

# **OEC Winter Conference Update**

February 13, 2023 Pat O'Loughlin - President and CEO



### **Ohio's Electric Cooperatives and Buckeye Power**



- 25 cooperative members
- Serving approximately 400,000 member-consumers in Ohio/IN
  - 1 million Ohio residents
  - 1,905 MW peak demand (12/23)
- Generation Sources
  - Coal (1,600 MW)
    - Cardinal 1,200 MW
    - OVEC 400 MW
  - Natural Gas CT (650 MW)
    - Mone 450 MW
    - Greenville 200 MW
  - Renewables (70 MW)
    - Hydro, Bio-gas, Solar
  - 375 employees at 5 sites



# FY 2022 Highlights

- Reached agreement with AEP on Cardinal future
- Resilient member sales, strong member satisfaction
- Competitive rates in high cost environment
- \$37M capital credit retirement in Nov 2022
- Net Margin \$32 million after \$25 million revenue deferral, non-member energy sales margin \$41M
- Maintain generation resources, reduce long term cost exposure
- Record level of participation at COLT

   On-site lineworker development program underway



## PJM – Grid Operator Manages 22% of US Power Supply (13 states)





### **Cardinal Station**

Safe, Reliable, Cost Competitive, Environmentally Responsible Three 600 MW Units – AEP and Buckeye receive energy Nearly \$1.5B in environmental improvements Typically dispatched by PJM at 80-95% of available MWH



# **Cardinal Purchase Provides Certainty**

- Amendment 14 to Cardinal Station Agreement closed 8/1/22 - BPI purchases Unit 1, land, spare parts for \$10M
- AEP rights and obligations consistent through 2026 (up to 2028)
- Post-AEP exit BPI will operate Cardinal Units 1-2, retire Unit 3
  - Lower cost, more efficient operation
- Amortize remaining Unit 3 investment through 2034



### **Rates Pressured by Transmission & Fuel Costs**





### Member Fuel and Transmission Charges (\$/MWH)





# **Energy Markets**

- Rapid increase in fossil fuel prices and supply constraints effecting all markets during 2022
  - Coal and natural gas up 3x
  - Coal generation dispatch near 95%
- Market prices for Ohio IOU G&T service \$100 \$120/MWH over next 12 months
- Peak period supply shortages predicted across several Midwest, western states – rolling blackouts TVA, Duke
- PJM expects best supply situation of all RTOs (Yikes!)
- NOPEC drops 550,000 consumers to SSO suppliers
- Natural gas price dropped 50% in January 2023



# State of WV vs. USEPA

- SCOTUS finds USEPA exceeded authority to regulate greenhouse gases from power plants
- Provides direction to government and industry on limits of regulatory authority



# War on Fossil Fuels Continues

- "We want to present the industry with a suite of regulations so that they can make the best longterm investments possible," Regan said. "The power sector will ... look at the cost benefit of complying with those and more than likely stay with the conclusion that ... clean energy is more cost effective for them and for their customers," he said.
  - Michael Regan, Administrator, US EPA July 2022
- Will see you in court

#### 

G&T Rates Buckeye vs Residential CRES: 12-month term



Notes: CRES residential rates from energychoice.ohio.gov website. Using a 12-month term, zero monthly fee, no intro price, no promo offer, and 0% renewable.



#### SO2 and NOx Emissions Trends from Buckeye's Cardinal Energy





### Generation Retirements within PJM– 38,000 MW (about 25%) since 2011 Generation Deactivation over 20,000 MW since 2014 polar vortex





# **US Electricity by Source (%)**



Source USDOE Energy Information Admin.

![](_page_15_Picture_0.jpeg)

## NERC 2022 Risk Assessment

OHIO'S ELECTRIC COOPERATIVES

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Figure 1: Risk Area Summary 2023–2027

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# Winter Storm Elliott

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#### Winter Storm Elliott

![](_page_18_Picture_4.jpeg)

Temperatures across the RTO plummeted beginning on Dec. 23 and lasted into the morning of Dec. 25 with record lows in some areas as well as record drops in some regions.

Source: NOAA and the National Weather Service; Graphic created on Dec. 21, 2022.

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#### Actual Load Came in Higher Than Forecast (Preliminary Data)

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### Looking Ahead

- Clear partnership arrangements (Cardinal, OVEC)
- Cost based generation extremely competitive with market
- Transmission cost and service reliability concerns
- Continued focus on improving plant operations, controlling costs, disciplined investments, workforce development
- Financial resources to benefit membership (now vs. later)
  - Continuing strong margins from non-member energy sales used to reduce rates now, and in the future (up to \$40M in FY2023)
- Evolving decarbonization discussion realizing importance of reliability, resiliency, timing
- Concerns for adequate base load generation resources, coal supply in the near term (nationally, regionally)
- Introducing legislation to direct utility tax to fund local community development projects

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## **US CO2 Emissions from Fossil Fuel Use**

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# **US CO2 Emissions from Fossil Fuel Use**

- US CO2 emissions from fossil fuel use have decreased 853 million metric tons from 2005 -2019, a 14% reduction
- World CO2 emissions have increased 7,153 million metric tons from 2005 – 2018, a 24.7% increase
- US power sector CO2 emissions have decreased 798 million metric tons from 2005 – 2019, a 33% reduction, which accounts for 93% of US emission reductions during this time

Source US Energy Information Administration (EIA)

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# **US CO2 Emissions by Sector**

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