



IURC Summer Reliability Forum

Matt Moore

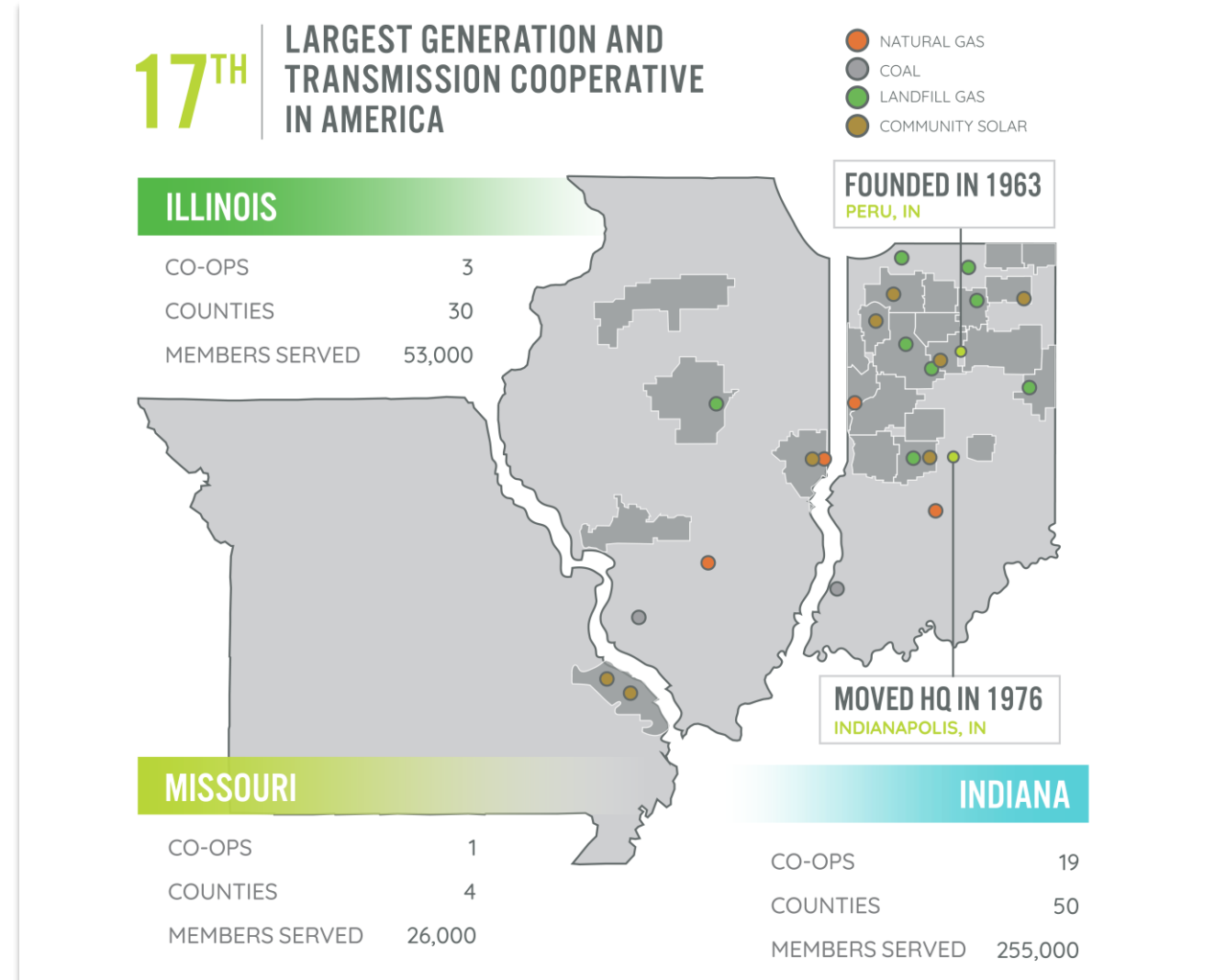
Executive Vice President of Power Supply

May 2024

WABASH VALLEY POWER ALLIANCE

- WVPA at a Glance

- Serves **23** locally-owned distribution cooperatives in **3** states with **334,000** members
- Peak load ~**1,780** MW
- **6** transmission zones
- Diverse portfolio of jointly owned and solely owned resources and contracts

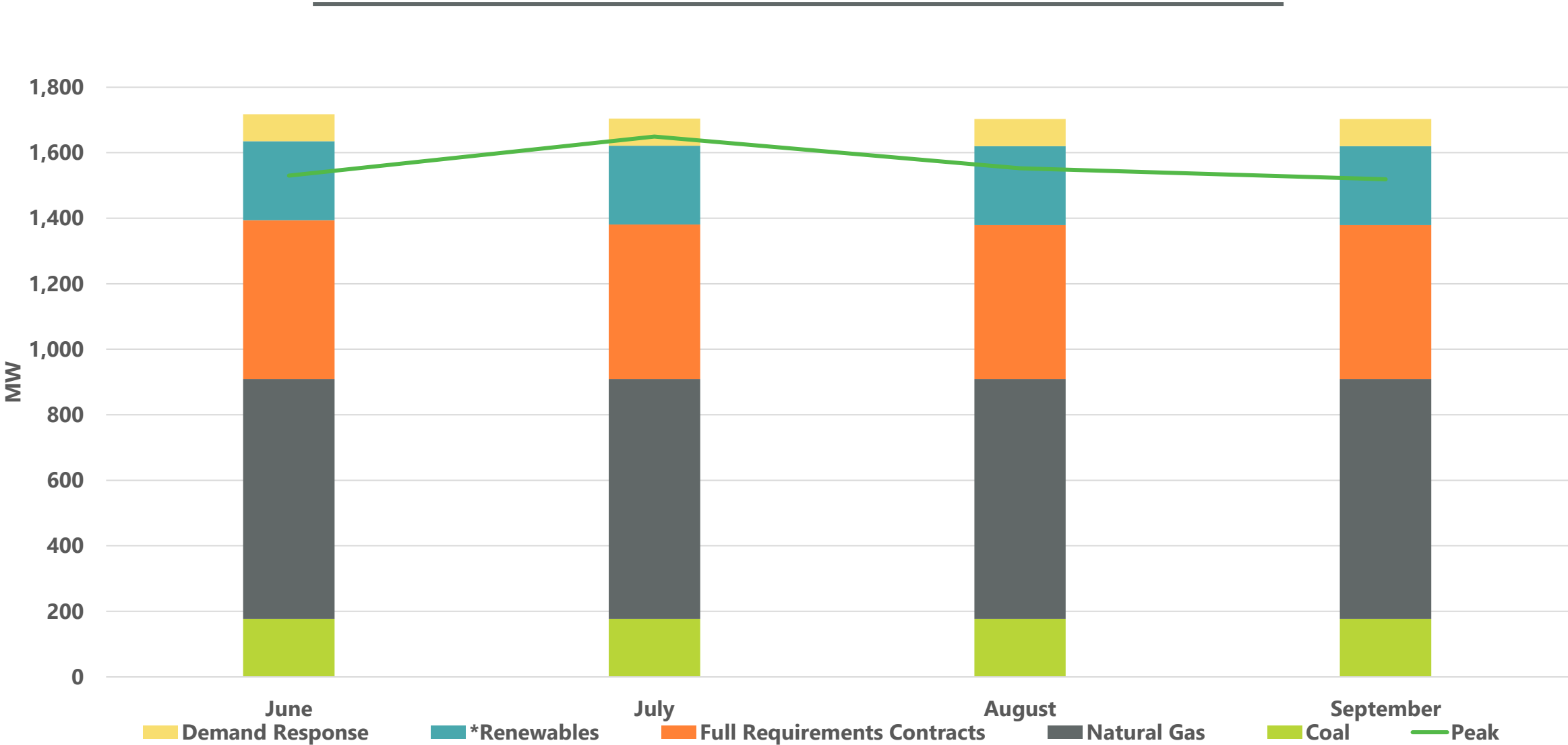


DISCUSSION TOPICS

- WVPA Summer Forecast and Readiness
- Facility Preparations and Severe Weather Plans
- RTO Changes, Challenges, and Interactions
- Operational Practices



2024 SUMMER MONTHLY PEAKS & RESOURCE CHART



** 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.*

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

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

- All 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 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.



FACILITY PREPARATION & SEVERE WEATHER PLANS

- 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 10th.
- Unusually dry conditions do not present significant challenges to WVPA-owned resources.



SUMMER PREPARATIONS

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

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:
 - Mobile substations
 - Shared transformer pool
 - Order materials early
 - Spare parts inventories



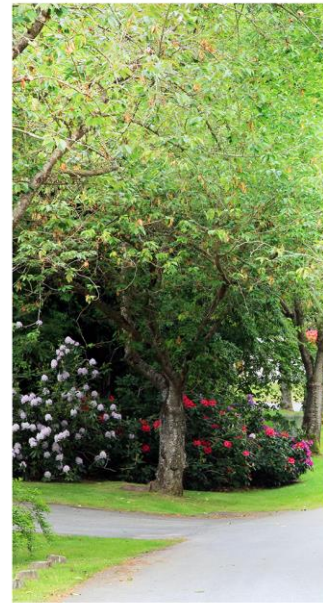
STORM RESTORATION IMPROVEMENTS

- WVPA has seen a 50% reduction in tree-related transmission sustained outages during 2020 – 2023
- To improve member reliability, WVPA has recently:
 - Added substation automation
 - Built 2 new distribution substations



RTO CHANGES, CHALLENGES, & INTERACTIONS

- Transition to seasonal capacity construct
 - Variable annual accreditation for generators and intermittent resources
 - Management of unit outages longer than 31 days
- Interconnection queue
 - Monitoring progress and potential changes
- Future planning and cost uncertainty
 - Long Range Transmission Plan (LRTP) and future cost allocations
 - Distributed Energy Resource (DER) expansion



WORKFORCE DEVELOPMENT

- While the electric utility industry work force is changing, WVPA's exposure is limited.
- We are making improvements on training, development, and recognition.
- Annually, we work with WVPA's joint-owner partners who operate generating resources.
- Strategic priority to promote a Culture of Excellence includes these efforts:
 - Conducting Employee engagement surveys,
 - Identifying high performers with specific career-pathing, training, and leadership opportunities, and
 - Reviewing succession plans.



WORKFORCE DEVELOPMENT

- Recruitment Efforts
 - Participation in university career fairs
 - Engineering Internship program
 - System Operator training to develop “pipeline”



ENERGY ASSISTANCE AND PROGRAM OFFERINGS

- WVPA provides Power Moves energy efficiency programs at www.PowerMoves.com for all 23 co-ops
- PowerShift demand response programs are offered by ~75% of co-ops
- WVPA co-ops interact with retail energy users
 - Each co-op has an energy advisor
 - Provide energy use advice and guidance to those experiencing high bills
 - Include energy savings tips on websites and social media channels
 - Manage distribution outage restoration



PUBLIC MESSAGING FOR EXTREME WEATHER EVENTS

- Formally addressed in WVPA's emergency power supply manual
 - WVPA provides sample messages for our co-ops to share
 - Conservation tips such as change thermostat, close blinds, delay using large appliances
 - Suggest people make arrangements for life-support/medical needs
 - Channels include social media, websites, smart hub app, news outlets

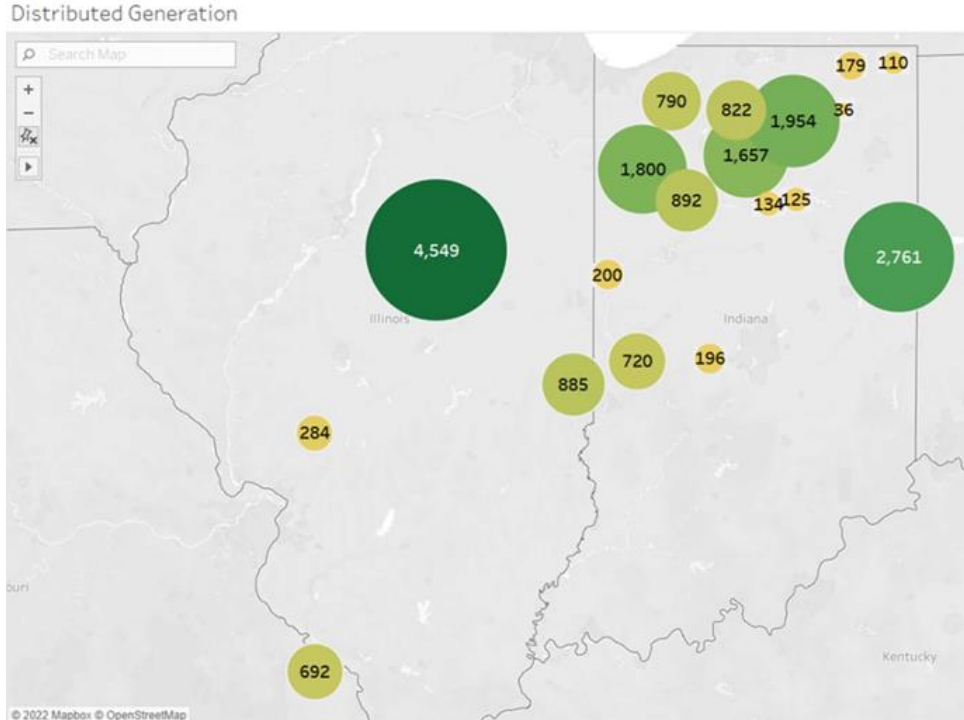


EXTREME WEATHER UPDATE

Appendix



DISTRIBUTED GENERATION (DG) EXPANSION



- Approximately 40 MW of member owned DG
- Over 2,100 sites
- Interest in DG has increased over the past few years with concentrations per Co-op shown in the map
- Represents 200% increase since 2020