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Testimony on Ohio's Nuclear Fleet
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Chairman Holmes, Vice Chair Mathews, Ranking Member Rader, and members of the Ohio House Energy Committee:

My name is Emily Stipe, and I am Director of Federal and Nuclear Policy for Vistra.

Thank you for the opportunity to provide testimony on Ohio's current and future nuclear fleet, highlighting the realities of and opportunities for nuclear development and making recommendations for actions needed to support a nuclear industry that will drive the state's economic development long into the future.

Vistra is a leading Fortune 500 integrated retail electricity and power generation company that provides essential power resources to customers, businesses, and communities from California to Maine. Vistra is one of the largest competitive power generators in the U.S., with a capacity of approximately 45,000 megawatts, or enough to power over 23 million homes, operating in all the major competitive wholesale markets in the country. Vistra is a combination of two words – Vision and Tradition – we are rooted in the tradition of providing reliable power to our customers while having the vision to look forward to new, innovative energy technologies. We maintain a diverse portfolio of generation including natural gas, coal, nuclear, solar, and battery storage. Even prior to our acquisition of the Ohio Perry and Davis-Besse nuclear plants, we were already the largest generator of power in the state. Since adding them to our fleet, we have more than 5,500 MW of capacity across our seven facilities, which include nuclear, natural gas, and coal.

In the nuclear space, we own and operate the second largest competitive nuclear fleet in the country with six reactors across four sites. As I mentioned, two of those sites are located in Ohio, Perry in Lake County and Davis-Besse in Ottawa County, providing over 2,100 MW of carbon-free, baseload power. In 2025, our Perry plant received approval from the Nuclear Regulatory Commission to extend its operating license through 2046 which is an additional 20 years beyond its original license. With that approval, all six reactors in Vistra's fleet have now received license extensions, each approved by the NRC for 60 years of operation. That milestone is not administrative; it reflects rigorous NRC safety reviews and is a direct validation of our operational performance and safety culture, and demonstrates our long-term asset management approach that drove us to purchase these plants. Our fleet is one of the most reliable and consistent in the nation, consistently operating above the average capacity factors for the industry.

In terms of our role as an economic engine in the regions we operate in, we employ 1,550 Ohioans, home numerous retail offices in major metropolitan areas, and serve more than 1.5 million customers across our various retail brands. The economic footprint of our Ohio nuclear plants alone is substantial: Davis-Besse generates over $1.1 billion in annual economic output for Ohio (according to the most recent impact study), contributing hundreds of millions of dollars in tax revenue to local, state, and federal governments. Perry employs approximately 600 full-time staff and 200 permanent contractors in Lake County, and each refueling outage brings an additional 800 to 1,200 skilled workers into the region.

As the electricity space has been quickly evolving and expanding, so too has Vistra, and the most exciting of those developments are taking place right here in Ohio. Earlier this year, we announced that we have entered into 20-year PPAs to provide more than 2,600 megawatts of zero-carbon energy from a combination of three different Vistra nuclear plants to support Meta's operations in the region. Through the agreements:

- Meta is purchasing 2,176 MW of nuclear energy and capacity from the operating Perry and Davis-Besse plants in Ohio;
- Meta is also purchasing 433 MW of incremental nuclear energy and capacity from equipment upgrades to increase generation output (called uprates) at the Perry (Ohio), Davis-Besse (Ohio), and Beaver Valley (Pennsylvania) plants – more than 15% of the contracted capacity announced today will be new capacity added to the PJM region; and
- the electricity generated at the plants will continue to go to the grid for all electricity users.

Importantly, the power output increases to these three plants will be the largest nuclear uprates supported by a corporate customer in the United States. Meta's purchases under the agreements will begin in late 2026, with additional capacity added to the grid through 2034, when the full 2,609 MW of power will be online. The agreements will also grow the local tax base, foster economic development in the region, and protect existing jobs while creating new ones. Over the life of the uprate projects, approximately 3,000 project-related jobs across engineering, construction, and planned outage work are expected, adding to the economic impact around these plants. With the financial certainty provided by the agreements, Vistra will also begin planning for subsequent license extensions at all three plants, which would extend operations of these carbon-free assets for another 20 years. Just a few short years ago, prior to Vistra’s acquisition, these plants were on a path to retirement. We saw their tremendous potential to offer carbon-free, reliable power to the grid, and it has been thanks to the tremendous work of our plant workers and nuclear team, alongside partners like Meta, that we are able to invest in these plants and ensure they are operating and providing for Ohio long into the future.

The ability to enter into agreements like this one is critical for independent power producers (IPPs) like Vistra to have the financial certainty to invest in extending and upgrading our existing generation resources, as well as bring new generation to the grid. As affordability concerns continue to be at the top of Ohioans’ minds, it is important that the risk and cost of new generation is not placed on their shoulders; maintaining that the responsibility of bringing new generation to the grid belong with IPPs and not utilities places that burden on companies and their shareholders, not ratepayers.

Thanks to these deals and other sustained market signals, Vistra and other IPPs are making these investments: PJM, the grid operator for Ohio, is actively processing over 11,000 MW of new high-reliability generation through its Resource Reliability Initiative in order to respond to rapid demand growth in the region. Over 70% of selected projects in PJM's reliability resource initiative (RRI) were located in Ohio or Virginia. Of projects in PJM's reformed queue process, Ohio is second only to Virginia in projects with nearly 14GW with agreements or with studies. The state of Ohio is well positioned to capitalize on this continued success if it remains committed to growth and market dynamics.

Looking to the future, Ohio is part of our potential nuclear expansion strategy. Vistra is actively evaluating development opportunities across multiple Ohio sites which include our existing nuclear plants at Perry and Davis-Besse, former coal facilities within our Ohio portfolio, and other sites in our footprint. This growth spans nuclear uprates (already announced for Perry and Davis-Besse in Ohio), potential large-scale new generation, and/or advanced reactor deployment.

First, uprates are an optimization that results in increasing the electrical output of an existing nuclear power plant. There are a variety of types of uprates, ranging from efficiency and measurement improvements with a less than 2% increase in generation to extended power uprates that involve significant modifications to major pieces of equipment, including generators and turbines, and can result in increases of up to 20%. Given the role that the plant's power level plays in evaluating plant safety, NRC review and approval is required for this type of development, which can take 9-18 months, depending on the complexity of the uprate. The process at the plant generally takes several years to fully implement, evidenced by the timeline for bringing our already announced uprates with Meta onto the grid by 2034. While the review and implementation process for nuclear uprates are complicated and lengthy, uprates are the most cost-effective, timely way to bring new nuclear generation online, utilizing existing infrastructure and interconnection to better meet the timing of projected load growth.

Second, companies can build new large-scale nuclear plants in the same vein as what you currently see in Ohio, with the most popular design being the Westinghouse AP-1000. Building a new large-scale nuclear power plant involves an almost decade-long development cycle with multiple engineering, financial, and regulatory stages, alongside the construction process. Projects begin with site studies and early engineering that can last 1-3 years and cost hundreds of millions of dollars before construction even begins. Developers then navigate the U.S. Nuclear Regulatory Commission (NRC) licensing framework, which usually includes referencing a certified reactor design (the AP1000 design itself was first certified in 2006 and remains licensed through 2046), applying for a Combined License (COL) that authorizes both construction and operation, and undergoing extensive environmental and safety reviews. Once the license is granted, the construction phase for a large reactor generally requires 4-8 years, though the recent projects in the U.S. have experienced delays. Capital costs are extremely front-loaded: a single large reactor can cost $10–15 billion, with billions committed before revenue is generated. Development of new large-scale nuclear plants face significant headwinds: regulatory complexity and documentation requirements; financing risk for such large capital projects; supply-chain constraints for specialized nuclear components; local opposition

and litigation during environmental review; and “first-of-a-kind” engineering challenges that often cause schedule overruns. Even when the reactor design is already certified, developers still face substantial uncertainty around licensing timelines, cost escalation during construction, and long payback periods, which collectively make large nuclear projects difficult to finance and execute. These headwinds are currently exacerbated by the fact that only three new reactors have been built in the 21st century (Watts Bar Unit 2 and Vogtle Units 3 and 4), so the United States has let its nuclear industrial base, nuclear construction expertise, and nuclear workforce become insufficient to produce the efficiencies that regular and repeated nuclear development provides. As more reactors are built, we can develop economies of scale that reduce or remove those headwinds.

Third, the next generation of nuclear reactors is preparing to be brought to market and begin commercial operations. Advanced reactors, whether any type of small modular reactor (SMRs) or micro-reactors, offer the zero-emission and reliability characteristics of large-scale nuclear while improving on the strong safety performance of current reactors. Given the expertise of my fellow panelists on this topic, I won’t go into detail about the actual technology and deployment and will leave that to them. I’ll instead share a few promising characteristics of advanced reactors, regardless of technology: smaller sizes that are easier to transport and store and can be scaled to meet the needs of universities, hospitals, municipalities, or other large loads; potential to be located near existing energy infrastructure; factory construction that can allow for high quality at lower cost; and easy integration with renewable energy sources and backup power, among others.

There are steps that need to be taken to make new nuclear development financially and technically feasible in the near-term in Ohio. I will note that not all of these can be solved exclusively by State actions and require some federal actions as well, but there are certainly steps that can be taken at the state level to contribute to progress towards new nuclear development. And with that I do want to praise Ohio for the steps it has already taken to signal to the market that the state is open for business. At its core, House Bill 15 promotes the retention and development of generation in the state of Ohio by promoting competition and a market-based approach that will keep costs low, drive innovation, and result in the benefits customers are looking for. The competitive landscape demands urgency. Indiana has enacted a 20% nuclear manufacturing tax credit. Tennessee has committed more than $150 million in state funding to nuclear development. Texas established a dedicated Advanced Nuclear Development Fund. Arkansas and Wyoming have passed Construction Work in Progress mechanisms for small modular reactors. Ohio has real assets: the Ohio Nuclear Development Authority established in 2023, Governor DeWine’s $100 million JobsOhio Energy Opportunity Initiative announced in October 2025 that includes SMR site preparation and a nuclear energy center of excellence, and, most importantly, two operating nuclear plants, an experienced nuclear workforce, and available land at former industrial sites that no other state in PJM can match. HB 15 is the right foundation. The steps below build on it. But the window for Ohio to become a first-mover in advanced nuclear development will not stay open indefinitely. States that act now will attract the investment, the talent, and the supply chain infrastructure that defines the next generation of American energy.

Regarding other efforts that need to be pursued to encourage specifically nuclear development:

1. Risk Reduction: This is the most complicated of necessary steps and involves mobilizing the large amounts of capital needed for new nuclear development, meaning favorable financing terms, government financial support, and cost-overrun insurance. In recent years, the United States has built few new nuclear power plants, leaving project execution capabilities below the level needed for reliable deployment. To reduce the financial risks for early projects, the government can play a critical role in protecting ratepayers and customers by helping cover potential cost overruns. Supporting first-mover projects is particularly important, and one effective approach is funding programs that share the costs of developing and demonstrating new technologies or technologies with limited commercial-scale deployment. For example, the state of Texas has established the Advanced Nuclear Development Fund, a funding program specifically to support new nuclear development, providing financial assistance to help offset the risks and costs associated with pioneering nuclear projects. The federal government is deploying its loan authorities through the Department of Energy's Energy Dominance Financing Office to provide financing that would not be available through capital markets. By offering targeted cost-sharing support, such programs encourage innovation while helping ensure the successful deployment of advanced nuclear technologies.
2. Customers Willing to Pay: The investments developers are making in new nuclear are not 5-year investments, they are 30-plus year investments and so there need to be price signals and contracts that can sustain that type of development. Customers, particularly these new large loads coming onto the grid, need to be willing and able to sign long-term agreements to purchase the power from nuclear plants at prices able to justify new build and market prices need to be sustained at a level to support continued operations beyond those contracts. This can also include utilizing the government's purchasing power to enter into power purchase agreements to support new reactors.
3. Nuclear Supply Chain Development: We must establish a secure domestic nuclear fuel supply chain for all steps of that process, including conversion and enrichment in which the US has historically had a severe lack of capacity. The US must also be a leader in used fuel management, solving a longstanding impasse on the handling of spent nuclear fuel and investing in permanent solutions, whether that be recycling and reprocessing technologies or permanent storage. The nuclear supply chain also includes the more standard construction materials for building new plants, concrete and steel plus the industrial components such as switch gears, pumps, cables, valves, pipes, etc.
4. Workforce Development: The states that invest in building the nuclear workforce will be the first to succeed in new nuclear development. We cannot build or operate these facilities without an extremely talented, specialized, and robust workforce. This workforce does not just include nuclear engineers, though we always want more of those. The industry needs skilled tradesmen like pipe-fitters, electricians, and welders; electrical engineers; mechanics; and technical experts like nuclear technicians and operators, alongside a slew of other critical job functions. All of these needs have to be met to enable operation of these new facilities, let alone the specialized construction jobs required to build them. Our Perry and Davis-Besse plants currently employ

hundreds of licensed reactor operators, nuclear engineers, and skilled craft workers which is the exact workforce foundation that new nuclear development requires. Governor DeWine's $100 million JobsOhio Energy Opportunity Initiative includes a dedicated nuclear energy center of excellence for workforce training, and the Ohio Nuclear Development Authority is actively working to expand the pipeline. The state should build on these programs with targeted investments in community college nuclear technician programs, apprenticeship partnerships with the building trades, and university nuclear engineering pipelines. The workers who will build and run Ohio's next generation of nuclear plants are already here. We need to develop and retain them.

You might be asking yourself the important question of why we need to do this, why we need to invest in new nuclear development. In a time when power demand is increasing across the country, region, and state due in part to the build-out of large chip manufacturing facilities, reshoring of industrial activity and the build-out of data centers to maintain the United States' competitive advantage in artificial intelligence, Vistra recognizes the state's need to retain the generation it has, attract new reliable, carbon-free energy generation, while keeping electricity affordable. It is important to emphasize that new generation is necessary to meet the affordability challenge and AI race, but it is just as, if not more, important to protect what is currently on the grid, fully utilizing and optimizing it.

We need to meet the moment in a way that protects affordability and ensures we optimize the balance between energy demand and supply. We are in an uncertain time for how our electricity demand will change. We need improved load forecasting so we know what problem we're solving for: what is the real level of load growth and where it is coming to. We need to get the most out of our existing energy resources because when we look at the demand on the grid, it's really only a handful of hours each year where the market is getting really tight. Optimizing and upgrading what's already on the grid gives us the ability to maintain reliability and the time to get that data right and right-size what we're building. Nuclear uprates and new nuclear development, which can be completed on a more condensed timeframe, are important tools in that effort. Competitive energy generation and a market-based approach will produce the results that Ohio needs to enable its economic development, while also ensuring that Ohio's citizens are not the ones that bear the burden of appropriately meeting this challenge and instead companies like Vistra and its shareholders bear that risk.

Thank you again for the opportunity to testify here today, and I look forward to answering your questions.