

Longview Power- An Advanced Supercritical Coal Plant

prepared for the

West Virginia Governor's 2012 Energy Summit

December 10, 2012



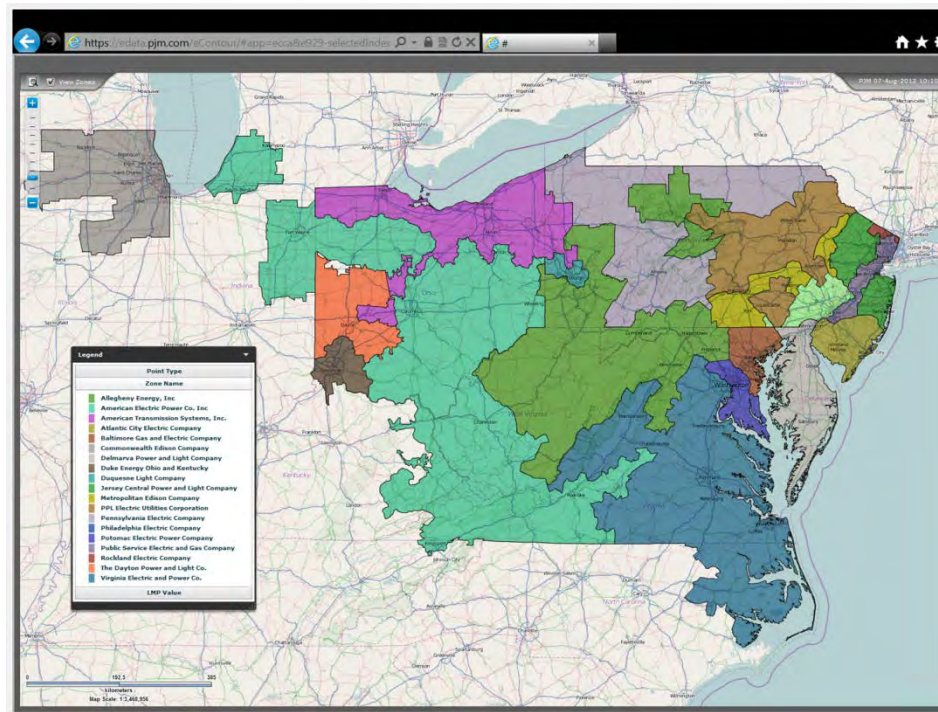
Longview Power Overview



- 769 MW gross (695 MW net)
- Advanced supercritical pulverized-coal boiler
- Near Morgantown, West Virginia.

- Permitting for the project started in 2003
- Construction started in 2007
- Completed in December, 2011

Longview Power Overview



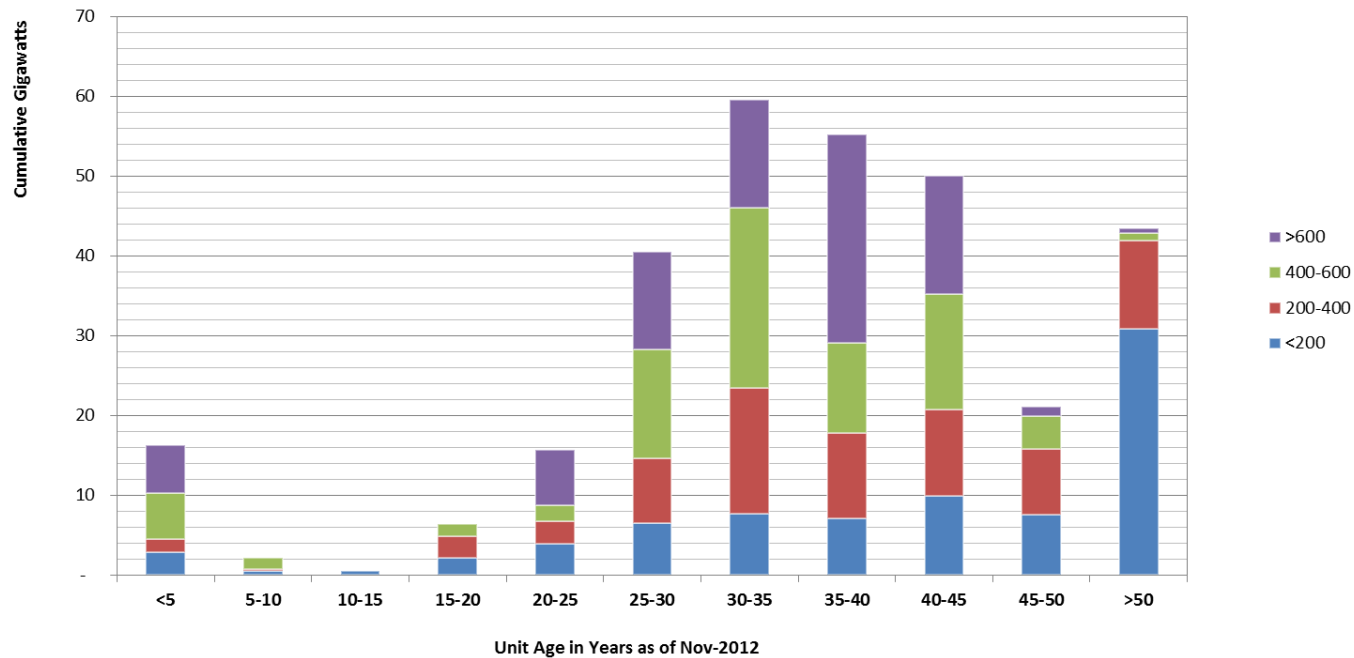
- The total project cost is approximately \$2.0 billion – the largest private investment in WV history.
- The project is owned by Longview Power which is majority owned by GenPower Holdings, L.P. (GenPower).
- Longview Power is located in the PJM West Power Market.
- Longview is one of the cleanest, most efficient coal-fired power plants in the United States, producing 695 megawatts of electric power.

Best in Class Technology

Longview is among the newest and most technically advanced in the nation.

- 93% of existing coal fleet was built prior to 1989.
- 50% of existing fleet was built prior to 1974.

**Age and Size of Coal-Fired Generating Units
in the United States as of Nov-2012**



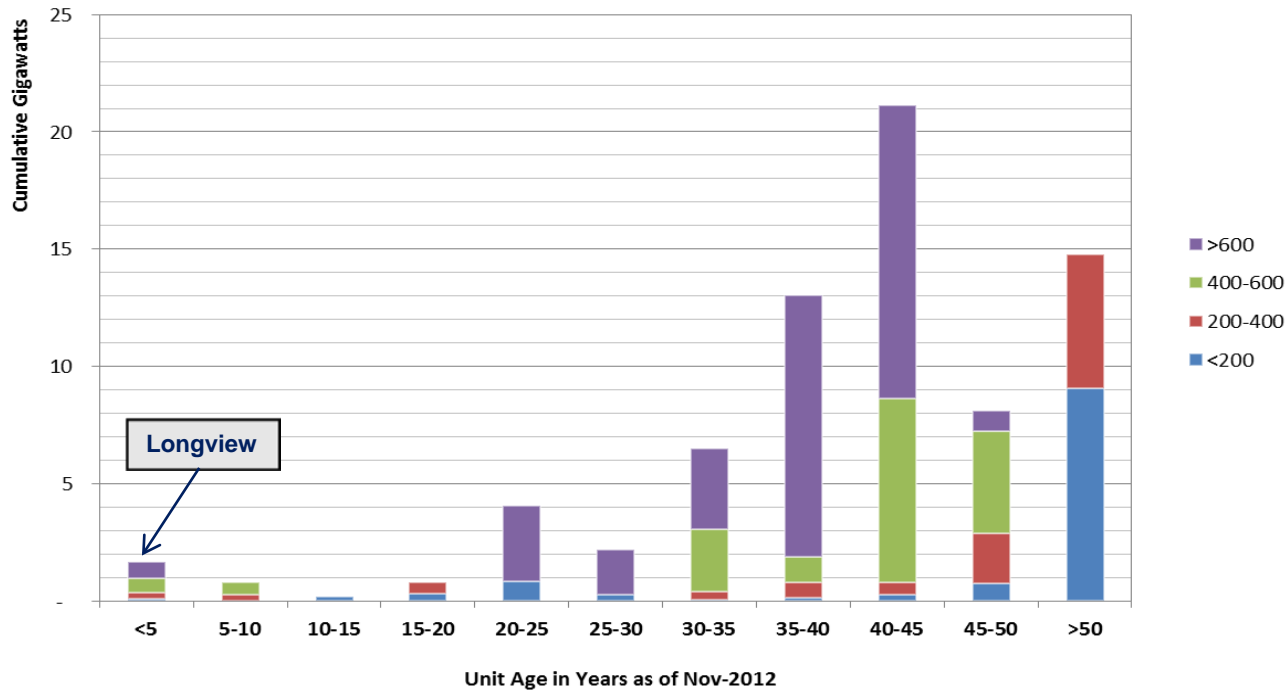
Source: Velocity Suite Nov-2012

Best in Class Technology

Longview is the newest and most technically advanced in the region.

- Average age of PJM coal fleet is 45.6 years.

**Age and Size of Coal-Fired Generating Units
in PJM as of Nov-2012**



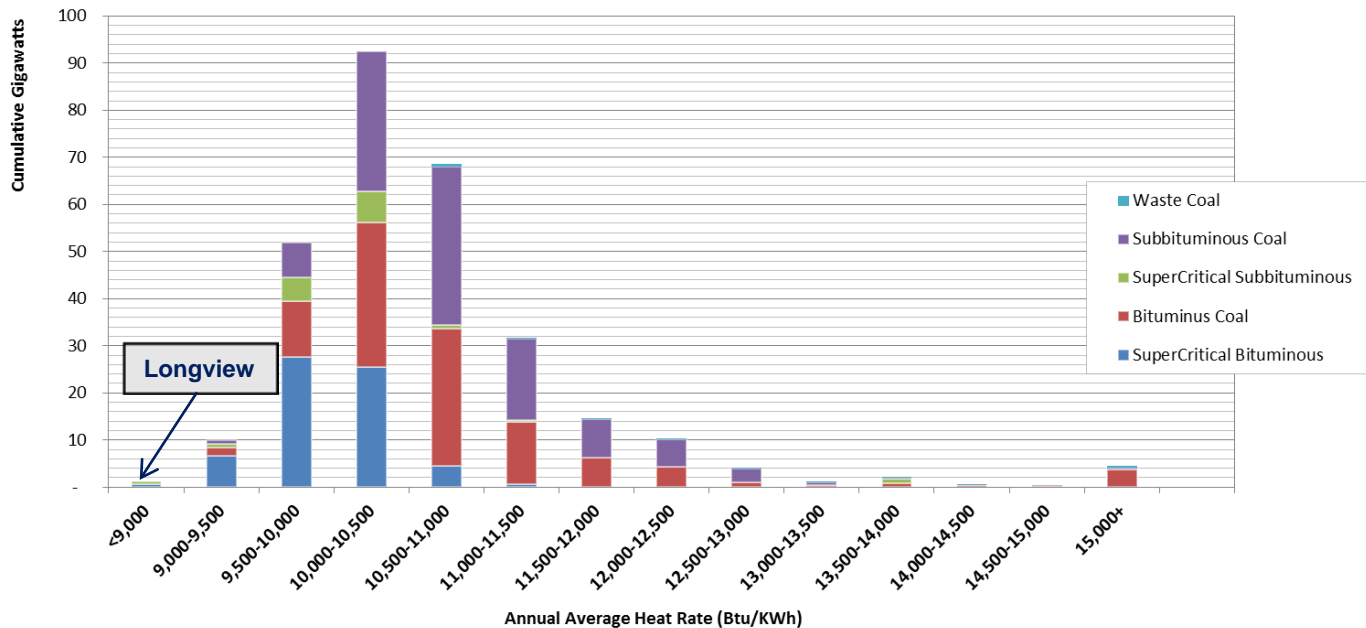
Source: Velocity Suite Nov-2012

Best in Class Technology

Longview is the most efficient coal-fired unit in the nation.

- Electric Light & Power magazine ranked Longview the #1 heat rate in the nation (Nov/Dec, 2012 Industry Report).
- Longview is approximately 17% more efficient than the average (less fuel consumption, less emissions).

Heat Rate, Fuel Type & Technology Class
of Coal-Fired Generating Units in the United States

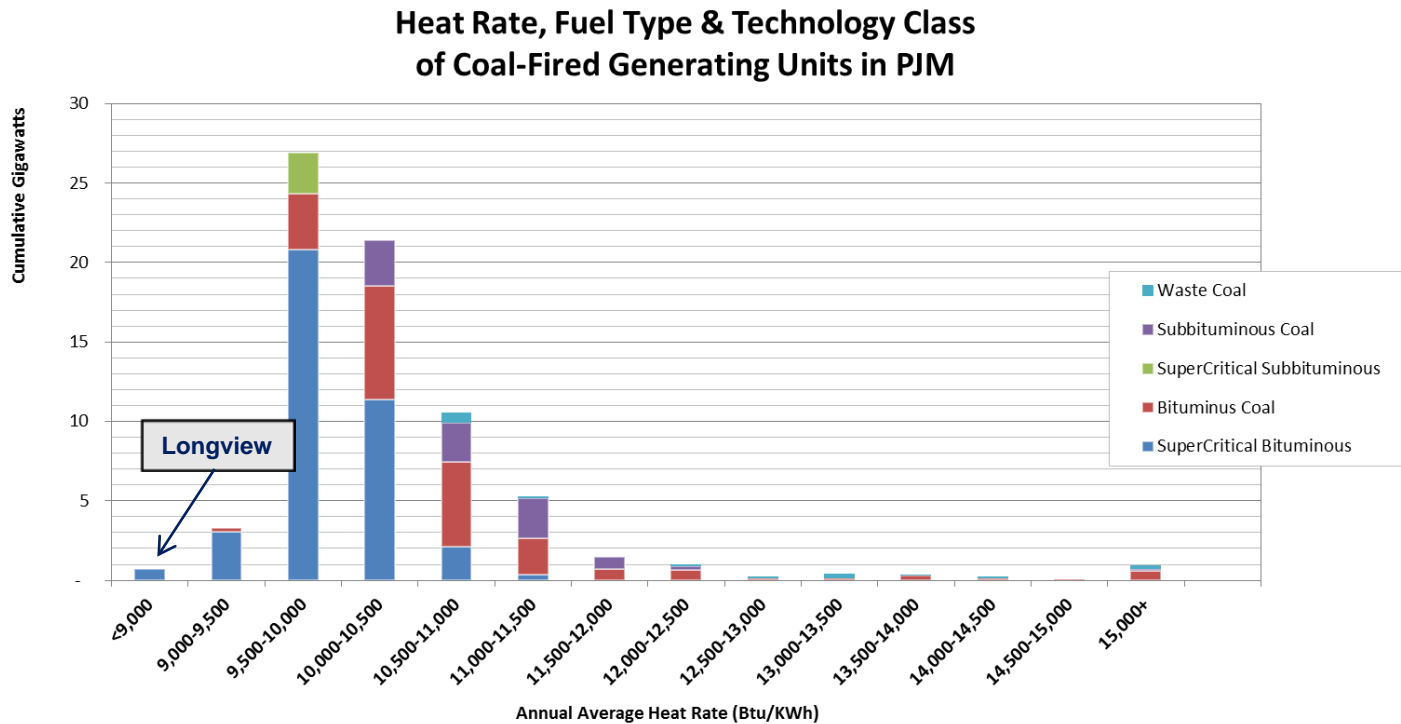


Source: Velocity Suite Nov-2012

Best in Class Technology

Longview is the most efficient coal-fired unit in the region.

- The average PJM net heat rate of the coal fleet is ~10,600 Btu/kwh; Longview is designed to be 8,728.
- Longview is approximately 18% more efficient than the average (less fuel consumption, less emissions).



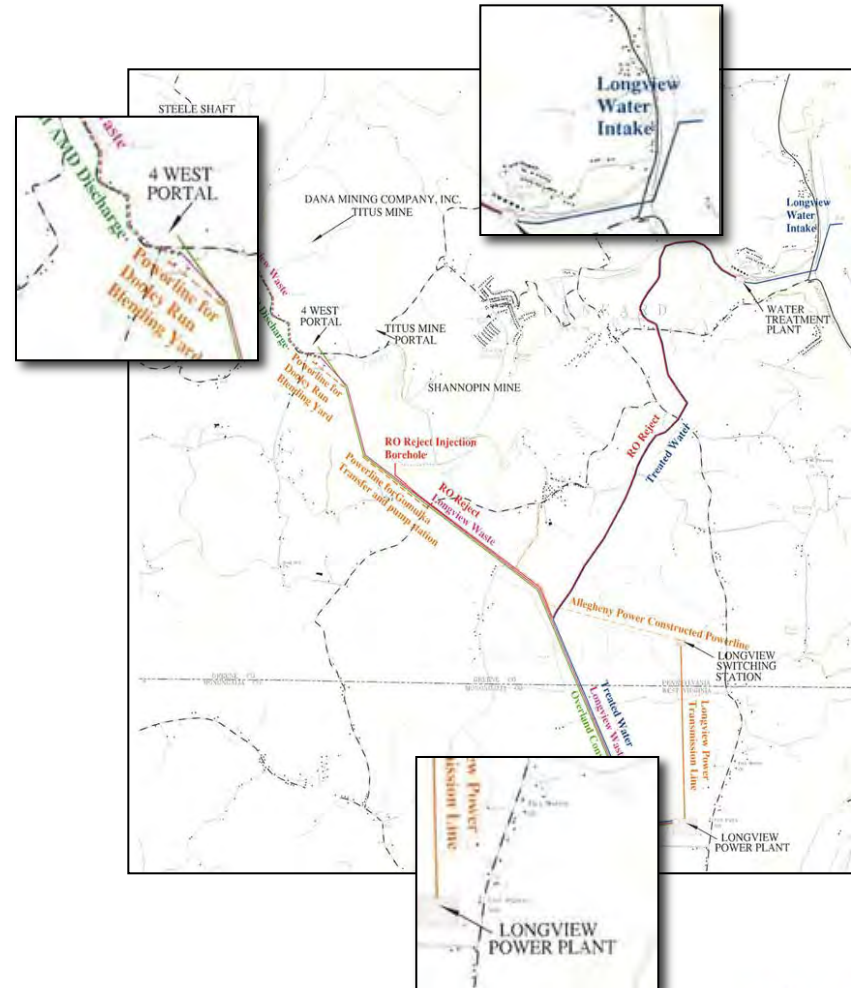
Source: Velocity Suite Nov-2012

Longview Project Efficiencies

Project efficiencies include:

- Proximity to fuel
 - “Mine Mouth” project, fuel delivered by conveyor with minimal washing or prep cost
- Water system design
 - Highly efficient water balance
 - Minimal wastewater discharge, zero discharge to WV
- Local quarries supply limestone
- Proximity to ash disposal
 - ½ mile transportation, no public roads
 - Ash sales for recycling

Collectively, Longview's advanced supercritical boiler efficiency and project efficiencies add up to the lowest cost of dispatch (delivery of electricity) of any pulverized coal plant in the region.

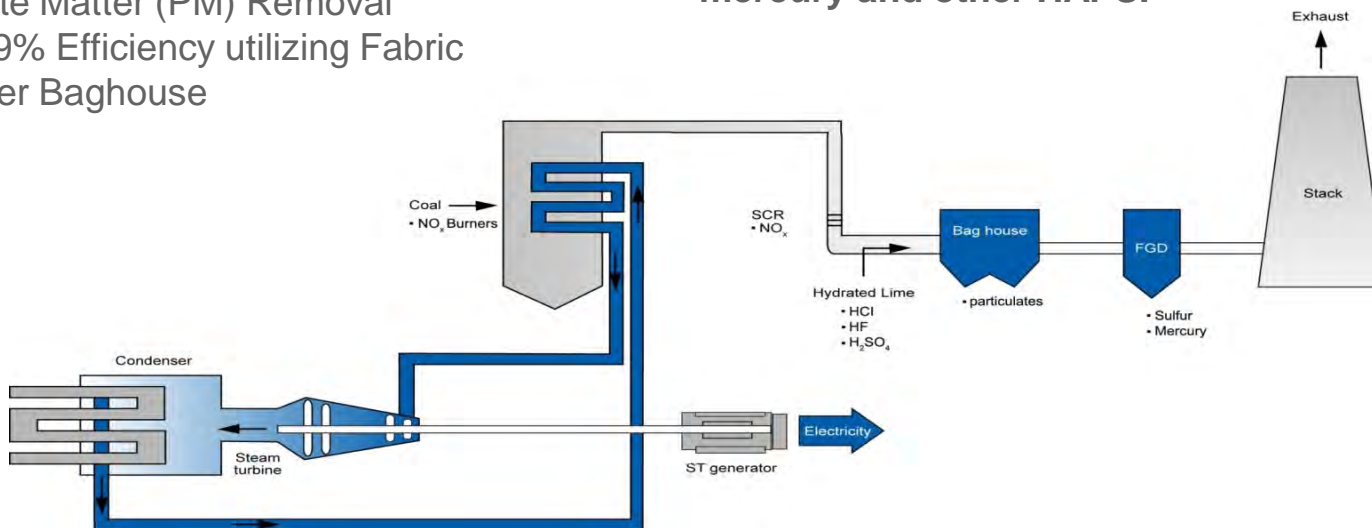


Longview Air Emission Controls

Longview meets or exceeds Best Available Control Technology (BACT) air emissions standards using the following control systems:

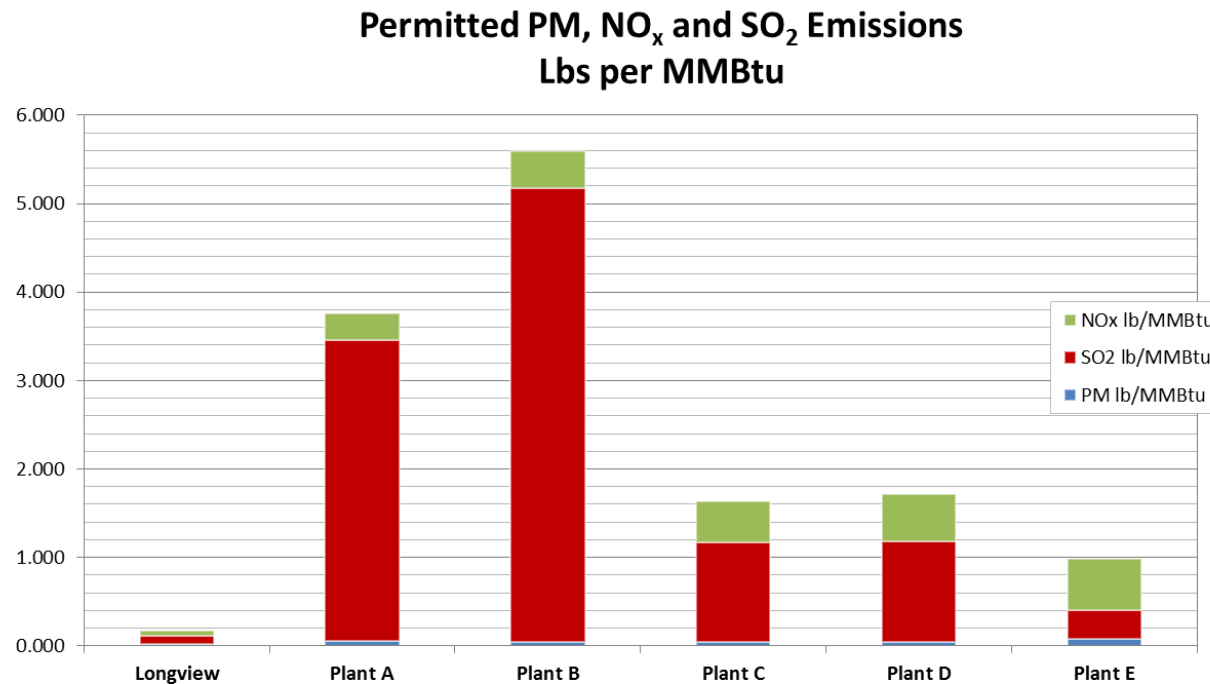
- NO_x Reduction
 - Low NO_x Burners with Overfire Air
 - Selective Catalytic Reduction System (SCR)
- Acid Mist Reduction
 - Hydrated Lime Injection System
- Particulate Matter (PM) Removal
 - >99% Efficiency utilizing Fabric Filter Baghouse
- SO₂ Removal
 - >98% Efficiency with Wet Flue Gas Desulfurization System (FGD)

These combined controls provide for significant removal of mercury and other HAPS.



Longview Air Emissions

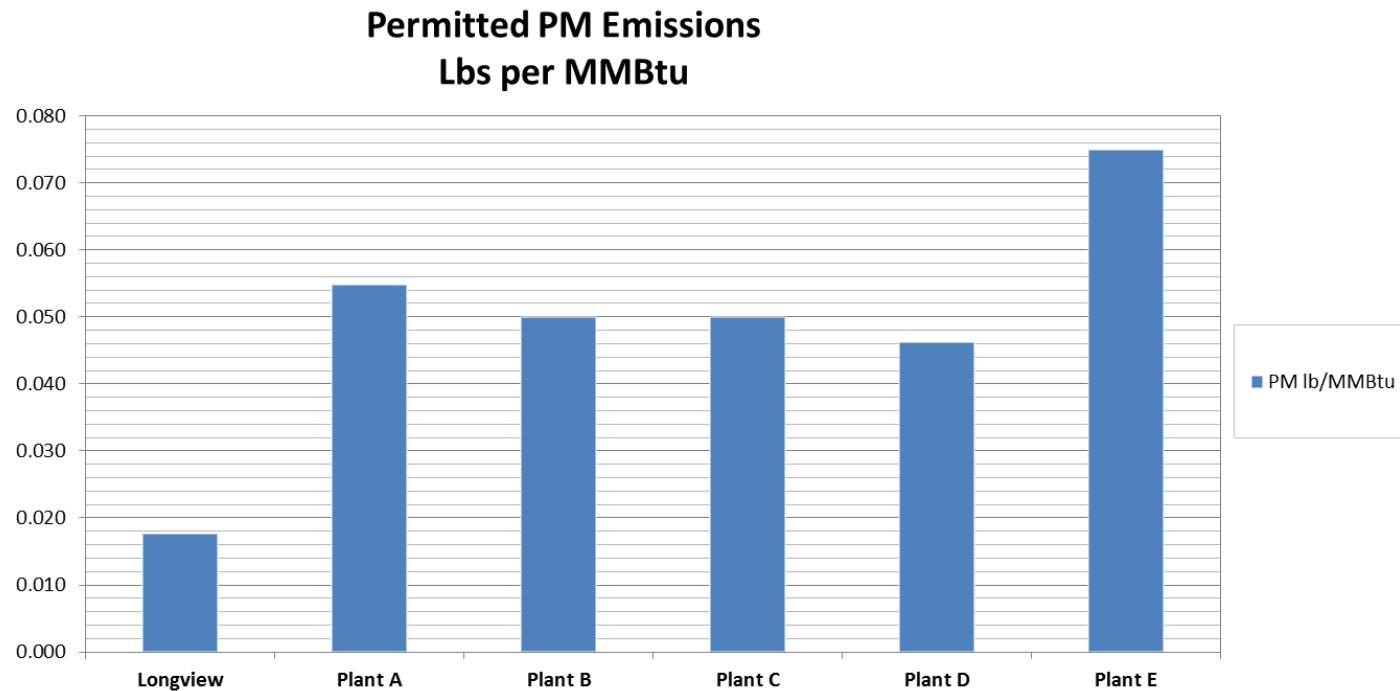
Longview has the lowest coal plant emissions in West Virginia.



Source: Facility Operating and Acid Rain Permits

Longview Air Emissions

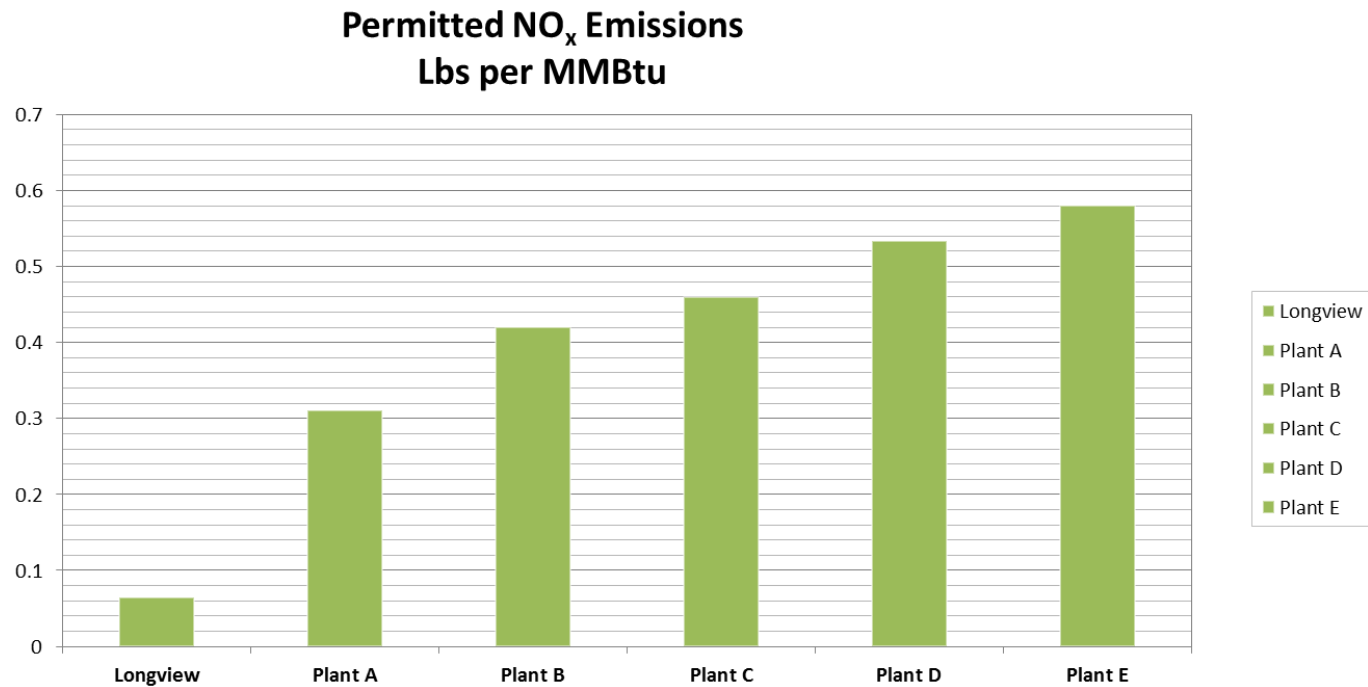
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Longview Air Emissions

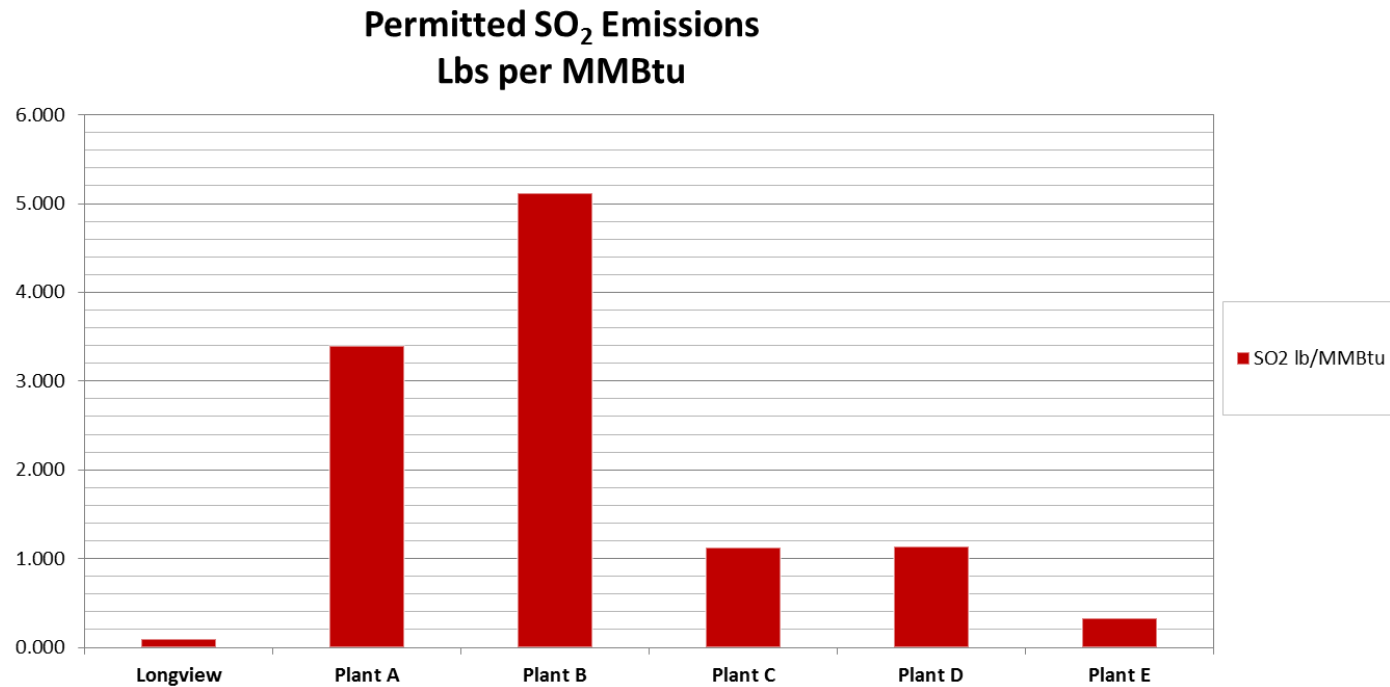
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Longview Air Emissions

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Longview is MATS-Ready

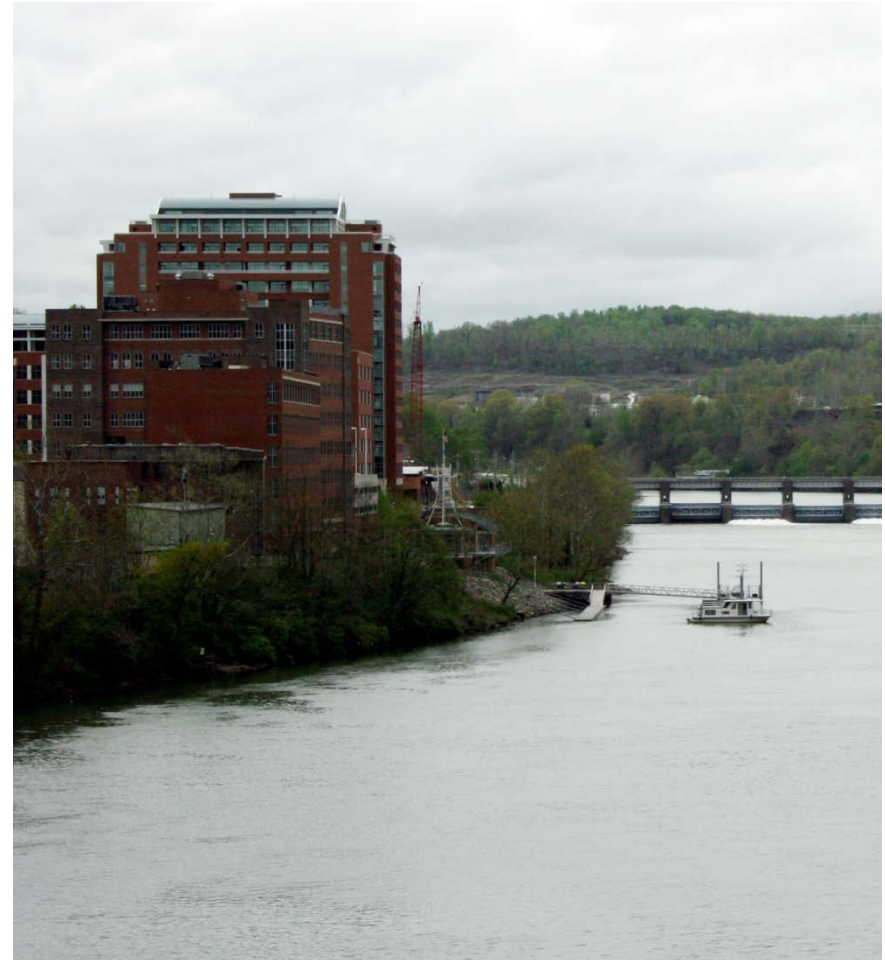
Longview already meets the new Mercury and Air Toxics Standards (MATS) rule for existing plants

- No additional equipment modifications required
- Demonstrated by stack testing and certified CEMS
- MATS-required CEMS already in place for SO₂, Hg and PM
- Longview is an “Area Source” as opposed to a “Major Source” of HAPS
 - Longview facility-wide HAP PTE = 16 tons/year
 - Major Source \geq 25 tons/year



Additional Environmental Benefits

- Longview provides an Environmental Mitigation Fund to support CO₂ reduction and sequestration and stream mitigation programs in the region.
 - \$500,000/year for first 10 years, then \$300,000/year for life of project
- Longview discharges less than 30 gallons of water per minute, which is treated at an EPA award-winning acid mine drainage treatment facility located in Greene County, Pennsylvania. This facility treats up to 7,500 gallons per minute of acid mine drainage that was threatening local streams and the Monongahela River.
- Longview purchases 1.1 SO₂ allowances per ton of emissions, over and above the required federal Acid Rain requirements, to offset potential acid deposition and visibility impacts to nearby Federal Class I Lands.



Economic Benefits to Host Communities

Local coal supplier: Mepco LLC (Mepco)

- Reserve base of approximately 200 million recoverable coal tons in Monongalia County, WV and Greene County, PA
- 2 million tons/yr. to Longview Power
- Over 300 affiliated coal mining jobs
- Annual gross wages and benefits associated with these jobs: \$30 million



In Summary

The Longview Power Project is good for West Virginia and the U.S.

Environmentally

- displacing older technology
- going beyond permit limits
- funding research and partnering with WVU and others to find answers to air, water and land use issues

Economically

- bringing additional revenues to WV
- bringing employment to the Morgantown MSA
- bringing opportunities to area businesses that will support Longview operations

Socially

- providing low cost, highly reliable electricity to the region
- committing time and resources to education
- committing time and resources to community safety and outreach programs
- being a good corporate citizen



Our Energy Future

Longview Power proves that electricity can be generated with coal:

- As a low cost producer in competing with natural gas generation
- In an environmentally friendly way





THANK YOU

