

PACER & PRESS Analysis

How Governor Shapiro’s RGGI 2.0 Plans Will Raise Energy Prices and Jeopardize Reliability

André Béliveau, Senior Manager of Energy Policy

OVERVIEW

- Gov. Josh Shapiro [campaigned](#) on a healthy skepticism of carbon taxes before proposing his own carbon tax scheme. His new energy agenda [centers around](#) the Pennsylvania Climate Emissions Reduction Act (PACER) and the Pennsylvania Reliable Energy Sustainability Standard (PRESS).¹
- PACER represents a massive new tax on power producers that establishes a Pennsylvania-specific carbon cap-and-trade system, similar to the Regional Greenhouse Gas Initiative (RGGI). Data suggests the economic impact of PACER would be around \$499 million in new taxes.
- PRESS proposes amending the Alternative Energy Portfolio Standard (AEPS)—mandating increased percentages of energy from intermittent (unreliable) energy sources, adding additional percentages for battery storage and “low emission” fuels. Implementing PRESS would require cutting grid reliability essentially in half.
- PACER and PRESS, together, would raise taxes and electricity bills, eliminate energy sector jobs, arbitrarily limit energy production, and jeopardize the reliability of our electric grid. Notably, Shapiro’s planned rebates to ratepayers tacitly admit an increase in energy costs under his new agenda.
- Pennsylvania’s energy industry leads the way in reducing emissions while increasing generation, but federal and state policies threaten this success. Lawmakers should consider adopting an energy-source-neutral plan prioritizing grid reliability, adequacy, and affordability.

PACER IS A SOLUTION IN SEARCH OF A PROBLEM

- PACER is a cap-and-trade or “carbon tax” initiative that would set strict emissions limits on the power-producing industry. The proposal is Shapiro’s [answer](#) to “doing nothing is no longer an option” regarding emission reductions. Yet, facts prove Pennsylvania already has a solid track record of reducing emissions while increasing production without destroying jobs or imposing energy taxes.
 - The Independent Fiscal Office (IFO) recently [released data](#) demonstrating that the Pennsylvania power sector has reduced carbon emissions while expanding power generation.
 - IFO figures show Pennsylvania’s CO2 emissions decreased by 10.8 percent from 2022 to 2023—the most significant year-over-year decrease since the 1990s.² The IFO credits this decrease to the state’s transition from coal to natural gas.

- PACER is an unnecessary tax scheme that would punish the very industry providing cleaner, more reliable energy.
- PACER, patterned from the RGGI multistate cap-and-tax program, represents a “Pennsylvania only” proposal. The Commonwealth Court ruled Pennsylvania’s entrance in RGGI, under former Gov. Tom Wolf’s executive order, an [illegal tax](#), a decision which Shapiro has [appealed](#). Due to its RGGI affinity, PACER would likely incur similar economic hardships and negative job impacts.
 - While no official fiscal note exists for PACER, the [IFO estimated](#) that RGGI would collect about \$800 million in new carbon taxes redistributed to government agencies and [special interests](#).³
 - Economic models calculate that RGGI would increase residential electric bills by [30 percent](#) and threaten over 22,000 jobs in Pennsylvania’s energy sector.
 - Some [early data](#) suggest that the economic impact of PACER would be around **\$499 million in new carbon taxes**.⁴
 - Shapiro’s proposal includes rebates to ratepayers (70 percent of revenues) that he says would save money, a tacit acknowledgment that his agenda would increase energy costs. Without PACER, there would be no need for the rebates.
 - Meanwhile, PACER would funnel the remaining 30 percent of extracted revenue into a state bureaucracy for slated “clean energy” priorities.⁵

PRESS WILL PUSH PENNSYLVANIA TOWARD A GRID RELIABILITY CRISIS

- PRESS seeks to increase the amount of intermittent or unreliable energy sources necessary to meet AEPS standards.
 - Current [AEPS](#) standards mandate that [18 percent](#) of electrical energy be sold from alternative energy sources, eight percent of which are traditional intermittent renewable sources like solar and wind.⁶ PRESS increases the number of intermittent sources to 35 percent (but also adds nuclear and nuclear fusion technology).
 - Additionally, PRESS makes further carveouts for battery storage and hydropower at 10 percent and “ultra-low emission” fuels at 5 percent (the proposed plan did not specify in detail what would constitute as “ultra-low emission”) for a total of 50 percent of electrical energy to come from AEPS sources.⁷
 - Adding nuclear power, including small modular nuclear reactors (SMR) and nuclear fusion, is a positive addition to the AEPS, as nuclear power is the most reliable zero-carbon emitting source. However, permitting and other regulatory burdens make developing nuclear technology cumbersome and costly. Thus, PRESS, as proposed, prioritizes intermittent renewable sources over more reliable, baseload nuclear sources.
- Mandating more intermittent sources and artificially incentivizing the market to produce more intermittent sources threatens electric grid reliability. Additionally, such increases in intermittent sources raise energy costs.
 - The electric grid, by design, accepts dispatchable and baseload energy sources.
 - Dispatchable means on-demand sources that peak up or turn down to keep the lights on.

- The U.S. Energy Information Administration [defines baseload](#) as “the minimum amount of electric power delivered or required over a given period of time at a steady rate.”
- Examples of baseload and dispatchable power sources are coal, natural gas, and nuclear.
- Renewables are intermittent power sources, meaning they are not dispatchable and cannot provide baseload power. Thus, they are not as reliable or able to keep the lights on without backup dispatchable sources.
- While renewables serve as a valuable part of grid diversification, mandating their use presents many challenges. The need for increased battery storage infrastructure and grid modifications or upgrades [increases](#) the onboarding expenses for renewables to the grid, raising energy costs. And dispatchable and baseload sources will need to remain on the grid for backup.
- Overall, onboarding large amounts of renewables to the grid, as proposed in PRESS, negatively impacts energy costs and reliability.
- Currently, Pennsylvania produces enough dispatchable energy to keep the lights on, but PRESS and other state and national attempts to increase intermittent generation threaten reliability.
 - According to the IFO, Pennsylvania’s current power generation mix includes 96 percent from dispatchable and baseload sources (59 percent natural gas, 32 percent nuclear, and 5 percent coal).⁸ That is exceptionally good for reliability. Yet, implementing **PRESS would require cutting reliability essentially in half.**
 - The Pennsylvania-New Jersey-Maryland Interconnection (PJM), the grid manager across our commonwealth plus other states in the region, has [expressed concern](#) about the inadequate replacement of retiring thermal power generation and future [capacity](#) replacement.⁹ PRESS would continue these negative trends toward grid instability and unreliability.
 - A [recent study](#) from Quanta Technology says PJM baseload power loss with increased demands puts Pennsylvania at higher risk for blackouts under extreme weather conditions. The research, conducted ahead of the influence of a Pennsylvania cap-and-trade emissions program, writes: “Analysis shows a potential system loss of load of as much as 13,900 megawatts (MW) during extreme winter peak demand.” The report adds, “Maintaining adequate resources will be a challenge for the PJM system in the future when the grid is likely to be operating under abnormal conditions.”¹⁰

CONCLUSIONS

- PACER and PRESS would increase energy costs, threaten energy sector jobs, and increase the potential for our electric grid to become unstable and unreliable.
- The Pennsylvania power sector is reducing emissions while increasing generation. However, national and state policy trends, like RGGI, PACER, and PRESS, threaten this progress and our electric grid's future stability and reliability.
 - Recent [polling reveals](#) that RGGI and RGGI-like programs are wildly unpopular among Pennsylvania voters. Nearly two out of three surveyed oppose RGGI.¹¹
- The General Assembly should consider energy-source-neutral policies that prioritize reliability and affordability. Additionally, the General Assembly should consider policies that ensure equal baseload

and dispatchable power generation to replace retiring baseload and dispatchable facilities, including removing regulatory burdens that negatively impact generation replacement.

¹ Pennsylvania Office of the Governor, "Governor Josh Shapiro's Energy Plan Builds on Pennsylvania's Legacy of Energy Leadership by Protecting and Creating Energy Jobs and Lowering Electricity Costs for Consumers," press release, March 13, 2024, <https://www.governor.pa.gov/newsroom/governor-josh-shapiros-energy-plan-builds-on-pennsylvanias-legacy-of-energy-leadership-by-protecting-and-creating-energy-jobs-and-lowering-electricity-costs-for-consumers/>.

² Jesse Bushman, "Pennsylvania Electricity Update," March 7, 2024, Pennsylvania Independent Fiscal Office, http://www.ifo.state.pa.us/download.cfm?file=Resources/Documents/Electricity_Update_2024.pdf.

³ Matthew Knittel, Testimony on RGGI Modeling Assumptions: Joint Hearing of the Senate Environmental Resources and Energy Committee and Community, Economic and Recreational Development Committee, March 29, 2022, (as director, and on behalf of the Pennsylvania Independent Fiscal Office), http://www.ifo.state.pa.us/download.cfm?file=Resources/Documents/IFO_Testimony_RGGI_Nov_4_2022.pdf; Commonwealth Foundation, "Corporate Welfare in the 2024–25 Budget," March 7, 2024, <https://www.commonwealthfoundation.org/research/corporate-welfare-2024-25-pa-budget/>.

⁴ Power PA Jobs Alliance, "Statement in Response to Governor Shapiro's 'Major Energy Announcement,'" March 13, 2024, <https://twitter.com/PowerPAJobs/status/1767959886032175563/photo/1>.

⁵ Pennsylvania Office of the Governor, "Governor Josh Shapiro's Energy Plan."

⁶ 52 Pa. Code § 75.61,

<https://www.pacodeandbulletin.gov/Display/pacode?file=/secure/pacode/data/052/chapter75/subchapDtoc.html&d=reduce>.

⁷ Pennsylvania Office of the Governor, "Governor Josh Shapiro's Energy Plan."

⁸ Bushman, "Pennsylvania Electricity Update."

⁹ PJM, "Energy Transition in PJM: Resource Retirements, Replacements and Risks," February 24, 2023, <https://www.pjm.com/-/media/library/reports-notices/special-reports/2023/energy-transition-in-pjm-resource-retirements-replacements-and-risks.ashx>; Ethan Howland, "Up to 58 GW Faces Retirement in PJM by 2030 without Replacement Capacity in Sight: Market Monitor," Utility Dive, March 14, 2024, <https://www.utilitydive.com/news/pjm-coal-gas-power-plant-risk-retirement-market-monitor/710518/#:~:text=from%20your%20inbox,-,Up%20to%2058%20GW%20faces%20retirement%20in%20PJM%20by%202030,grid%20operator's%20market%20monitor%20said>.

¹⁰ Henry Chao and Hisham Othman, "Ensuring Reliability: A Case Study of the PJM Power Grid," (Raleigh, NC: Quanta Technology, February 2024), 1–2, <https://americaspower.org/wp-content/uploads/2024/02/Quanta-Final-Feb-2024-3.pdf>.

¹¹ Commonwealth Foundation, "Perspectives on Pennsylvania Energy: A Public Opinion Survey" (Conducted by Public Opinion Strategies, March 2024), March 19, 2024, www.commonwealthfoundation.org/pennsylvania-energy-public-opinion-survey/.