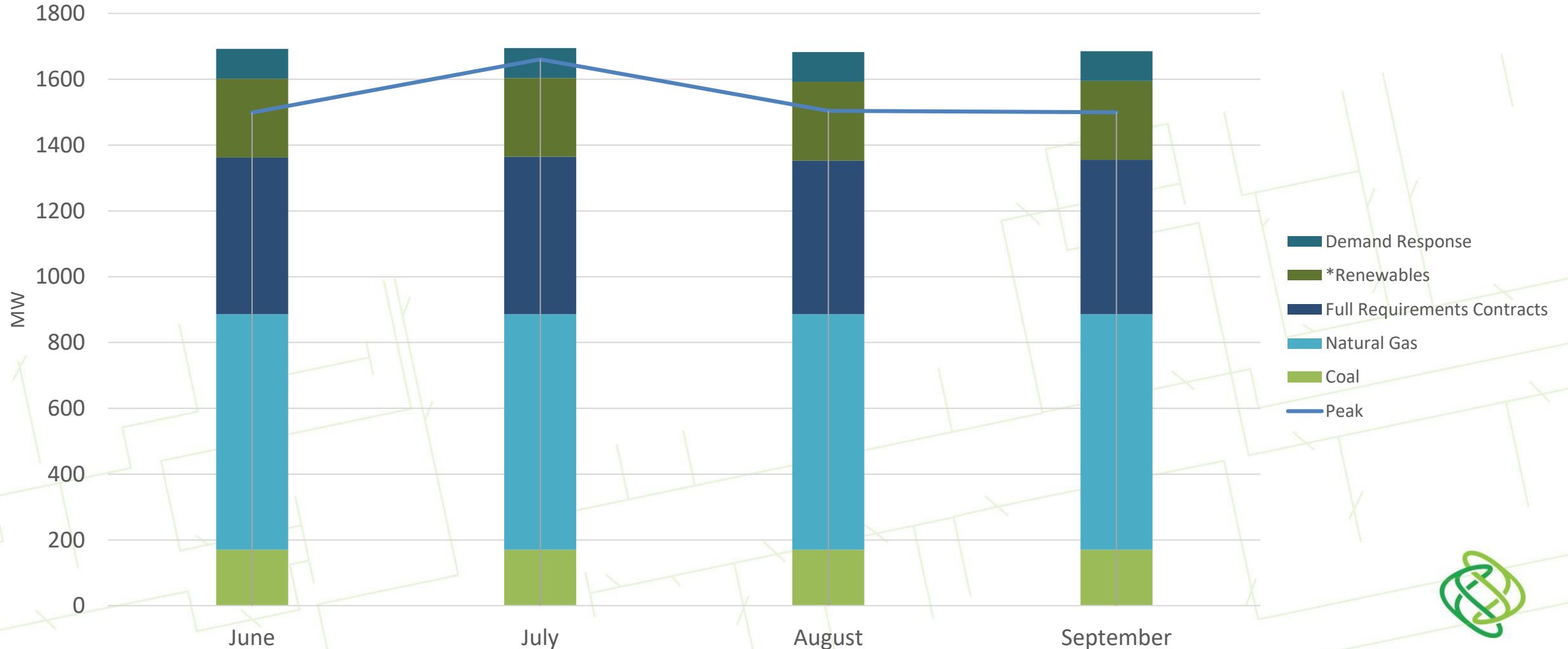
- Summer Resource Preparations
- Severe Weather Actions
- Storm Restoration
- Supply Chain Issues

## **RTO Changes, Challenges, and Interactions**

- Transition to seasonal capacity construct
- Interconnection queue issues
- Future planning and cost uncertainty



# 2023 Summer Monthly Peaks & Resource Chart



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# Fuel Supply

## Jointly Owned Coal - Indiana

- Continuous collaboration with partners
- Weekly meetings
- Forecasting
  - Rail deliveries by month
  - Coal burn
- Target 45-70 days
- Manage coal pile objective through market offer strategy
- Coal inventory is currently projected to hit 70 days by June 1<sup>st</sup>

## Jointly Owned Coal - Illinois

- Coal mine is directly adjacent to coal plant
- Maintain 30 days of inventory
- Inventory is to manage potential issues with the coal mine

## Natural Gas

- Natural gas can not be stored in inventory on site
- Contract with larger suppliers that own natural gas transportation
- Historically, WVPA has not had issues with physical delivery of natural gas in the summer

# Facility Preparation & Severe Weather Plans

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- All of the operating companies for WVPA owned generation have formal summer weather and event checklists, plans, and procedures.
- Prior to the start of the summer season each year (mid to late spring), operating staff review the summer prep plans, severe weather procedures, associated preventative maintenance (“PM”) activities, and the need for any changes or repairs necessary coming out of winter operations.
- These plans and procedures are reviewed again immediately prior to the arrival of each extreme heat or severe weather outbreak.
- All planned spring outages are scheduled to be completed by May 12<sup>th</sup>.



# Summer Preparations

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## All Plants

- Stock adequate summer PPE
- Inspect dampers, louvers, and doors
- Verify operation of exhaust fans and remote cabinet cooling
- Verify operation/cleanliness of air-cooled condensers
- Identify/repair cooling system leaks
- Clean critical heat exchangers
- Verify proper operation of instrument air dryers
- Verify critical equipment temperature indicators and instruments are functional
- Verify motor heaters are in service and maintaining motors moisture free
- PMs and checks on regulatory compliance systems





# Summer Preparations

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## Coal Plants

- Open boiler and turbine building roof vents and return vent fans to service
- Open FGD/Absorber building wall vents and remove insulation panels
- Remove reagent storage vent fan covers
- Monitor biofouling of critical systems
- Verify cooling tents/stations are operational

## Natural Gas Plants

- Check and monitor differential pressure across combustion turbine inlet filters
- Wash turbine oil and glycol cooling radiators/fans
- Clean and inspect cooling towers and spray nozzles
- HVAC PM's and filter changes on critical buildings and electrical enclosures



# Before & During Summer Extreme Weather Events

## Before

- Monitor weather and RTO notifications
- Review severe weather event safety procedures
- Ensure adequate staffing and readiness
- Check summer PPE supplies
- Communicate weather/RTO status updates to operating companies
- Review power supply emergency manual

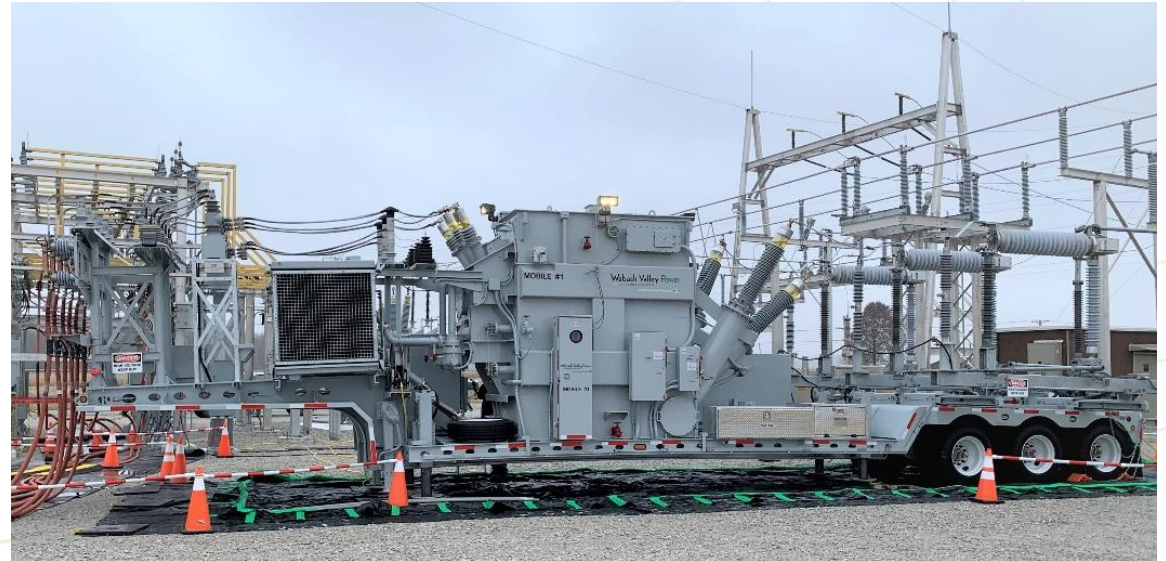
## During

- Monitor and communicate weather/RTO status to operators
- Curtail non-essential maintenance
- Stand down/shelter as required
- Track and report outages
- Implement power supply emergency steps as necessary
- Communicate with/follow RTO directives



# Supply Chain Issues

- Limited supply chain issues are not impacting ability to serve members
- Mitigation measures include:
  - May deploy mobile substations
  - Maintain critical spare parts inventories
  - Transformer pool shared between members
  - Plan and order materials early
  - Pull equipment from new projects in flight



# Storm Restoration Improvements

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- WVPA has documented a reduction in tree-related sustained outages during 2020 - 2022
- In order to improve member reliability and shorten outage durations WVPA has:
  - Increased staff to monitor system conditions as well as plan, engineer and execute projects
  - Partnered with connected utilities to build 69kV line segments, add automation, and add remote control for quicker response to outages events
  - Built 6 new distribution substations
  - Enabled redundant transmission paths to 20 distribution substations



# RTO Changes, Challenges, & Interactions

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- Transition to seasonal capacity construct
  - Lower accreditation for generators, intermittent resources and LMRs
  - Auction delays increase uncertainty
- Interconnection queue issues
  - Significant delays
  - No date for 2023 submissions
- Future planning and cost uncertainty
  - Long Range Transmission Plan (LRTP) and future cost allocations
  - Distributed Energy Resource (DER) expansion



# Q&A

