Remarks of Dave Griffing Vice President, Government Affairs FirstEnergy Solutions

Consumer Affairs Committee (R) Pennsylvania House of Representatives April 8, 2019

Chairman Roae, Chairman Matzie, and distinguished Members of the Committee, thank you for inviting me to speak before you today. I am Dave Griffing, Vice President of Government Affairs for FirstEnergy Solutions, and I am here today on behalf of the nuclear generating facilities in the Commonwealth of Pennsylvania.

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Nuclear power forms the backbone of Pennsylvania's electric generation fleet and its energy economy. Pennsylvania is the second-largest nuclear capacity state in the country, home to nine nuclear reactors at five different facilities across the state. Over 16,000 Pennsylvanians are employed in this industry, which contributes \$2 billion to the Pennsylvania Gross Domestic Product annually in addition to nearly \$70 million in annual state tax receipts.

In addition to being an economic engine for the state, nuclear power is safe, reliable, and clean. Nuclear facilities operate at close to 100% capacity, 24 hours a day, with planned refueling outages occurring only every eighteen to twenty-four months. They avoid fuel supply issues faced by most other generating stations—such as disruptions in the natural gas pipeline network, frozen coal stockpiles, and weather conditions that prevent renewable energy production—that can threaten the reliability of the power grid. And, importantly, the production of electricity using nuclear fission technology produces no air pollution and releases no carbon dioxide emissions.

Two of Pennsylvania's five nuclear plants have announced plans to shut down. Three Mile Island is scheduled to shut down in September 2019, and Beaver Valley is scheduled to shut down in 2021. Both plants are being retired well before their current operating licenses are set to expire, and once these plants are shut down, they will not be brought back into operation. These

two plants are likely foreshadowing future premature retirements, as the other plants in Pennsylvania are on the same trajectory.

Others will try to convince you that these plants are failing to compete and that you should "let the market" decide what happens to them. So let's talk about that market. Pennsylvania participates in a wholesale market called PJM, which is regulated by FERC. That market decides what power is used in Pennsylvania, using rules that decide for you what power your customers receive and what price they pay for it. That market does not consider whether the power plant negatively impacts the seven counties in the state already exceeding air pollution limits. It doesn't account for whether the power plant adds harmful carbon pollution to the air. It doesn't take into account whether the plant has a reliable source of fuel on site. And it doesn't consider what is best for customers over the long term. All it does is pick the power that is cheapest for the next five-minute increment.

Many states, including Pennsylvania, have stepped in to promote a cleaner and more diverse generation fleet. In 2004, Pennsylvania enacted the Alternative Energy Portfolio Standards Act, or AEPS, which provides financial support for 16 forms of clean energy, including wind, solar, and hydroelectric power. But nuclear resources, despite being the state's largest source of clean energy by far, are not eligible for the program.

Because of this, it is not credible to say the plants aren't able to compete – and it borders on insulting to the 16,000 Pennsylvanians who safely support and operate these plants 24/7/365. On one hand, emitting plants get to pollute for free, not bearing any of the costs of the pollution they put into the air and the water. On the other hand, 16 other forms of technology get a payment – some as high as \$55² – from the federal and state government through tax credits and AEPS credits. The result is unsurprising. Nuclear facilities here and elsewhere in the country have both hands tied behind their backs and are facing the prospect of premature retirement.

¹ Bucks, Chester, Delaware, Montgomery and Philadelphia counties are in non-attainment for the 2015 ozone standard and Allegheny, Delaware and Lebanon counties are in moderate non-attainment for PM. These seven counties include 48% of the state's population. https://www3.epa.gov/airquality/greenbook/jnca.html, https://www3.epa.gov/airquality/greenbook/jnca.html, https://www.lung.org/assets/documents/healthy-air/state-of-the-air/sota-2018-full.pdf, p. 141

² PA Solar AEC spot price in 2017 of \$10.67 plus 30% solar ITC. \$55 is also the weighted average PA Solar AEC credit price for credits retired in the year ending 5/31/17.

The impact of losing the state's nuclear facilities cannot be overstated. Nuclear power represents 93% of the commonwealth's zero-carbon electricity. These facilities allow the state to avoid 37 million tons of CO2 annually and prevent significant emissions of criteria pollutants like sulfur dioxide, nitrogen oxide, and particulate matter. Independent experts value these contributions at \$1.6 billion and \$260 million, respectively, per year. If these facilities are lost, they will be replaced primarily by natural gas-fired generators—not wind and solar. Carbon and other harmful emissions will increase. Grid resilience will deteriorate. And costs to consumers will go up—by \$788 million per year, according to the Brattle Group.

The proposed legislation will temporarily avert this outcome and give the federal government and PJM time to work on a permanent solution. The legislation would amend the Pennsylvania AEPS to create a new Tier III AEPS credit program open to nuclear power to go along with the existing Tier I and Tier II AEPS credit programs. This new tier will put nuclear power on equal footing with other clean energy resources in the state. One Tier III credit would be earned for each megawatt-hour of electricity produced by a qualifying resource, and Pennsylvania's electric utilities would be required to purchase these credits from qualifying facilities, as they currently do for wind, solar, waste energy, hydro, and other environmentally beneficial technologies. The Tier III credit price would be tied to the Tier I AEPS credit price but would contain both a floor and a ceiling to provide pricing stability and to protect consumers. In other words, nuclear will get the same credit as Tier I renewables, but unlike Tier I renewables, the Tier III credit price will never go above \$8ⁱ.

The Tier III program would be open not just to nuclear, however. Solar, wind, low-impact hydro, and geothermal energy could all be compensated under Tier III or one of the other tiers, not both. Applicants will have to demonstrate that Pennsylvania's environment would be negatively impacted if the resource were to cease operation, or in the case of a new resource applicant, if the resource fails to come into service. The Pennsylvania Public Utilities Commission will rank all qualifying resources on this basis and will select applicants up to the point at which the combined sum of megawatt-hours of all Tier III resources equals approximately 50% of the electricity distributed by electric distribution utilities in the state. Participating resources would

have to commit to operating for at least six years and would be prohibited from participating in any similar program in other states.

As Pennsylvania and the country transition to a cleaner energy future, we overlook the importance of nuclear power at our peril. Many scientists now agree, no other energy source can provide around-the-clock, carbon-free power on the scale necessary to meet the climate challenges we face. Closure of these facilities will increase your constituents' electric bill, create a generation portfolio dominated by a single fuel source, eliminate any possibility of achieving the Commonwealth's stated environmental goals, eliminate 16,000 highly- skilled jobs and represent a loss of economic vitality for many of our communities. This body is the only entity that can prevent this outcome, and I urge you to do so.

Thank you for your time and attention.

¹ HB11 ceiling is \$7.904, which equals 65% of Average Price of Tier 1 AECs retired year ending 5/31/17 (65% of \$12.16).