

**Energy, Jobs and Progress for Ohio
Substitute S.B. 221**

House Public Utilities Committee

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Governor Ted Strickland

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Chairman Hagan and members of the Committee, my name is Mark R. Shanahan. I serve as Executive Director of the Ohio Air Quality Development Authority, and I also serve as Governor Ted Strickland’s Energy Advisor.

I appreciate the opportunity to share perspectives on Substitute Senate Bill 221 (Sub SB 221) with you. I would like to remind you of our key goals in originally proposing this bill particularly in the advanced energy area, underscore the need for action and instill a sense of urgency.

As a comprehensive policy package, the legislation before you targets three key objectives:

- Protecting today’s jobs by ensuring stable, affordable, predictable electricity prices;
- Creating tomorrow’s jobs by seizing opportunities in the advanced energy sector for which Ohio is well-suited; and
- Empowering Ohio consumers of all classes by modernizing our electric infrastructure and making meaningful energy management tools broadly available.

Although not the primary focus of my comments today, I want to touch briefly on two issues that have been before this Committee. The first is the issue of markets; the second is that of price.

The expert testimony presented to you makes it clear that for every economist—trained or not—there is a definition of “market.” And, as you well know, “market” itself indicates nothing more than the presence of sellers and buyers and the potential for a transaction between them. The “devil in the detail” for markets is always the noun’s modifier. Is it a free market? Is it a regulated market? Is it a monopoly or oligopoly market? Is it a mixed market? Is it a subsidized market? Is it a protected market? Is it a free trade market or a fair trade market? Is it a competitive market?

Whichever one you pick, there follows a number of complex and dynamic additional questions to refine the definition. And each of those can be vigorously debated. The bill before you provides guiding principles for the Public Utilities Commission of Ohio (PUCO) to use in determining whether a competitive electric market does, or is likely to, exist in Ohio. These principles further refine those established by the Ohio General Assembly through the passage of Amended Substitute Senate Bill 3 (Am Sub SB 3).

I am not suggesting that improvement is impossible. But both Governor Strickland's original proposal and the substitute bill passed by the Ohio Senate recognized that the more specific the "competitive market" definition included in statute, the more likely it is that the definition will prove irrelevant in two, three or five years. Fixing elements of the definition will require reopening this entire process and once again reintroducing significant uncertainty into Ohio's electric market.

The second issue you have discussed is "price." It has been suggested to this Committee that "price" is not the proper focus for your deliberations; it has even been suggested that certain stakeholders should be discredited because they focus on the price they pay for electricity. I would simply suggest to you that price is in fact the key indicator in every stakeholder's analysis of electricity in Ohio today. It is what worries low income consumers choosing between heat, food and medicine. It is what worries business owners, ranging from the corner dry cleaner to the largest industrial users, as they try to plan for the future. For utilities, it comprises an essential component of their projections of revenues, profits and shareholder dividends.

No one can predict what the price of electricity will be. We must, however, debate and decide which structure and process best serves the public interest. As you have heard in the course of these hearings, Ohio has one of the most energy intensive economies in the world. Our traditionally strong sectors—manufacturing, health care, agriculture and food processing, transportation—are disproportionately dependent upon energy and, therefore, its price. We are one of the largest users and producers of electricity. The essential

nature of electricity and its peculiar commodity characteristics have always created a tension between its producers and its consumers. We have long recognized that however the industry is structured, however its price is determined, it is critical that a public body be charged with balancing the conflicting interests of the electric industry itself and those of its myriad users. It is a core component of Sub SB 221 that the PUCO must retain final approval authority for the structure, process and pricing of retail electricity in Ohio.

Let me turn now to the primary focus of my comments: the second objective I mentioned earlier – creating jobs of the future by forging an advanced energy economy in Ohio.

There are two central messages:

- **This bill can work.** The provisions addressing advanced energy give us the necessary tools to position Ohio at the vanguard of the advanced energy economy.
- **The time is now.** We have the infrastructure, the know-how and the workforce necessary to succeed in the advanced energy economy. But every day that passes in Ohio without an Advanced Energy Portfolio Standard (AEPS) means missed opportunities and lost jobs.

This Bill Can Work

A pillar of Sub SB 221 is the AEPS. This standard requires that a minimum of 25% of the electricity supplied by electric distribution utilities to consumers located within the utility's certified territory must be generated from advanced energy technology by the year 2025. This 25% by 2025 requirement will send a clear signal across the global energy sector that Ohio – the fifth largest consumer of energy in the country – is serious about creating demand for advanced energy. Imagine if you will, Ohio replacing the “do not disturb” sign that is currently hanging outside our front door and replacing it with a friendly welcome mat. In doing so, we will open our doors to new projects and investments from advanced energy entrepreneurs from around the globe.

As part of this portfolio standard, no less than half of this 25% figure must come from renewable sources, such as biomass and wind, and some portion would have to be solar.

This provision acknowledges the significant work on renewable technology already under way in Ohio. Today, renewable sources account for less than 0.5% of Ohio's electric generation. But in the context of rising energy security concerns, dramatic fuel price volatility and escalating environmental priorities, renewable energy clearly must become a more important source of power for our future.

I would like to address some concerns others have raised about the effectiveness of the AEPS. Some have suggested that the minimum 12.5% figure for renewables is too modest a goal. Reminding you that this is a minimum not a maximum, I would point out that because of Ohio's energy intensity, even this minimum translates to more renewable energy than the total amount of electricity consumed by twelve different states today. One way to measure, frequently used by critics, is to compare the percentages required by various states' renewable portfolio standards. By this measure, Ohio does indeed appear to be considering a weak standard; at least eighteen of the twenty-five states with renewable portfolio standards would rank above Ohio in this count. But, if you translate those percentages into actual megawatt hours of electricity, only California¹ and Illinois² set renewable energy targets meaningfully beyond what we have proposed.

Others have questioned the 3% cap on the cost of advanced energy in Sub SB 221. I encourage the Committee to note that such a "safety valve" measure is not uncommon among other states that have adopted portfolio standards – over a third of states with renewable portfolio standards place explicit caps on the cost of renewables, and the most common limit is 2%.³ Again, also consider that a 3% ceiling on advanced energy costs is most appropriately measured against the entirety of Ohio's huge electricity sector. As such, this cap still allows for the development of a market for advanced energy on the order of at least \$350 million per year, based on \$12 billion in annual retail sales.

¹ 33% renewables by 2020

² 25% renewables by 2025

³ Colorado, Illinois, New Mexico, & Rhode Island have adopted 2% cost caps on their renewable portfolio standards

Finally, some groups have argued that the AEPS needs stronger enforcement mechanisms. The bill establishes a clear deadline and specifically provides the PUCO with an enforcement mechanism if utilities fail to meet the deadline. The argument that utilities will not act to meet the mandate without interim potential penalties assumes both that the utilities will have no interaction with a public regulatory body in the interim and that they will conduct their business in an irrational manner. Between the effective date of this bill and the 2025 deadline, utilities will continue to appear in a variety of PUCO proceedings ranging from infrastructure planning to rate cases. In its deliberations, the Commission will take into account utility progress in meeting all the terms and conditions of operating in Ohio, including mandates established through this bill. In addition, the Commission will provide regular reports to the General Assembly on that progress. Surely, we can assume that Ohio's utilities will plan investments in new generation in an organized and timely manner; and, the PUCO will exercise oversight of that process in public proceedings.

Importantly, the AEPS requires that no less than half of the 25% must be generated within Ohio. This will foster a burgeoning market for "green collar" jobs in Ohio. Such services as installation, maintenance and repair of advanced energy technology facilities are all highly desirable advanced energy economy jobs that are rewarding, sustainable and cannot be outsourced. These are jobs that Ohioans deserve to have, and at which Ohioans certainly will excel.

Recognizing Ohio's unique endowment of resources and infrastructure, the legislation goes beyond simply mimicking other states' approaches. Our AEPS would allow for clean coal with the potential for carbon capture and sequestration; next-generation nuclear power technologies; and cogeneration that dramatically boosts energy efficiency. Ohio is well-positioned to put all three of these valuable energy resources to work in a sustainable manner, given our vast coal reserves, sizable investments in nuclear energy and diverse waste energy opportunities.

It is worth noting that the full spectrum of advanced energy technologies embraced by the legislation represents a broad portfolio of low- and no-carbon energy options. This foresight will help prepare Ohio for the probability of national and international policies that constrain greenhouse gas emissions to address global climate change. To put it another way, when it comes to resolving the dilemma posed by our thirst for energy and our impact on the global climate, there are no silver bullets... so we must instead use silver buckshot by diversifying the energy sources upon which we depend.

Energy efficiency is a central element of the legislation, and the proposed bill requires that utilities refocus their attention on demand-oriented measures that fell to the wayside in the wake of Am Sub SB 3 in 1999. Under Sub SB 221, Ohio utilities will have to meet at least 25% of the growth in electricity demand by achieving power saving efficiencies and achieve no less than 10% of the total peak demand of Ohio's electricity in the same way. Some believe this goal to be too modest, but I believe that this approach will allow utilities to rebuild their demand-side programs in a constructive, rather than punitive, way. With the PUCO given authority to treat efficiency as a production cost, it would not be surprising to see utilities exceeding these goals as they increasingly recognize that the best power plants that they ever built will more often than not be the ones that they *never* build.

The Time Is Now

Ohio possesses all the know-how necessary to succeed in the advanced energy industry, but we are losing in the race for jobs and investments in this growing sector. Just last month the Timken Company – the venerable Canton manufacturer – announced a \$110 million deal to form a joint venture to produce ball bearings for wind turbines...in China. This past November, Molded Fiberglass Companies – a family-owned enterprise headquartered in Ashtabula – announced a \$40 million investment employing 750 people to manufacture wind turbine blades...in South Dakota. And within this past year, First Solar – a leading renewable energy company that began in Toledo – announced their newest and largest production plant for photovoltaic cells...in Malaysia. All Ohio companies, but no Ohio investments.

It is fair to ask whether the AEPS would make a difference in cases like these. I am not trying to second guess the individual business decisions involved but there is evidence that an AEPS matters. Today, Ohio is negotiating with a major wind manufacturing company that is exploring several potential sites in Ohio; the company has made it clear that a strong local market for its products, driven by a portfolio standard, is a critical part of its analysis. Another company, a large Asian OEM manufacturer, looking at Ohio has made it clear that future market growth driven by an AEPS would make a difference in its decision.

Lt. Governor Fisher recently led a business investment trip to Japan. In the course of meeting with five major advanced energy technology manufacturers, there was a consistent message: location decisions for expansions give significant weight to the existence of local markets, proximity to effective supply chains and clear signals about the importance of the industry.

Study after study makes clear that Ohio is at a distinct, and often crippling, disadvantage when competing for energy investments against states that already have progressive standards in place. A national study conducted by the Renewable Energy Policy Project found Ohio second only to California in the potential for economic growth through the supply of wind power components. But, The Cleveland Foundation recently concluded that without a progressive energy standard, Ohio falls short in attracting and keeping advanced energy companies. To illustrate Ohio's disadvantages concretely, consider that of the eight wind companies that began U.S. operations within the past two years, seven located operations in states with renewable portfolio standards. The eighth located near the border of a neighboring state with a standard. In two of those cases, Ohio was in direct competition for the plants; the lack of a standard hurt.

While Ohio is coming from behind in terms of energy policy, we are fortunate to have a strong energy head start in many other ways. There are five biomass companies operating in five Ohio counties, involved in all areas of biomass production. Ohio is

home to nineteen companies in eleven counties conducting research, manufacturing components for and otherwise involved in the solar energy supply chain. Ohio is an important coal state and for more than two decades we have operated one of the nation's leading clean coal research, development and deployment programs. Opportunities in clean coal technologies – especially carbon capture and sequestration – afford Ohio a key opportunity to become a player in the global economy. Through the Third Frontier's \$193 million Fuel Cell Initiative, Ohio leads the nation in the fuel cell industry. Fuel cell research by Ohio institutions totals more than \$50 million in over 125 projects. With fifty-two companies in twenty-three Ohio counties involved in the wind energy supply chain, Ohio's wind manufacturing potential is second only to California. With all these strengths, Ohio has every right to stand tall as a national champion in the advanced energy industry.

The bottom line of the advanced energy portfolio standard is jobs. Deploying the technologies in Ohio creates thousands of construction jobs as well as the “green collar” jobs I mentioned earlier—jobs operating, maintaining and servicing those technologies. But beyond that, it sends a clear signal to the advanced energy technology industry that Ohio is prepared to use its enormous resources in these areas to encourage investment by new companies as well as the expansion and retooling of existing Ohio companies. We are talking about tens of thousands of good jobs for Ohioans.

How can we assert leadership in the advanced energy economy? An advanced energy portfolio standard will generate healthy demand for new energy technologies, attracting investment and creating jobs that will power Ohio's economy. An AEPS will enable Ohio companies – and their irreplaceable people – to look locally, rather than afar, for new opportunities. An AEPS will capitalize upon the vast manufacturing infrastructure, skilled human capital, and immense technical expertise Ohio already possesses. An AEPS will build upon the best of Ohio's past to forge a bright future for our state.

Again, thank you for the opportunity to appear before the Committee. I welcome the opportunity to respond to your questions.

