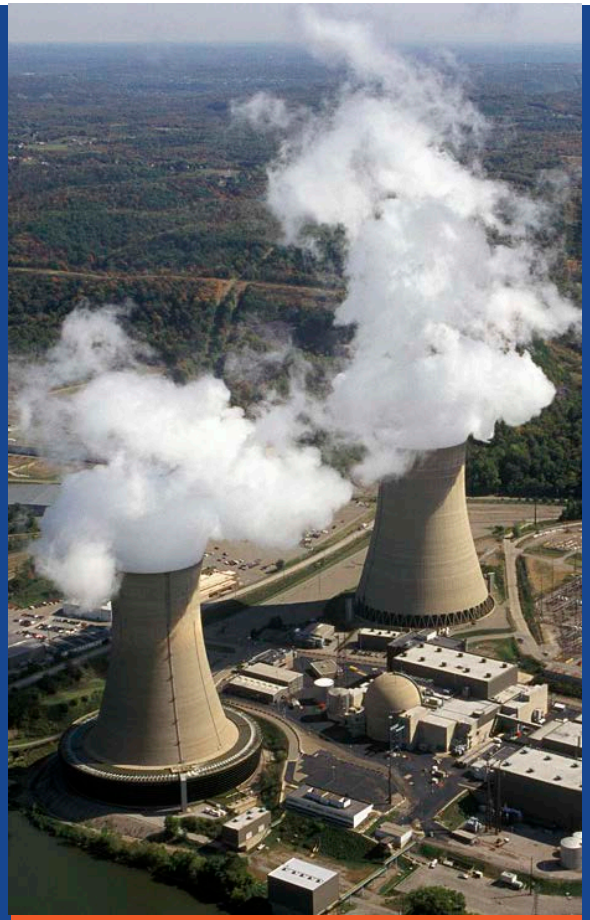
FENOC™
FirstEnergy Nuclear Operating Company

Preserving Pennsylvania's Nuclear Benefits



Nuclear Energy Caucus

Don Moul
President and Chief Nuclear Officer
FES Generation Companies

April 17, 2018

FirstEnergy Nuclear Power Plants

Safe, Clean, Reliable and Well-Protected

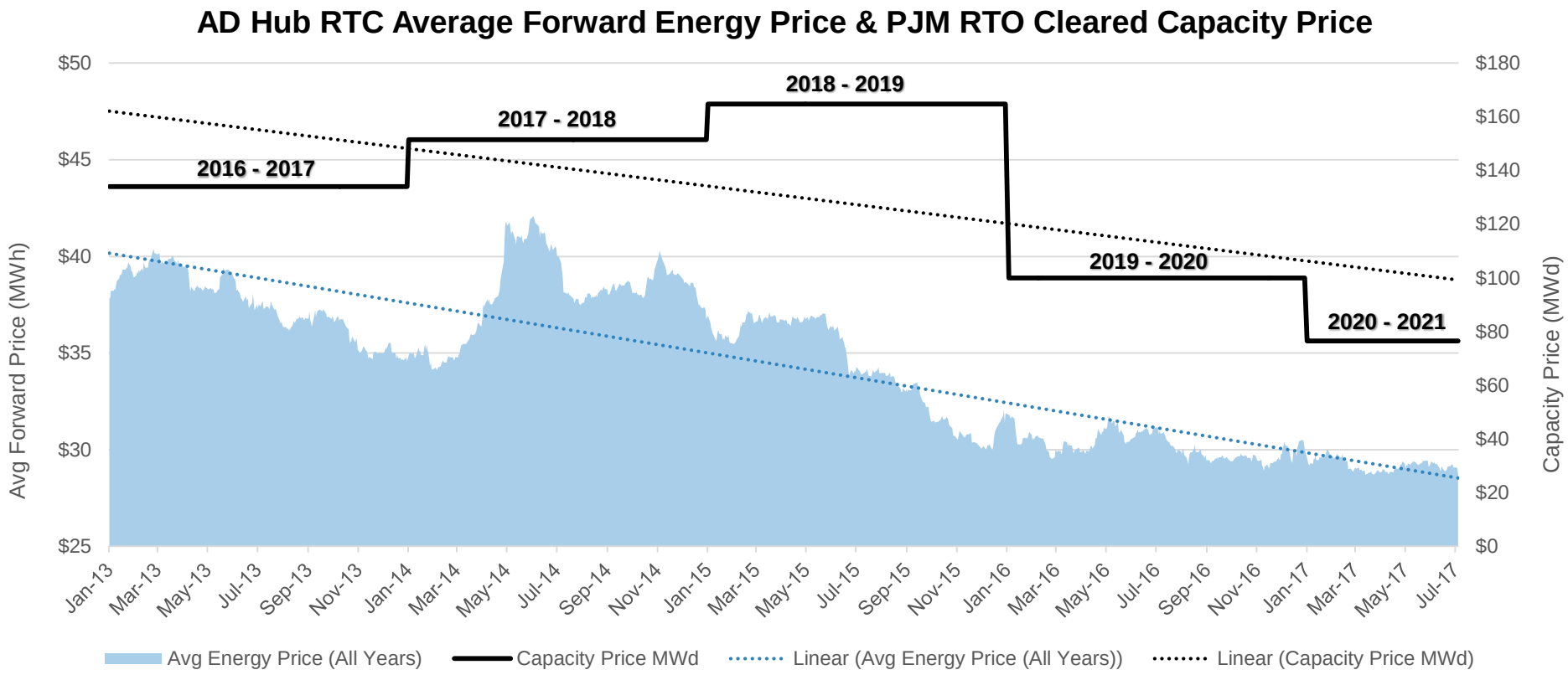
Beaver Valley Power Station

- Birthplace of commercial nuclear power, where Shippingport Atomic Power Station began generating electricity in 1957
- Two Westinghouse Pressurized Water Reactors, together generating 1,872 megawatts electric
- Unit 1 operations began in 1976 with renewed license expiring in 2036; Unit 2 operations began in 1987 with renewed license expiring in 2047
- One of the largest employers in Beaver County
- Able to supply electricity generated carbon free to more than 1.8 million homes
- Operations avoid the production of more than 9.5 million tons of greenhouse gases annually

Community Impact of Beaver Valley

- **Approximately 1000 employees at the plant with $120 million annual payroll expenditure**
- **$70 - $120 million annual expenditure on contracted services, nearly all of which is local or business in the state**
  - More than 500 companies in Pennsylvania support nuclear energy
  - Secondary state jobs created to support an operating nuclear plant are typically more than double the number of direct plant employees
- **$4 million paid in local and state taxes**
- **Significant support provided to local and state emergency management services – financial, personnel and practice drills**

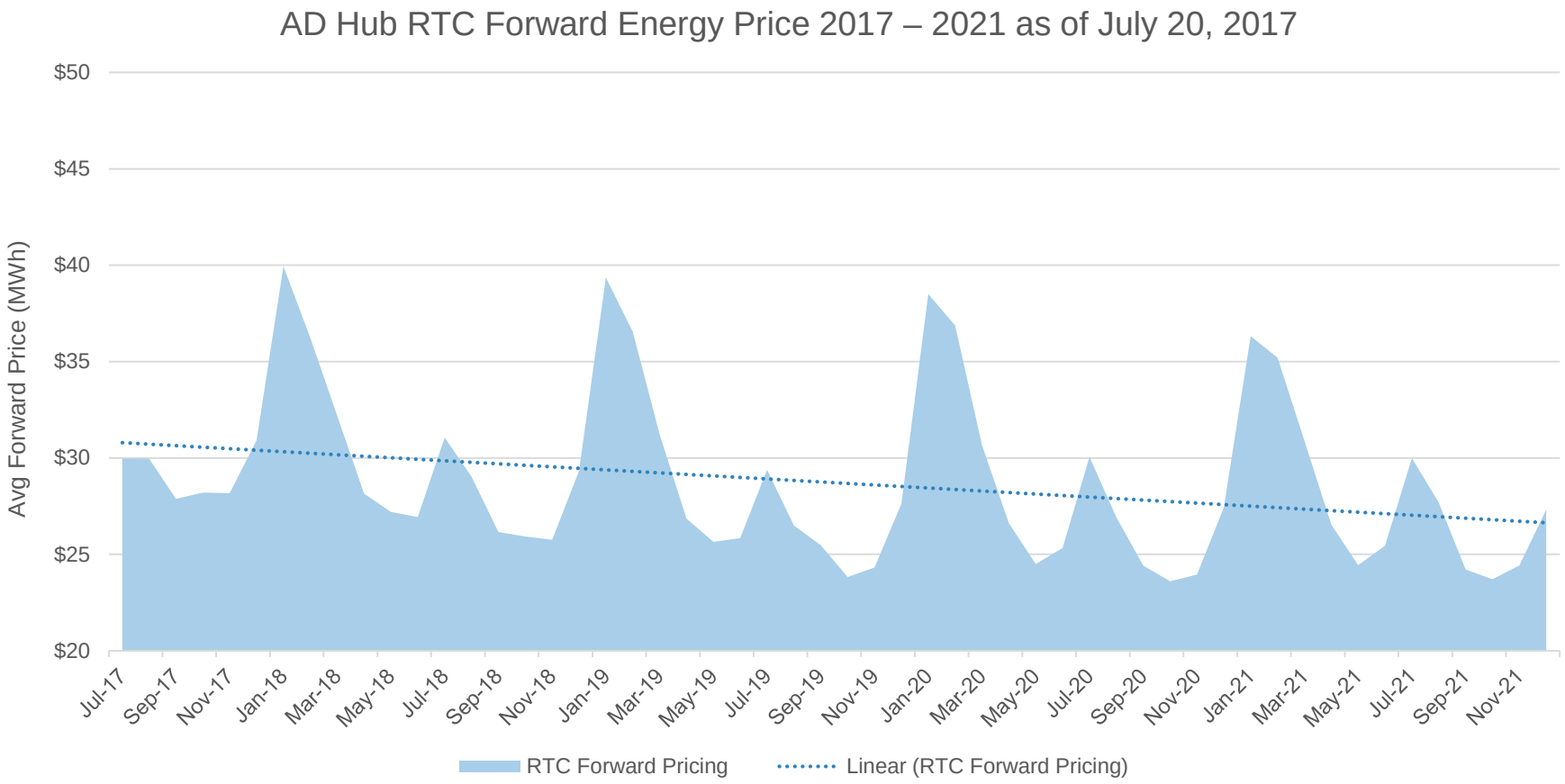
Market Conditions



Cleared capacity prices have declined from $165/MWd in 2018/2019 to $77/MWd in 2020/2021 planning years

Data: Forward energy prices are the average, AD Hub around-the-clock price forwards as of each date in the periods above

Market Conditions | Forward Energy Prices



The forward trendline suggests that energy prices will remain at currently depressed levels through 2021

What have we done in response?

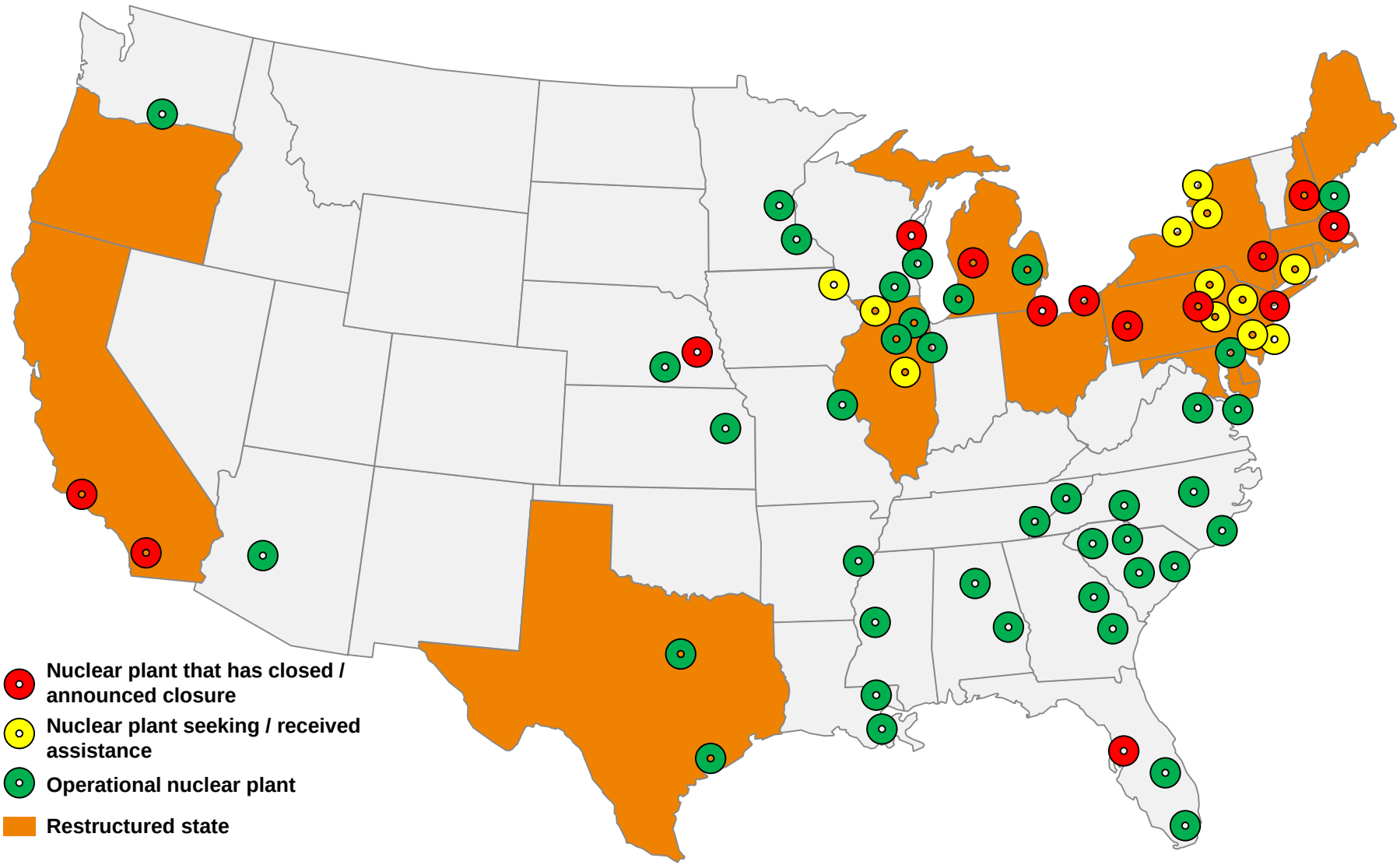
- FENOC Unit Capability Factor has increased steadily since 2014 to greater than 92%
  - Capability factor is the ratio of actual energy produced to maximum energy the unit is capable of generating.
- Capital expenditures have been trimmed to top quartile performance while maintaining excellence in safety and reliability.
- Both head count and labor costs have declined since 2015 to be as cost effective as possible.
- FENOC has reduced their costs since 2014 to top quartile overall fleet performance.

Domestic Nuclear's Greatest Challenge

- **Nuclear facing competition from renewables, low-priced natural gas**
  - Natural gas plants or renewables setting the market price for electricity
  - Renewables can be profitable at negative market prices due to tax subsidies
- **Flat demand growth for electricity & rising generating capacity**
  - Suppresses electricity market prices
- **Reactors at risk of premature shutdown despite safe and efficient operations**
  - Nuclear plants in competitive markets face the greatest near term risk exposure
  - Some nuclear plants facing challenges in regulated markets as well
- **Imperative to remain focused on improving performance**
  - In the past 5 years industry average performance has improved

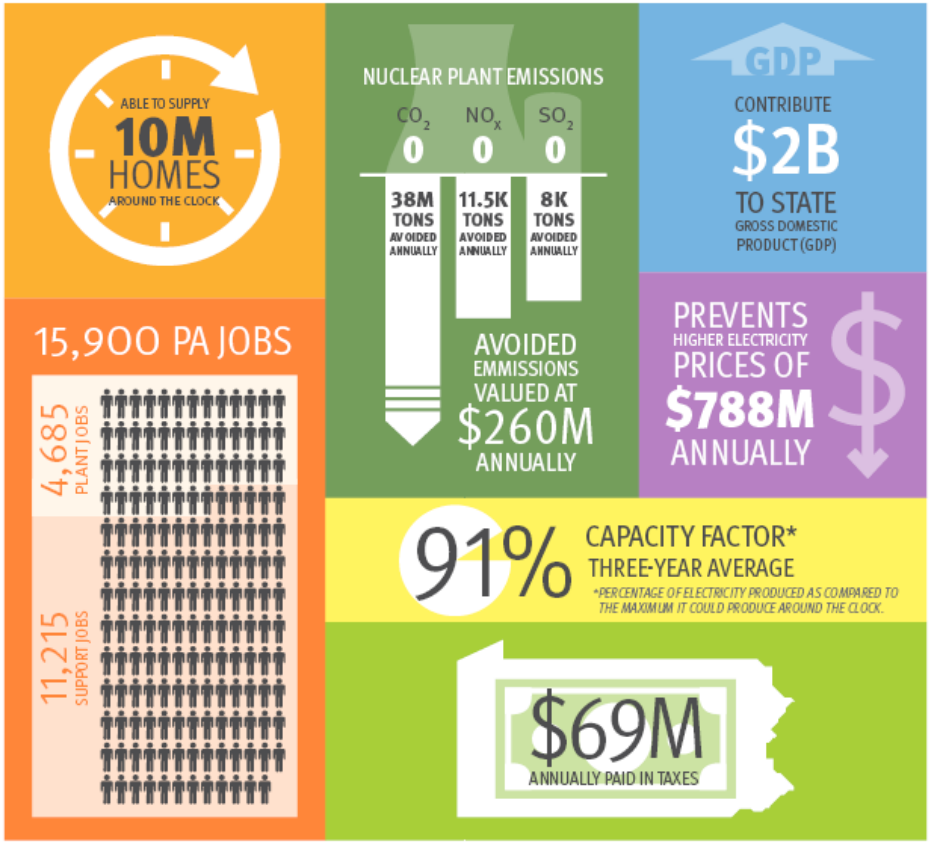
    O&M ↓ >6%, Capex ↓>38%, Fuel ↓>10%, Capacity Factor ↑>6%
  - During same period competitive market prices have declined more than 30%

Nuclear Plants Closing in Restructured States



A Nuclear Solution Is Critical to Pennsylvania

- **A nuclear solution preserves:**
  - Thousands of jobs
  - Economic benefits and growth
  - Affordable and resilient electricity
  - Regional fuel diversity
  - Environmental advantages
- **Nearby states have taken action to protect nuclear power generation**
  - Four plants in New York and Illinois will continue to operate with state programs that preserve nuclear plants in place
  - Legislation has been introduced in the Ohio House and Senate to create a similar program



Thank You