

# The Clean Power Plan

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DETERMINING THE PATH FORWARD  
FOR WEST VIRGINIA

*Charles Patton  
President and COO  
Appalachian Power  
October 27, 2015*

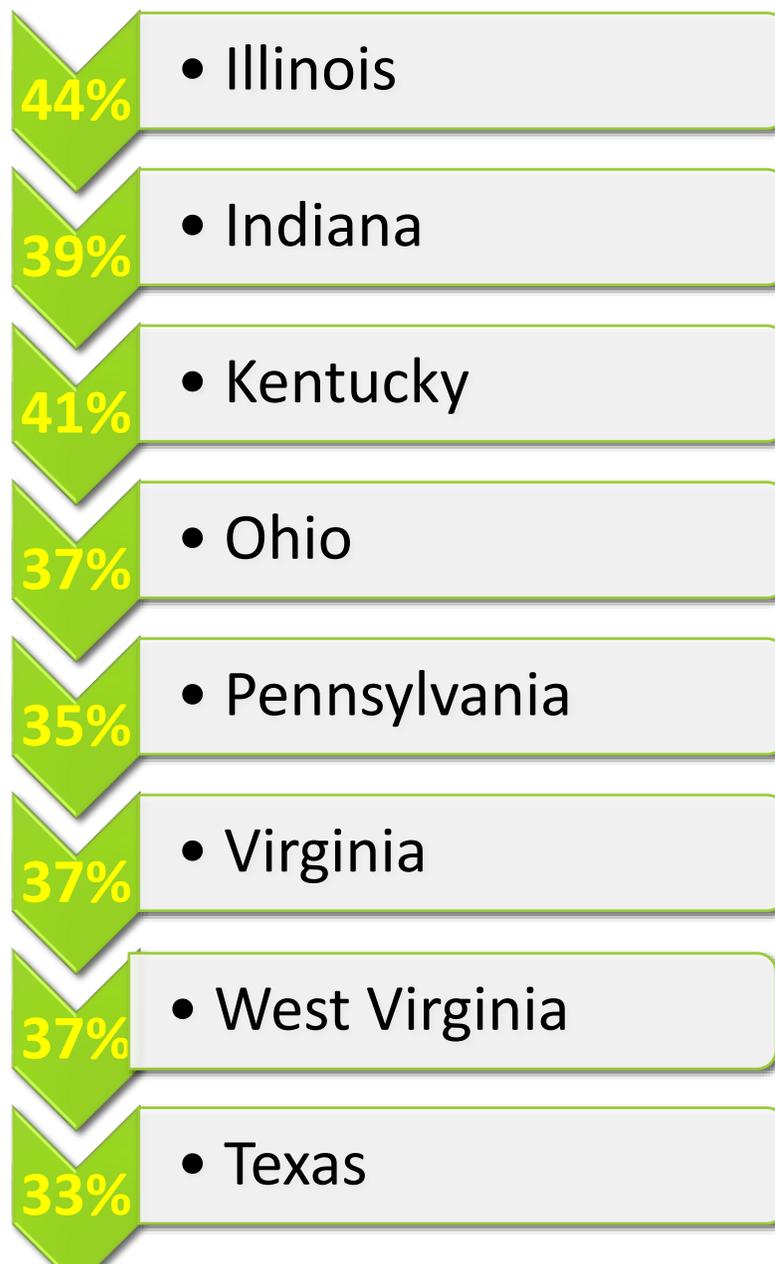


“When you come to a fork in the road, take it.”

Will the CPP  
further reduce  
coal  
consumption in  
the US?

**Yes.**

## CPP Final CO<sub>2</sub> Emission Reduction Requirement

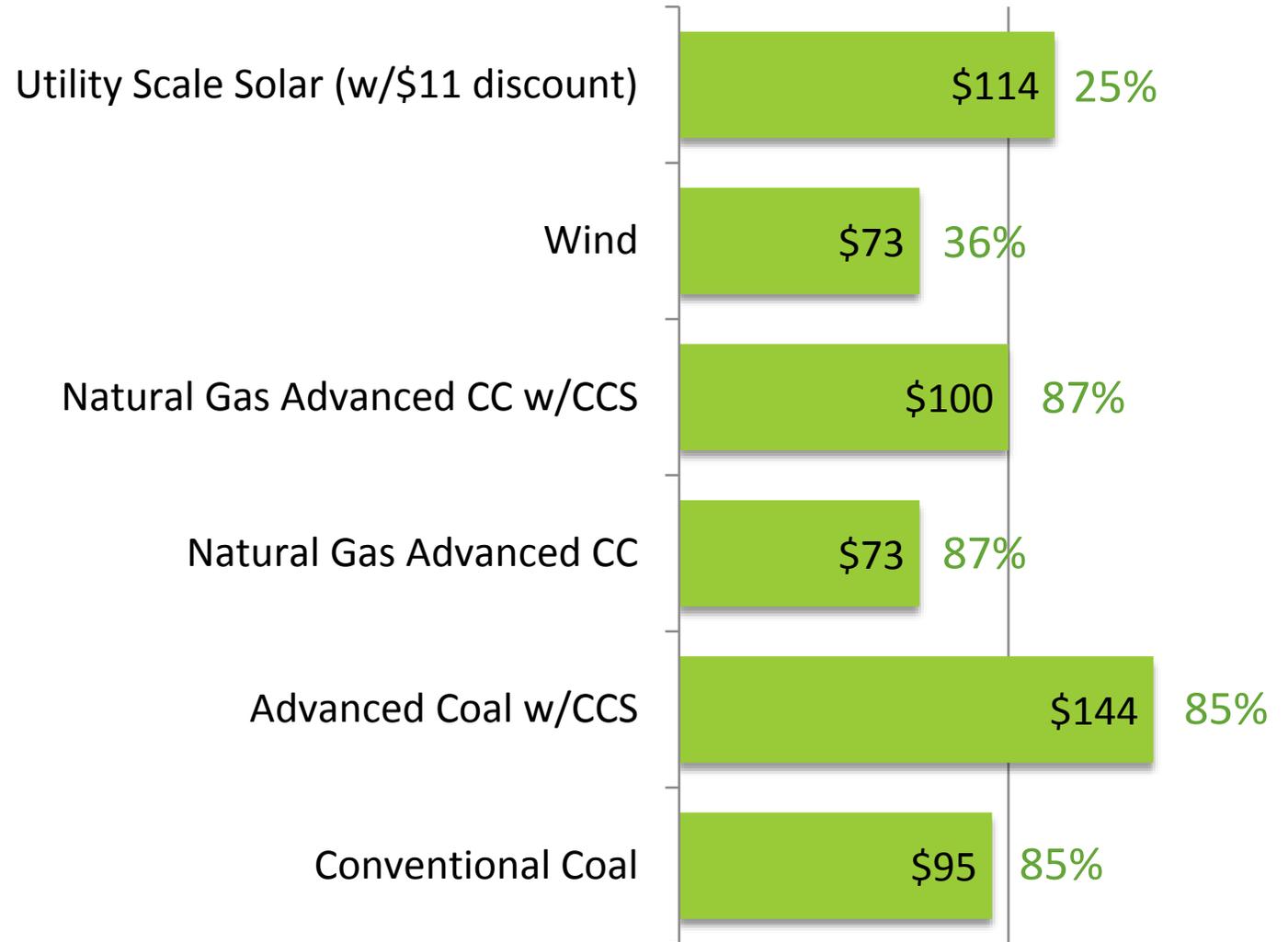


If the CPP is not enacted, will coal consumption likely increase?

**No.**



### Levelized Cost of Generation per MWh



Source: EIA. Note: % shows plant availability or “capacity factor”

Are entire communities being decimated by the decline of coal?

**Yes.**

## **Employment**

**43,306 in 2008**

**31,236 in 2015**

**28%**

## **Severance Tax**

**\$420M in 2008**

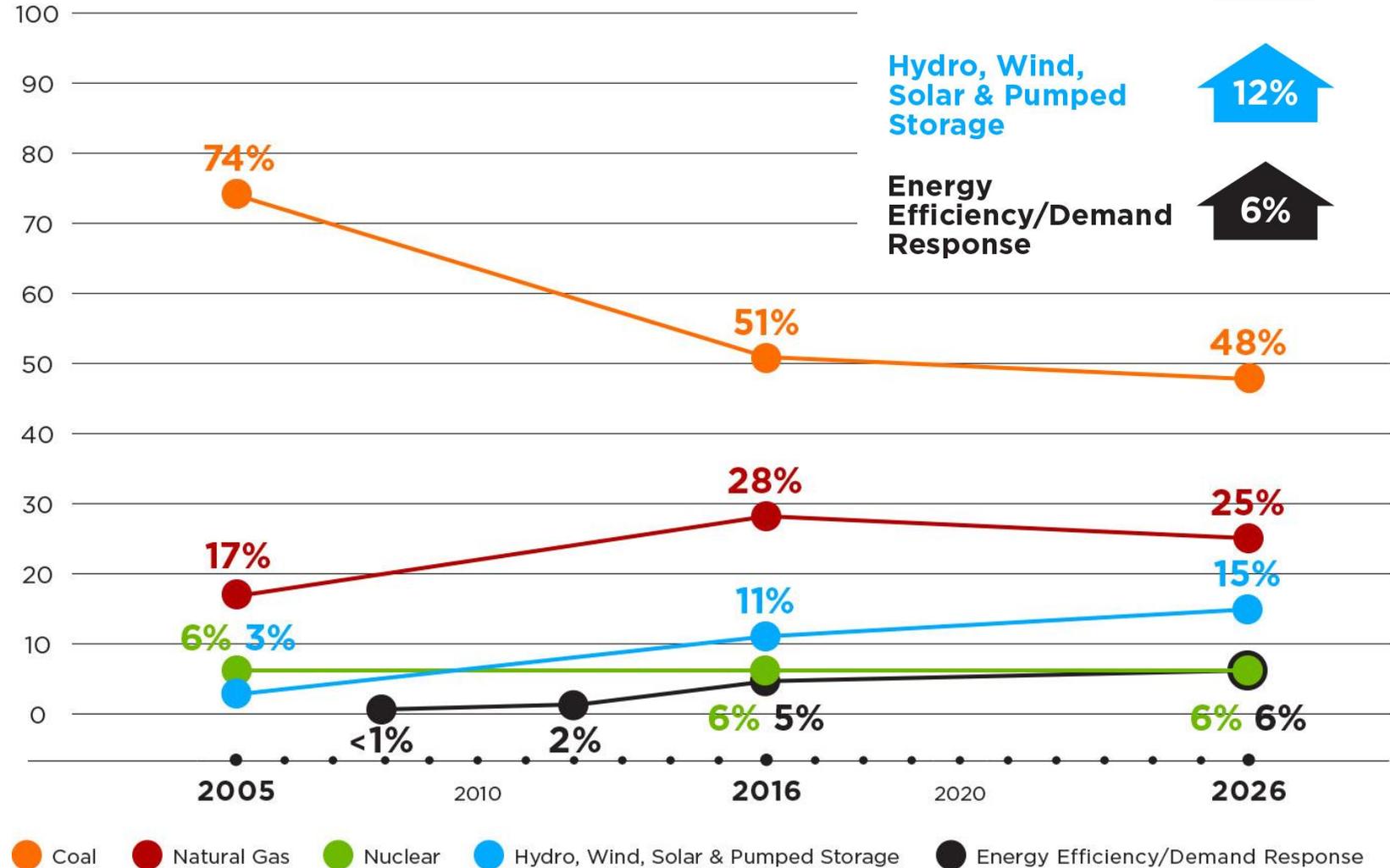
**\$315M in 2015**

**25%**

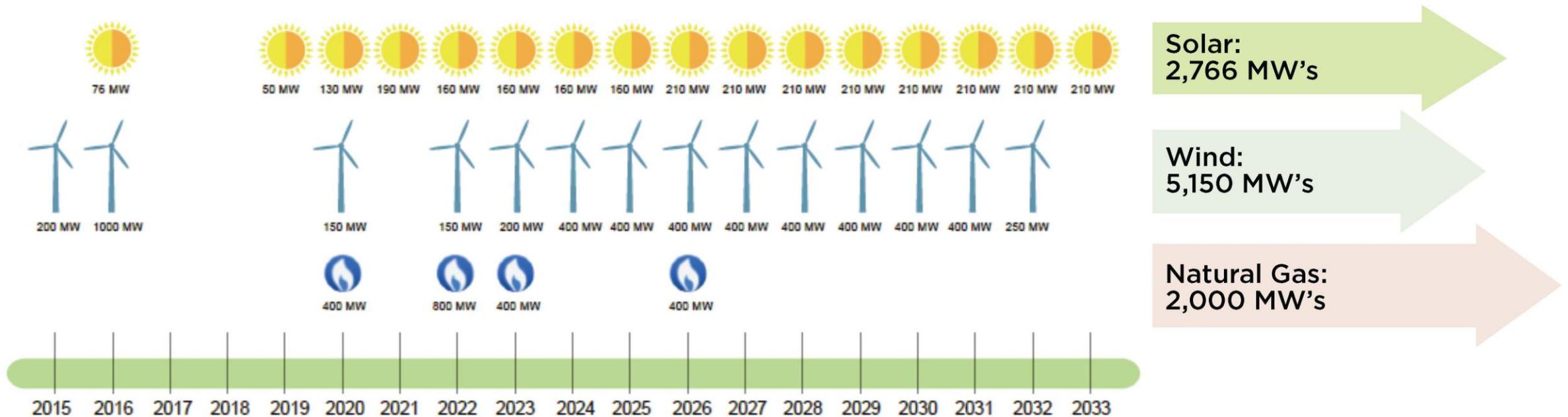
Will technology stall if the CPP is not enacted?

No.

## AEP Generating Capacity



# Large-Scale Renewable Opportunities



\$10+ Billion investment opportunity in renewables over the timeframe before considering CPP impacts

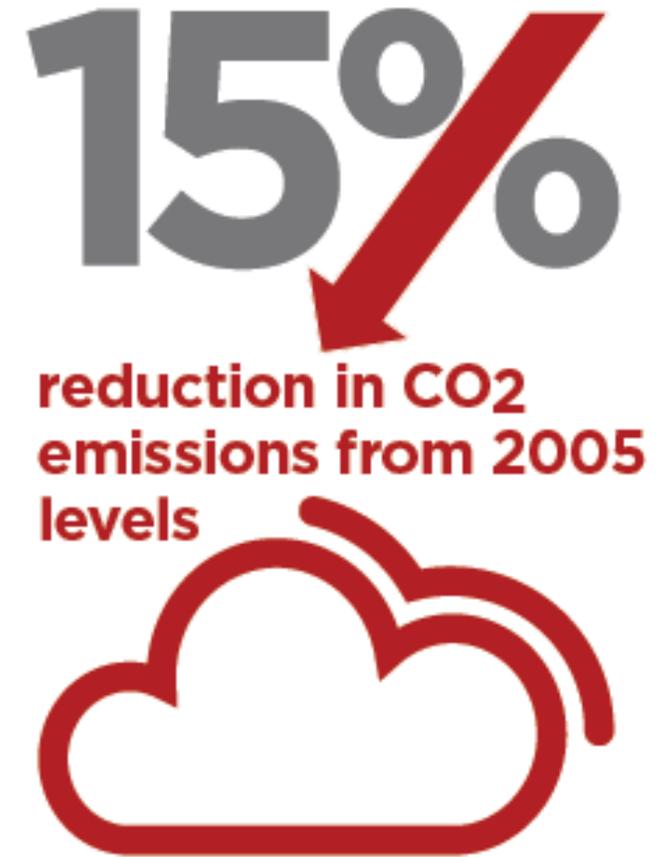
Total Coal and Gas Retirements 2015 - 2033  
Coal: 5,738 MWs • Gas: 1,063 MWs

Will CO<sub>2</sub> from EG increase without CPP?

**No.**

## AEP Stats

- ❑ Carbon emissions have decreased from 145 million metric tons (MMTs) to 123 MMTs in 10 years
- ❑ Additionally, units retired in 2015 emitted ~20 MMTs last year
- ❑ Economic, cultural pressures will continue to disadvantage coal



If CPP is not enacted, is the status quo likely?

No.

- ❑ 72% of adults believe there's solid evidence the Earth is getting warmer
  - ❑ 77% of those under age 50
- ❑ 64% are in favor of stricter emissions limits on power plants to address climate change
- ❑ Global companies joining climate change initiatives
  - ❑ Investment managers controlling \$2.6 trillion commit to divest from fossil fuels
  - ❑ Global companies commit to power entirely with renewable energy
    - ❑ Johnson & Johnson, Proctor & Gamble, Starbucks, Goldman Sachs, Walmart

Will the CPP  
increase cost of  
electricity?

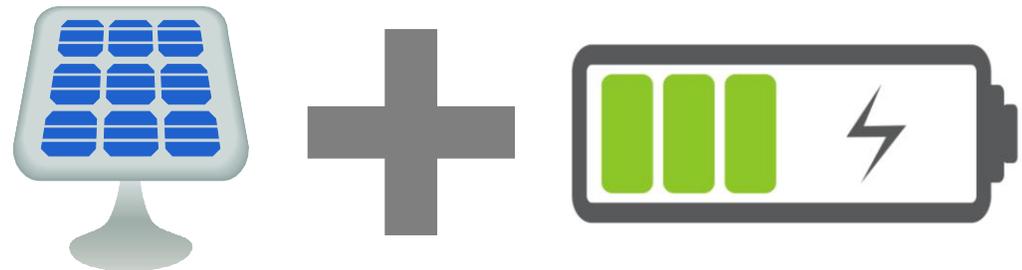
Yes.

- Existing fleet will be under-utilized
- Will replace that fleet with new capacity, some of which will
  - Cost more
  - Be intermittent

Is reliability  
threatened by  
the EPA's regs?

Possibly.

- ❑ PJM, SPP, ERCOT and MISO are already working on reliability studies under the final rule
- ❑ NERC is also doing an overall reliability assessment and will be advising the RTOs
- ❑ Intermittency and ancillary service issues are key parts of analysis



Is the CPP a fait accompli?

**No.**

“I guess the bottom line is this:  
“You can legitimately go after me on the Clean Power Plan rule because...that was hatched by us, and I believe we need to deal with climate change, so we can have a lengthy debate about that.”

*– President Barack Obama*



Questions?