

# A Utility Perspective on Coal Utilization and West Virginia's Electric Infrastructure

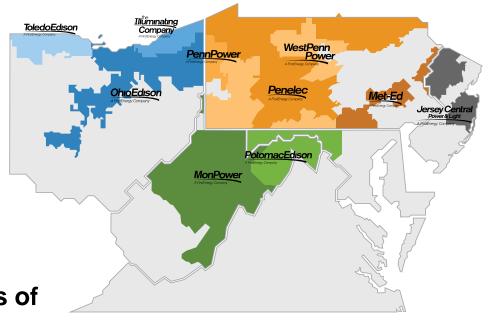
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December 10, 2012



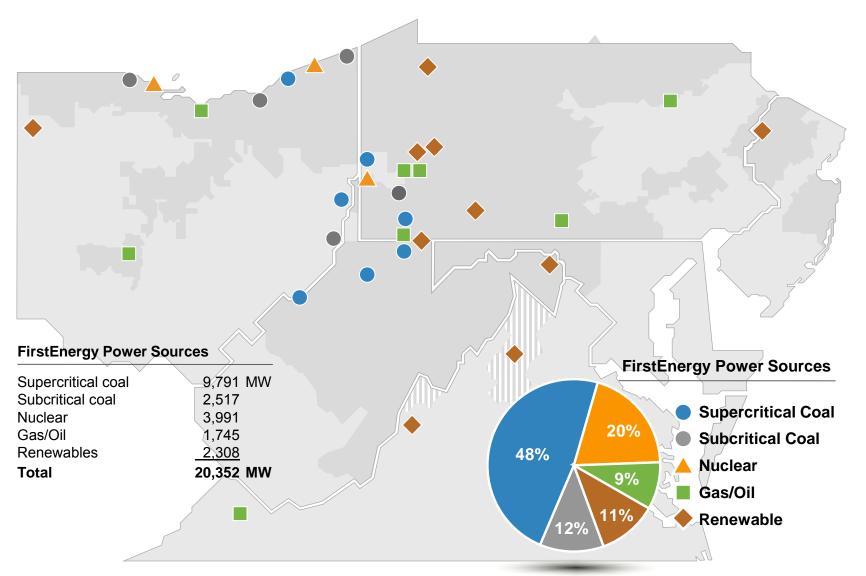
## About FirstEnergy (FE)

- Headquartered in Akron, Ohio
- One of the largest investor-owned electric systems in the U.S. based on six million customers served
- Nearly \$47 billion in assets
- \$16 billion in annual revenues
- Approximately 20,300 megawatts of generating capacity
- 10 electric utility operating companies in six states
- 65,000-square-mile service territory
- 20,000 miles of high-voltage transmission lines and approximately 281,000 miles of distribution lines





## FirstEnergy Diverse Generating Sources



#### Coal in WV

- Contains more than 500 mines
- Provides more than 63,000 direct and contract jobs
- Pays \$3.4 billion in annual payroll and hundreds of million dollars to state and local governments in taxes and contributions
- Accounts for one-third of the nation's total energy production
- Source of 40-50 percent of the electricity generated nation wide
- Accounts for 90 percent of America's fossil energy reserves



Source: WV Coal Association 2011 Coal Facts with adjustments

#### Industry Challenges

#### Environmental Regulatory Issues

- Hazardous Air Pollutants Regulations (MATs)
- Cooling Water Intake Regulations (Clean Water Act §316(b))
- CAIR Replacement Rule
- Coal Combustion Residue Regulations
- Revised Wastewater Effluent Guidelines
- National Ambient Air Quality Standards (NAAQS)
- Greenhouse Gas Regulation (NSPS)

#### Shale Gas

- Advanced drilling methods
- Hydraulic Fracturing
- Abundant supplies
- Sold at historic lows during 2012
- Price of natural gas largely sets wholesale electricity prices
- Wind PTC
- Energy Policies (up for discussion)
  - Clean Energy Standard
  - Carbon Tax

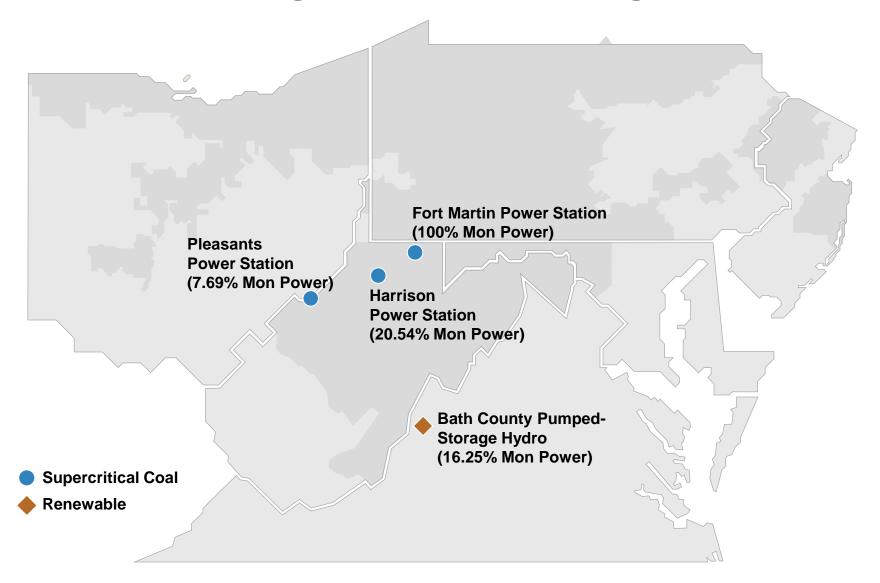


#### FirstEnergy Coal Use



- 33 million total tons of coal purchased by FE annually
- 16 million tons purchased from WV mines annually
  - \$850 million
- 4.5 million tons used by Mon Power annually

### Mon Power Regulated Generating Sources



#### **Need for Additional Capacity**

- Mon Power's expected capacity shortfall is 938 MW in 2013
- Shortfall will increase to over 1,400 MW by 2026, representing approximately 40% of Mon Power's projected capacity needs
- In its 2012 Resource Plan, Mon Power identified cost effective ways of meeting the Company's projected needs



#### **Proposed Generation Transaction**

- Mon Power will purchase AE Supply's interest in Harrison Power Station
  - Transaction will make Harrison 100% owned by Mon Power
  - Harrison generates 1,984 MW of electricity
  - Plant uses more than five million tons of coal annually





- Mon Power will sell its interest in the Pleasants Facility to AE Supply
  - Transaction will make Pleasants
    100% owned by AE Supply
  - Pleasants generates 1,300 MW of electricity
  - Plant uses more than 3 tons of coal annually

#### **Cost Analysis**

The proposed transaction is the most economic alternative to reliably serve Mon Power's long term requirements

| Alternative Type             |                                     | Levelized Cost per MWh |
|------------------------------|-------------------------------------|------------------------|
| Repurpose Subcritical        | Albright Switch to Biomass          | \$268                  |
|                              | Albright Switch to Gas              | \$164                  |
|                              | Gas Combined Cycle at Albright Site | \$112                  |
| Construct New Plant          | New Coal                            | \$107                  |
|                              | New Nuclear                         | \$153                  |
|                              | New Gas Combined Cycle              | \$115                  |
| Purchase Existing Generation | Harrison Acquisition                | \$74                   |

#### Benefits

- Capacity and energy self sufficiency
- Stabilize retail rates
- Provides continued support of West Virginia coal industry
- Simplifies and centralizes control and ownership of Harrison
- Proven and reliable supercritical asset
- Located in the heart of the Mon Power/PE WV territory



# Questions Answers