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Chairman Bingaman, Ranking Member Murkowski, and Members of this Committee: Thank you for the opportunity to speak about S. 2146, the Clean Energy Standard Act of 2012 (CESA), and how this relates to the President's goal of generating 80% of our electricity from clean sources by 2035.

We are currently engaged in a global race to develop, manufacture, and deploy clean energy technologies. Countries like China and Germany are investing heavily in clean energy, and we can't risk falling behind. With American ingenuity and American manufacturing know-how, we can lead the world in clean energy. The President has set forth an all-of-the-above energy strategy for the 21st century that develops every source of domestic energy, including clean energy.

A core part of the President's vision is his call for the nation to generate 80 percent of our electricity from clean sources by 2035. A Clean Energy Standard (CES) is a technology-neutral approach to achieving that goal. It works by setting a target and letting investors and entrepreneurs determine the best and most-effective technologies to deploy to meet it. These include nuclear power, clean coal, efficient natural gas generation, and renewable sources like wind, solar, geothermal, hydropower and biomass.

Of course, there are many ways to design a Clean Energy Standard to meet the President's goal, and there are many possible energy mixes that could realize it. My colleague, Dr. Howard Gruenspecht from the Energy Information Administration (EIA), has shared with you some modeling of Senator Bingaman's proposed approach. I want to emphasize his statement that EIA's modeling results represent one potential future, but not the only one. Because a CES lets the market drive the outcome, the evolution of clean energy technologies over time will determine what our energy mix will look like in 2035. As a result, the policies we put in place and the investments we make now will play a large part in determining that future energy mix. The Administration remains committed to making the investments in innovation that will ensure abundant and affordable American-made clean energy.

The Administration welcomes Chairman Bingaman's leadership in proposing CESA, and looks forward to working with the Chairman and with Congress on the critical work of ensuring American leadership in the clean energy economy. For my part, I want to spend the rest of my time today talking about the President's vision for a Clean Energy Standard, which he first called for in last year's State of the Union address and proposed in more detail in the *Blueprint for a Secure Energy Future*, released in March 2011. In the *Blueprint*, President Obama set forth five principles for a Clean Energy Standard. They are:

- Credit a broad range of clean energy sources
- Double the share of clean electricity over the next 25 years

- Protect consumers from rising energy bills
- Ensure fairness among regions, and
- Promote new and emerging clean energy technologies

Let me discuss each of these principles in turn.

1. Credit a broad range of clean energy sources

In the Blueprint, the President proposed including electricity generated from a diverse range of clean energy sources, including renewable sources, nuclear power, efficient natural gas plants and clean coal technologies that capture and store carbon dioxide. In addition, any new clean generation technologies developed in the future should be eligible for credit to provide an incentive for innovators and entrepreneurs.

One way to achieve this principle of drawing on a diverse range of energy sources is to assign full or partial credit to generation technologies based on a simple metric, such as emissions per unit of output. As one example of how this can be done, CESA gives credit to all the technologies I just mentioned based on their carbon intensity relative to a benchmark of 0.82 metric tons per megawatt-hour, or roughly the same emissions rate as a modern supercritical coal plant.

2. Double the share of clean electricity over the next 25 years

The President has proposed a goal of generating 80% of our electricity from clean sources by 2035. This is a bold but achievable goal that would roughly double the share of electricity we get from clean energy sources. A Clean Energy Standard will provide a long-term price signal to investors that will reduce uncertainty and draw capital off the sidelines into investments in the electric power sector that will create jobs, enhance our national security, and help protect public health.

3. Protect consumers from rising energy bills

The President has also said that any CES should be tailored to protect consumers from rising energy bills. In part this can be achieved by drawing on a diverse range of energy sources and using a steadily rising target that gives the market time to invest in the most cost-effective clean energy sources available. In addition, energy efficiency plays a key role here. The Administration supports a variety of complementary policies and measures to accompany a Clean Energy Standard, each tailored to the unique challenges of a given sector. These include energy efficiency standards; the ENERGY STAR program; appliance labeling; weatherization; tax credits, grants, and loans for efficiency upgrades and energy efficiency technologies; the proposed Home Star rebate program; and partnerships with the private sector and states and localities to improve building and industrial energy efficiency.

The savings from these energy efficiency policies translate into lower projected household energy bills in the future. In fact, EIA's modeling projects that the average household will pay five dollars less per month for energy in 2035 than in 2011 under CESA, largely thanks to our current energy efficiency policies. We can do even better by realizing the full energy efficiency savings opportunity through sustained effort at the federal, state, and local levels.

While many of the energy efficiency opportunities can be tapped by complementary policies, I want to call out one important example of clean generation that can also improve energy efficiency: combined heat and power (or CHP). CHP can lead to significant cost savings for industrial energy consumers, help revitalize America's manufacturing base and reduce greenhouse gas emissions. That's why the Administration supports issuing clean energy credits to CHP generation, which is something that CESA also does.

Finally, there are additional CES design options that could further reduce electricity prices for consumers. In CESA, excluding older generators from both crediting and obligation leads to a transfer of

money from consumers to these generators that increases over time. Such transfers could be mitigated by including these older clean sources in utility obligations and giving them a partial credit that is smaller than the rising implicit credit they receive under the approach taken in CESA. Another option is to include an alternative compliance payment (or ACP) that acts as a safety valve if costs rise unexpectedly. CESA provides one example of how an ACP can be designed.

4. Ensure fairness among regions

Turning to the principle of fairness among regions, different regions of the country have relied on different energy resources. The President's principles state that any CES should take these differences into account, both regionally and across rural and urban areas. Again, ensuring a diverse set of energy sources is an important part of meeting this principle, since it gives all regions of the country the opportunity to tap their own sources of clean energy. Another way to promote regional equity is by focusing on new clean generation, in order to give every region a similar starting point – while at the same time crediting states that have been early movers.

5. Promote new and emerging clean energy technologies

Over the past three years, the United States has made substantial progress in clean energy. We've nearly doubled the amount of electricity generated from renewable sources like wind, solar, and geothermal, and we've enabled one of the world's largest wind farms and several of the largest solar power projects. Through the Title XVII and Advanced Technology Vehicle Manufacturing loan programs, the Department of Energy is supporting over 30 clean energy and advanced vehicle technology deployment projects that are expected to employ nearly 60,000 Americans. It has issued conditional

commitments for loan guarantees to support the first new commercial nuclear power plant construction in decades. With $3.25 billion in research, development, and demonstration investments since 2010, DOE has been working with industry to keep the United States at the forefront of carbon capture, utilization and storage technologies.

We're making good progress, but more needs to be done. Government has an important role to play, but a market-based mechanism is the best tool to harness the ingenuity of the American people and build our clean energy future. This is why we need a Clean Energy Standard. By establishing a market for domestic clean energy technologies and providing the long term price signal that private investors need, we can move billions of dollars of capital off the sidelines and into investments in the electric power sector that will drive innovation and create jobs throughout the economy. Creating a market here at home for the clean energy technologies of the future will help ensure that these technologies are developed and manufactured in America instead of being imported from abroad. As Secretary Chu has said: America is the most innovative country in the world, but "invented in America is not good enough. We need to ensure that clean energy technologies are invented in America, made in America and sold around the world." A Clean Energy Standard is part of an all-of-the-above strategy that will tap into diverse sources of energy here at home, keeping our energy supply clean, affordable and secure.

The Administration thanks Chairman Bingaman for his leadership in this vital issue. We look forward to working with members of this Committee to further develop this proposal, and I look forward to responding to your questions.