



January 29, 2019

Re: Opposition to anticipated “no strings attached” nuclear subsidies bill

Dear Senator:

In the near future, you will likely be asked to support legislation that would establish a new tier for nuclear power in Pennsylvania’s Alternative Energy Portfolio Standards Act (AEPS) but fail to either (i) significantly increase the statute’s renewable energy targets; or (ii) establish a declining cap on carbon pollution from the Commonwealth’s power sector.

On behalf of our **112,000 members and activists** in Pennsylvania, the Natural Resources Defense Council (NRDC) respectfully requests that at this time you **oppose such legislation and decline to co-sponsor it until fundamental and significant changes are incorporated into the legislation.**

NRDC’s Position on Nuclear Power and Nuclear Subsidies

NRDC’s view is that state policymaking concerning nuclear power should have the goal of an orderly and deliberate transition away from nuclear to a safer, more economical low-carbon electric power system based mainly on renewable energy and energy efficiency. In managing this transition, policymakers must ensure both that electricity is affordable for consumers and that the communities and workers whose livelihoods currently depend on nuclear plants have new opportunities for economic development and jobs, after the plants close.¹

Accordingly, NRDC identifies “best practices” for state proposals that subsidize nuclear plants to value the low-carbon power they generate. These practices include:

1. A requirement that plants show severe financial distress as a precondition to receive subsidies;
2. The narrow tailoring of support mechanisms (i.e., so that they account for current market conditions), accompanied by a finite time horizon to prevent the establishment of an entrenched subsidy;
3. A binding and declining cap on carbon emissions;
4. Policies to significantly scale up energy efficiency and renewable energy;

¹ NRDC’s position on state subsidies for nuclear power is set forth at length in our issue brief, *Transitioning Away from Uneconomic Nuclear Power Plants*, available [here](#).

5. Conditioning support for uneconomical nuclear power plants on a commitment to better manage the toxic waste they house onsite; and
6. Mechanisms to aid the workers and communities that will be affected when a plant closes.

Our position is based on three core considerations.

- First, it is critical that we – the United States and rest of the world – reduce our greenhouse gas emissions by *at least* 80 percent by 2050 to avoid the worst impacts of climate change.
- Second, although nuclear power has beneficial low-carbon attributes, it also comes with significant safety, global security, environmental, and economic risks. Until these risks are properly mitigated and the complete nuclear fuel cycle is sufficiently regulated, nuclear power should not be a leading strategy to diversify America’s energy portfolio and reduce carbon pollution.
- Third, based on analysis performed by NRDC in 2017,² the most cost-effective way for the United States to cut greenhouse gas emissions 80 percent by 2050 is to aggressively ramp up our use of energy efficiency and renewable energy while minimizing our use of both fossil fuels *and* nuclear power.

Cutting Carbon and Creating Jobs in Pennsylvania’s Power Sector

In November 2018, the General Assembly’s nuclear caucus issued a report that offers three rationales for providing financial support to nuclear plants in Pennsylvania: the thousands of jobs that these plants support; the low-carbon electricity they generate; and the notion that nuclear power is necessary for “grid resilience and reliability.”

While the idea that nuclear power is essential to reliability or resilience is false,³ it is true that the Commonwealth’s nuclear plants both support good-paying jobs and currently generate most of its low-carbon electricity. **That said, a bill that merely props up uneconomical nuclear plants without putting Pennsylvania firmly on a path to continuing decreases in carbon pollution and a growing clean energy economy, is not a climate bill. Nor, in the long run, is it a good jobs bill either.**

With respect to climate, keeping nuclear plants online may prevent them from being replaced by fossil generation in the short term – **but the key question is what will replace them in the long run.** While solar and wind energy paired with battery storage is increasingly the cheapest form of generation in the U.S., the absence of a price on carbon in the markets run by the PJM

² See *America’s Clean Energy Frontier: The Pathway to a Safer Climate Future*, available at <https://www.nrdc.org/sites/default/files/americas-clean-energy-frontier-report.pdf>

³ The operators of nuclear and coal plants have both argued that these plants provide irreplaceable “baseload” electricity, but this claim has been repeatedly debunked. See, e.g., PJM Interconnection, *PJM’s Evolving Resource Mix and System Reliability*, available at <https://www.pjm.com/~media/library/reports-notice/special-reports/20170330-pjms-evolving-resource-mix-and-system-reliability.ashx> (March, 2017), and Grid Strategies, LLC, *A Customer-Focused Framework for Electric System Resilience*, available at <https://gridprogress.files.wordpress.com/2018/05/customer-focused-resilience-final-050118.pdf> (May, 2018).

Interconnection,⁴ along with other market barriers, make it harder for renewables to compete in Pennsylvania. As a result, the Commonwealth is experiencing a massive build-out of natural-gas-fired generation, which – though less polluting than coal – still emits enormous quantities of climate pollution, especially when methane leaks during gas production activities are taken into account. **To ensure an ongoing decrease in carbon pollution from the power sector, Pennsylvania needs a declining cap on emissions with market mechanisms for trading and pricing, along with ambitious energy efficiency and renewable energy goals.**

Regarding jobs, as the unanimously-passed Senate Resolution 420 of 2018 noted, “the clean and renewable energy sector is a growing part of this Commonwealth's economy, growing at a current rate of more than 2% annually, and has been a key driver of economic growth in Pennsylvania in recent years with the number of jobs in the clean and renewable energy sector in Pennsylvania now standing at more than 86,000.”⁵

To a large extent, this growth is due to rapidly declining costs for renewables and the fact that Pennsylvanians are increasingly demanding cleaner and more efficient energy.⁶ But as comparisons between the Commonwealth and other states show,⁷ energy policies matter. A cap on carbon pollution from the power sector, together with stronger renewables targets in the AEPS,⁸ stronger efficiency standards, and strategic public- and private-sector investments, would stimulate demand for clean energy and create tens of thousands of new jobs in manufacturing, construction, among other fields, and spur much-needed economic development to areas of Pennsylvania that urgently need it.

Simply put, any nuclear power bill that does not prioritize policies that support the clean and renewable energy sector, and ensures we cap and cut power sector carbon pollution, is myopic

⁴ Until 1996, almost all of Pennsylvania's electricity was generated by utilities that operated as regulated monopolies under the supervision of the state Public Utility Commission. In 1996, Pennsylvania enacted the Electricity Generation Customer Choice and Competition Act, 66 Pa.C.S.A. §§ 2801-2815 (better known as the “Competition Act”), which required utilities to spin off their power plants to separate companies. Now, “merchant” power companies compete against each other to sell electricity on the wholesale markets operated by the PJM Interconnection. By most accounts, the Competition Act's “restructuring” or “deregulation” of Pennsylvania's power sector has largely succeeded in its main goal: lowering electricity costs for Pennsylvania consumers. **But PJM's markets, as they are currently designed, favor coal and gas plants over renewables and nuclear because they do not put any price – let alone a price consistent with the social cost of carbon – on carbon pollution. The markets instead “externalize” the economic and public health costs of plants that burn fossil fuels onto consumers (and governments) and enable coal and gas plant operators to reap windfall profits.**

⁵ For a breakdown of these jobs, see Environmental Entrepreneurs' 2018 Clean Jobs report, available at <https://www.e2.org/cleanjobspa/>

⁶ According to a March, 2018 Franklin and Marshall poll, 69% percent of Pennsylvanians believe it is “more important for Pennsylvania to pursue energy policies that prioritize the availability of renewable energy such as solar and wind” than to prioritize the extraction of gas and other fossil fuels. See <https://www.fandm.edu/uploads/files/708725106986767486-f-m-poll-release-march-2018.pdf>

⁷ Maryland and New Jersey, with their high renewable energy goals (25 percent by 2020 and 50 percent by 2050, respectively), both have far more than 1,000 clean energy jobs per 100,000 residents, while Pennsylvania has fewer than 700. See <https://cleanjobscount.org/impact-state/>

⁸ For an overview of the AEPS in its current form, see NRDC's blog *Pennsylvania's Renewable Energy Goals are not in the Super Bowl*, available at <https://www.nrdc.org/experts/mark-szybist/eagles-are-renewable-energy-winners-pennsylvania-isnt>

and regressive. We urge members to embrace forward-looking policies that will transition Pennsylvania to a lower-carbon future and clean-energy-based economic development.

For all these reasons, we respectfully request that you oppose any legislation that solely establishes a new tier for nuclear power in Pennsylvania's AEPS without significantly increasing renewable energy targets, further expanding the state's successful energy efficiency programs, and establishing a declining cap on carbon pollution from the state's power sector. **And we urge you, when legislating energy policy – as well as other policies that affect Pennsylvanians' economic and energy futures, especially fiscal and labor policy – to ensure that energy is affordable and increasingly cleaner for all Pennsylvanians, no matter their zip code.**

We look forward to continuing to work with the General Assembly, the Governor, relevant state agencies, and other stakeholders to chart a truly clean and sustainable energy future for the Commonwealth. Meanwhile, please do not hesitate to contact me if you have any questions or would like to discuss the issues raised in this letter.

Thank you very much.

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