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HB363: Clean and Renewable Energy Standard (CARES)
Economic Matters Committee Hearing
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UNFAVORABLE

Nuclear Information and Resource Service (NIRS) is based in Takoma Park, Maryland. Since 1978, we have served as a national center for organizations and individuals concerned about nuclear power, sustainable energy, radioactive waste, and the environmental and public health effects of radiation. We provide policy expertise and informational resources and we monitor policy developments on the national and state levels. Our mission is to advance a rapid, equitable, and socially just transition to a nuclear-free, carbon-free sustainable energy supply; to advocate for responsible and environmentally just solutions to radioactive and toxic waste; and to assure the greatest possible protections from the health and environmental effects of radiation.

Maryland has the opportunity to achieve a safe, sustainable, healthy, affordable energy future, and build a robust and dynamic clean energy economy before the youngest Marylanders graduate high school. We can provide thousands of good jobs to families, making sure that our children grow up breathing clean air and drinking clean water, that their parents never have to choose between paying the rent or keeping the heat on, and that their homes and communities are as safe and secure as possible from extreme weather, sea-level rise, and the environmental pressures of the changing climate. We can do all this by making the right choices – and adopting the right policies – now.

But we will not be able accomplish any of that with HB363. This legislation is a collection of fundamentally flawed policies, which would only result in continued reliance on dirty energy sources and prevent Maryland from meeting our climate, energy, and economic goals. You will hear from many others today, detailing these concerns. I am going to focus on two, in particular: the promotion of new nuclear reactors, and the provision to include a "credit" for aging nuclear reactors within the Clean and Renewable Energy Standard targets.

HB363's inclusion of a "credit" against the CARES targets for existing nuclear power plants is especially problematic. The bill replaces the existing Tier 1 renewable portfolio standard and its annual targets with a CARES target, but increased by 25 percent from 2021 forward. However, Section 7-704(f) allows for a deduction in this annual CARES target equal to the average amount of electricity produced by "nuclear generation assets connected to the distribution system in the state." This provision would be toxic to Maryland's renewable energy and climate goals:

- **HB363 places a perpetual cap on renewable energy in Maryland.** The purpose of the RPS is to develop new, environmentally sustainable energy sources. Simply "crediting" currently operating reactors does nothing to reduce emissions in Maryland, but building a cap on new energy sources into the CARES targets would only create obstacles to developing the real climate solutions we need.
- **HB363 opens the door to expensive and counterproductive subsidies for old nuclear power plants.** The bill does not include any provisions for how Maryland would meet the CARES targets if Exelon were to decide that a nuclear power plant were not profitable enough to continue operating. This would leave the state in a position to subsidize the

nuclear plant, or else fall short of the CARES targets. Exelon has exploited such concerns in other states to extract massive ratepayer subsidies. Such subsidies for nuclear reactors in other states have proven to be extremely costly, diverting billions of consumer dollars that could be spent on cost-effective climate solutions, like energy efficiency, solar, and wind.

HB363's nuclear deduction could also eliminate Tier 1 entirely for several years, and damage the entire renewable energy industry for over a decade. The provision to restrict eligibility to nuclear power plants connected to the distribution in Maryland applies not only to the Calvert Cliffs Nuclear Power Plant on Chesapeake Bay. It would also include Exelon's Peach Bottom Nuclear Power Plant just north of the border in Pennsylvania. Peach Bottom is connected to Maryland's distribution system by a transmission line directly from its switchyard across the state line to BGE's Conastone Substation in Harford County.

If this provision were adopted, the nuclear deduction would eliminate Tier 1 and all renewable energy (or CARES) credits for at least three years, through 2023. Peach Bottom is a much larger power plant than Calvert Cliffs, generating about 50 percent more electricity. While Calvert Cliffs typically generates about 25 percent of the amount of electricity consumed in Maryland, the two plants together generate over 60 percent. The CARES targets do not reach that level until 2024. That means all Tier 1 RECs, even those currently benefitting existing solar, wind, and other resources, would be eliminated in 2021. It is not clear how many of these existing businesses would survive a sudden cancellation of Tier 1 credits, which are a significant revenue source.

Also, Tier 1 credits would not become available to support new solar energy projects until at least 2026, because existing Tier 1 resources would likely consume them. Existing law reserves up to 6 percent of Tier 1 credits for solar in 2020. So as soon as the REC target exceeds the nuclear deduction, existing solar will likely consume those credits until the CARES target exceeds 66% in 2026. This would likely put local solar installers out of business, and drive much of the rest of the solar industry out-of-state until the middle of the decade. Thereafter, the solar carveout will drive all renewable energy development into just that one sector, until 2030, when solar would reach 14.5 percent of the electricity supply. This not only means that no other renewables would be developed, sell their electricity, or potentially even operate in Maryland during this time. If that were the case fossil fuel generation and electricity sector emissions would likely continue, unabated, and make it difficult, if not impossible, to meet greenhouse gas reduction goals in 2030.

Furthermore, HB363's inclusion of the Conowingo Dam in Tier 1 would likely prevent further renewable energy development until at least 2032. Conowingo generated about 4.6 percent of Maryland electricity in 2018, so no Tier 1 credits would be available for any further development of renewables until the CARES target surpasses 80 percent in 2033. The currently proposed offshore wind projects would be deferred until the mid-2030s, guaranteeing that Maryland will have missed the boat on one of the most promising new energy industries on the east coast.

Similarly, the inclusion of new nuclear reactors in HB363 is counterproductive and misinformed. Constructing new reactors has consistently proven to be costly and wasteful, for decades. Over half of all nuclear reactors proposed in the United States in the last fifty years were cancelled, despite extremely generous subsidies and incentives. In fact, the industry's track record has worsened with time. Since 2007, thirty new reactors were proposed, with generous loans, tax credits, financing, and cost-sharing, as well as a streamlined licensing process. All but two have been canceled.

Before construction even began on any of these proposed reactors, original cost projections were proven to be unrealistic, evidenced by billions of dollars in increases before projects even broke ground. Only four reactors actually began construction: two each in South Carolina and Georgia, using identical designs by Westinghouse, designer of more than half the reactors in the world. By 2017, costs of both projects had ballooned to $25 billion each, and they were more than 5 years behind schedule. South Carolina utilities pulled the plug on Summer 2 and 3, after spending $9 billion and increasing consumers' bills by 20%. Georgia utilities have continued with Vogtle 3 and 4, the costs of which have increased to approximately $28 billion. If the project is completed on schedule, it will have taken 15 years to plan and build. In both cases, utilities would have reduced greenhouse gas emissions far more, far faster, and far more cost-effectively if they had invested in wind, solar, and energy efficiency a decade ago.

The Power Plant Research Program's recent report on nuclear power contains a number of significant errors in its representations and assessment of new reactor designs. While there is much independent research which shows that the feasibility and cost of new reactor designs is unfavorable, PPRP does not seem to have availed itself of it. Nevertheless, the report does note that the designs currently being developed are likely to be even more expensive than those currently under construction, and that they are not likely to be available until after 2030. HB363 pins our hopes on choosing technologies that simply will not meet Maryland's needs.

Maryland does not need nuclear power to reduce greenhouse gas emissions. The costs and performance of renewables have improved dramatically over the last decade, and are on track to continue doing so for the foreseeable future. That is the path we should choose.

We recommend an unfavorable report on HB363.