



**Statement of Dusty Horwitt, Partnership for Policy Integrity**  
**Pennsylvania Department of Environmental Protection Listening Session on the Clean Power Plan**  
**Pittsburgh, Pa.**  
**September 21, 2015**

Thank you for the opportunity to comment. My name is Dusty Horwitt. I represent the Partnership for Policy Integrity, a nonprofit that advocates for clean energy and provides science and legal advocacy to reduce reliance on polluting energy technologies that masquerade as “clean.”

We will be submitting detailed written comments on Pennsylvania’s implementation plan. Today, I will speak briefly to emphasize that despite many public statements that have been made about how burdensome or far-reaching the Clean Power Plan is, the reality is that the plan’s ambitions are extremely modest – and that’s according to the EPA’s own words and data. The analysis I’m about to describe shows that reducing carbon dioxide emissions from electric power plants in any meaningful way will require reducing emissions immediately and maximizing deployment of zero-emissions renewable energy.

EPA specifies a “glide path” to the final emissions goal in 2030 by first projecting what the state’s emissions will be in 2020, prior to action under the Plan, then setting an initial interim emissions goal to be achieved between 2022 and 2024, a second goal to be achieved between 2025 and 2027, and a third to be achieved between 2028 and 2029.

We calculated what cumulative emissions in Pennsylvania would be in the ten years from 2020 to 2030 if the State sticks to this schedule of emissions reductions. We compared this result to cumulative emissions under a “no-action” scenario where yearly power sector emissions between 2020 and 2030 are constant – in other words, yearly emissions don’t decrease, they just flatline at the projected 2020 level.

We calculated cumulative emissions because CO<sub>2</sub> is a long-lived pollutant that persists in the atmosphere and continues to warm the climate long after it’s emitted. From the atmosphere’s point of view, what matters is the total amount of CO<sub>2</sub> we emit by 2030, and that’s a function of how quickly we lock in emissions reductions. If we can prevent a ton of carbon from entering the atmosphere next year, that’s better than waiting five years.

Looking at the end of the first compliance period, in 2024, the interim target is almost indistinguishable from taking no action at all, requiring the state to reduce emissions by about 600,000 tons of carbon dioxide annually. This is about as much CO<sub>2</sub> as would be emitted by a 68

MW coal plant in a year, which would represent less than one percent of Pennsylvania's installed nameplate capacity.<sup>1</sup>

*Cumulative* emissions from 2020 to 2024 under the Clean Power Plan are less than one-half of one percent lower than under the no-action scenario. That's a minuscule reduction, and when you consider that this is all that's required to happen under the plan *a full nine years from today*, it really highlights the need for the state to do better.

Looking at cumulative impacts over the full ten-year period from 2020 to 2030, we found that even if Pennsylvania cut emissions in the earliest year of each interim compliance period, the state's cumulative emissions would decline by only six percent, compared to the no-action scenario. If the state started earlier, in 2021, and cut emissions by an equal amount each year, cumulative emissions would fall by eight percent by 2030, relative to the no-action scenario. This is still a very small number.

When it comes to reducing carbon dioxide emissions, sooner is better. Our analysis shows that for emissions reductions to be meaningful, Pennsylvania should commit to more aggressive targets and a more aggressive timeline. Further, our analysis highlights the urgent need for energy efficiency and true zero-emissions renewable energy. Given the significant climate-forcing impacts of methane leaks from natural gas drilling and infrastructure, the state should limit the role of natural gas in Clean Power Plan compliance, and given that biomass and waste-burning emit more CO<sub>2</sub> per megawatt-hour than coal, the state should eliminate these technologies as compliance options.

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<sup>1</sup> E-grid data provided by EPA in the documentation for the proposed 111(d) rule shows the 2012 nameplate capacity of Pennsylvania coal-burning facilities that are regulated under the rule at 8,673 MW.

## Early, aggressive action is essential to achieve meaningful reductions in emissions

Pennsylvania's Interim (2022-2029) and Final Goals (2030) (from EPA's PA factsheet, available on PA DEP website)

| PENNSYLVANIA                                 |                                    |                                                                          |                                              |
|----------------------------------------------|------------------------------------|--------------------------------------------------------------------------|----------------------------------------------|
|                                              | CO <sub>2</sub> Rate (lbs/Net MWh) | CO <sub>2</sub> Emissions (short tons)                                   |                                              |
| 2012 Historic <sup>1</sup>                   | 1,682                              | 116,657,632                                                              |                                              |
| 2020 Projections (without CPP)               | 1,486                              | 106,682,061                                                              |                                              |
|                                              | Rate-based Goal                    | Mass-based Goal (annual average CO <sub>2</sub> emissions in short tons) | Mass Goal (Existing) & New Source Complement |
| Interim Period 2022-2029                     | 1,258                              | 99,330,827                                                               | 100,588,162                                  |
| Interim Step 1 Period 2022-2024 <sup>2</sup> | 1,359                              | 106,082,757                                                              | 106,598,711                                  |
| Interim Step 2 Period 2025-2027 <sup>3</sup> | 1,232                              | 97,204,723                                                               | 98,945,311                                   |
| Interim Step 3 Period 2028-2029 <sup>4</sup> | 1,146                              | 92,392,088                                                               | 94,036,616                                   |
| Final Goal 2030 and Beyond                   | 1,095                              | 89,822,308                                                               | 90,931,637                                   |

| Year                                                  | No-action (assumes emissions don't grow after 2020) | EPA Interim Step Approach                            |                                                |                                 | Yearly reduction increment |  |
|-------------------------------------------------------|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------|---------------------------------|----------------------------|--|
|                                                       |                                                     | Reduce to meet interim goals at latest year in block | Reduce to meet goals at earliest year in block | Reduce yearly, starting in 2021 |                            |  |
| EPA's 2020 projection                                 | 106,682,061                                         | 106,682,061                                          | 106,682,061                                    | 106,682,061                     | 1,685,975                  |  |
| 2021                                                  | 106,682,061                                         | 106,682,061                                          | 106,082,757                                    | 104,996,086                     |                            |  |
| 2022                                                  | 106,682,061                                         | 106,682,061                                          | 106,082,757                                    | 103,310,110                     |                            |  |
| Step 1 2023                                           | 106,682,061                                         | 106,682,061                                          | 106,082,757                                    | 101,624,135                     |                            |  |
| 2024                                                  | 106,682,061                                         | 106,082,757                                          | 106,082,757                                    | 99,938,160                      |                            |  |
| 2025                                                  | 106,682,061                                         | 106,082,757                                          | 97,204,723                                     | 98,252,185                      |                            |  |
| Step 2 2026                                           | 106,682,061                                         | 106,082,757                                          | 97,204,723                                     | 96,566,209                      |                            |  |
| 2027                                                  | 106,682,061                                         | 97,204,723                                           | 97,204,723                                     | 94,880,234                      |                            |  |
| Step 3 2028                                           | 106,682,061                                         | 97,204,723                                           | 92,392,088                                     | 93,194,259                      |                            |  |
| 2029                                                  | 106,682,061                                         | 92,392,088                                           | 92,392,088                                     | 91,508,283                      |                            |  |
| 2030                                                  | 106,682,061                                         | 89,822,308                                           | 89,822,308                                     | 89,822,308                      |                            |  |
| <b>Cumulative Emissions, 2020-2030</b>                | <b>1,173,502,671</b>                                | <b>1,121,600,357</b>                                 | <b>1,097,233,742</b>                           | <b>1,080,774,030</b>            |                            |  |
| <b>Cumulative % reduction over no action scenario</b> |                                                     | <b>4%</b>                                            | <b>6%</b>                                      | <b>8%</b>                       |                            |  |

**Early action matters:** Since every ton of CO<sub>2</sub> persists in the atmosphere and continues to exert a warming effect over decades, the sooner the state reduces emissions, the more effective the action will be in slowing climate warming.

**EPA's mandated reductions don't go far enough:** Cumulative emissions reductions in PA compared to a no-action scenario where emissions flat-line from 2020 onward **are only 8%, even under the best case scenario** where the state acts immediately to reduce emissions and reduces them steadily each year.

**Real emission reductions require zero-emissions generation:** Natural gas climate impacts are greater than stack emissions, so its use should be minimized. Biomass and waste-burning, which emit more CO<sub>2</sub> per MWh than coal, should not be permitted as "compliance" measures.