Clean Power Plan
Complying with Clean Power Plan

- U.S. EPA Final Rule covering carbon emissions existing fossil fuel power plants
- PA: 33% reduction by 2030
- Compliance obligation begins 2022
- State plan due September 2016
  - Or submit draft plan with extension request
- Focus on low-income and overburdened communities
- DEP committed to a Pennsylvania-centric plan that serves the state’s economy and maintains our net exporter status
Pennsylvania is the:
• 1st in the nation for electricity exports
• 2nd largest in nation for electric generation
• 2nd in nation for natural gas production
• 2nd in nation for nuclear generation
• 4th in nation for coal production
• 12th in nation for solar capacity
• 16th in nation wind capacity installed
Evolution of Pennsylvania Energy

Primary Electric Fuel Sources

- **2000**: Coal (57%), Natural Gas (36%), Other (Non-Woody) Biomass (1%), Renewable Sources (1%)
- **2010**: Nuclear Power (48%), Natural Gas (34%), Other (Non-Woody) Biomass (15%), Hydroelectric (2%)
- **2017**: Renewable Sources (35%), Natural Gas (35%), Hydroelectric (23%), Petroleum (1%), Nuclear Power (5%)
Webinar Overview

• Overview of Clean Power Plan
• Questions that PA needs to address in formulating its plan
• Our public participation process
• No details on final plan yet
  – Will use comments received to craft draft plan
EPA rule promulgated under Section 111(d) of the Clean Air Act
EPA establishes emissions guidelines for states
States develop plans according to guidelines and to achieve necessary reductions
If state fails to submit plan or the plan is inadequate, EPA will impose a federal plan
Using 2012 as the baseline year

• Rate:
  – 1,682 pounds of CO2 per megawatt-hour

• Mass:
  – 117 million tons of CO2 emissions
Calculation of State Targets

• Best System for Emissions Reduction (BSER)
• U.S. EPA established targets for the state using three “building blocks”
  – Heat rate improvements
  – Dispatching more gas over coal
  – Increased renewable generation
• Only used to calculate target, compliance strategies can be farther reaching
CPP Targets for Pennsylvania

• 2030 Rate-Based Target: 1,095 pounds per megawatt hour
  – Interim: 1,258 pounds per megawatt hour
• 2030 Mass-Based Target: 90 million tons of emissions
  – Interim: 99 million tons
• “Glide Path” Approach
• Credits vs. Allowances
  – Credits are self-generating
  – Allowances are allocated

• Key decisions
  – Allow trading in-state
  – Enter into multi-state agreements
  – Common elements approach
• Rate or Mass?
• Allocating allowances under mass?
• Inclusion of new natural gas plants under mass?
• Suggestions on measuring compliance?
• Should PA allow out-of-state trading? How?
• Energy efficiency as a compliance option?
• Renewables as a compliance option?
• Clean Energy Incentive Program?
• Least-cost options for compliance?
• How can we prioritize indigenous resources?
• How can we maintain a diverse fuel mix?
• Maintain net exporter status?
• Ensure electric reliability?
• Communities experiencing adverse impacts from climate change?
• Communities experiencing economic impacts due to the rule?
• How can we effectively reach out to vulnerable populations?
• Ensure communities are not disproportionately impacted by the state plan?
DEP is accepting comment on how PA should approach a state compliance plan
  – Comments due by November 12, 2015

Comments accepted via:
• eComment
• Email: ecomment@pa.gov
• Mail: PO Box 2063 Harrisburg PA 17105
Next Steps

• Fall 2015 - Comments received will be used to develop draft plan for Pennsylvania

• Spring 2016 - Draft plan issued for public comment w/ public hearings

• Fall 2016 - Submission of final plan to U.S. EPA by September 2016
DEP is seeking comments on how the state should approach its Clean Power Plan submittal

Comments are being accepted through November 12 through eComment

Listening Sessions will be held over the next two months

PA’s goal is to submit a final plan by September 2016
“..is to protect Pennsylvania's air, land and water from pollution and to provide for the health and safety of its citizens through a cleaner environment. We will work as partners with individuals, organizations, governments and businesses to prevent pollution and restore our natural resources.”