

AWEA COMMENTS ON THE CLEAN FUTURE ACT DISCUSSION DRAFT

AWEA appreciates the opportunity to provide comments on the discussion draft of the CLEAN Future Act (Draft Bill). In general, AWEA supports many of the different policy ideas in the Draft Bill, including establishing a national clean energy standard, mandating that states adopt plans to achieve net-zero greenhouse gas emissions (GHG), and reforming areas related to electricity and the electric grid. Some of these ideas hold substantial promise for substantially reducing GHGs and unleashing a clean energy economy. In our comments below, we signal areas that we support in the Draft Bill, identify some areas that need further work to make them more effective, and offer some additional recommendations that could be incorporated into a future iteration of the bill to help achieve GHG reductions and a clean energy economy.

SUMMARY

We provide our comments in greater detail below, but our main points are as follows:

- **In General:** AWEA supports the overall ambition of the Draft Bill—specifically, attainment of a clean energy economy by 2050. To help achieve that goal, the Committee should aim to make the Draft Bill compatible with a potential future economy-wide carbon pricing.
- **Clean Energy Standard:** AWEA strongly supports the Clean Electricity Standard provisions in the Draft Bill. However, in the next iteration of the Draft Bill, the Committee should consider setting the carbon intensity level lower if it determines that such action is needed to better achieve the bill’s stated goals to reduce GHG emissions.
- **Federal Energy Regulatory Reform:** AWEA supports the following proposals, and, in the discussion section below, suggests some revisions to make them more effective:

- Ensuring transmission planning, permitting, and operations to “facilitate a reliable, resilient, and decarbonized electricity supply.”
 - Reforming interregional transmission planning.
 - Requiring a rulemaking to support advanced transmission technologies.
 - Removing market barriers to clean energy development.
 - Clarifying that FERC may approve a carbon pricing regime under the Federal Power Act.
 - Encouraging the formation of more organized markets.
 - Requiring states and municipal/cooperative utilities to consider energy storage as part of resource planning.
 - Expanding the ability of federal agencies to purchase zero-emission electricity generation for up to 40 years under power purchase agreements.
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- **State Climate Plans:** AWEA supports directing states to design climate plans to achieve the standards established by the Draft Bill. However, AWEA is concerned that the Draft Bill does not provide enough direction to states on compliance measures to achieve those goals, nor the platforms necessary to facilitate meeting the targets through coordinated action among the states. AWEA recommends that the Draft Bill require EPA to provide more direction to states to engage in cost-effective measures to reduce GHG emissions, such as carbon trading and generation shifting.

 - **National Climate Bank:** AWEA recommends removing the proposal for a National Climate Bank public financing entity. Instead, the Committee should consider more effective ways to bolster private capital investment in clean energy and climate-infrastructure, such as through low-cost debt instruments like the Qualified Resilient Infrastructure Bond program and the expansion of the well-proven tax credit structure for renewable energy and related enabling

technologies.

- **Other Recommendations:** In addition, AWEA recommends that the Committee consider incorporating the following additional measures into the next iteration of the Draft Bill:
 - Clarifying federal siting authority for interstate electric transmission facilities in the national interest.
 - Appropriating funds for public-private transmission partnerships, renewable research, and wind workforce training.
 - Appropriating funds for a “Qualified Resilient Infrastructure Bond” program, modeled on the previously successful Build America Bonds program.
 - Adopting stand-alone storage and offshore wind investment tax credits.

DISCUSSION

I. Areas of General AWEA Support and Concern for the Draft Bill

A. Sector-by-Sector Approach

AWEA supports the overall ambition of the Draft Bill – specifically, attaining a clean energy economy by 2050. We think that this goal is reachable within the economy as a whole and the electricity sector. To accomplish this goal, the proposal takes a sector-by-sector approach. We believe this comprehensive set of policies, within the Committee’s jurisdiction, will help put the U.S. on the path to a clean and prosperous economy.

We also note, while adopting carbon pricing is potentially beyond the Committee’s jurisdiction, one area that could support the Draft Bill’s goals would be to ensure that the framework of the bill can be paired with a potential future price on carbon dioxide (CO₂) and/or other GHG emissions, which could be implemented in particular sectors of the economy or the whole economy.

II. Section-Specific Recommendations on Title II – Power

A. Subtitle A – Federal Clean Electricity Standard (Section 203)

AWEA strongly supports the Clean Electricity Standard provisions in the Draft Bill that require retail electricity suppliers to provide an increasing percentage of clean electricity each year in 2022, rising to 100 percent in 2050. However, we encourage the committee to explore whether the carbon intensity level is set at the right level to achieve the ambitious goals of the bill.

The Draft Bill proposes that a clean source is one that emits less than 0.82 metric tons of CO₂ equivalent per megawatt hour. Generators that fall within this definition receive credits, but the credit value is varied based on the emissions intensity of the generator. Under this standard, zero-emission sources, such as renewables or nuclear, would receive a full credit, while coal or natural gas-powered generators with carbon intensities lower than the 0.82 threshold would receive a partial credit.

We encourage the Committee to do more modeling to determine whether the carbon intensity level should be lowered, especially in the beginning years of the program, in order to achieve the ultimate goals of the bill. In short, in the next iteration of the Draft Bill, the Committee should consider setting the carbon intensity level lower if it determines that such action is needed to better achieve the Draft Bill’s stated goals to reduce GHG emissions.

B. Subtitle B – Federal Energy Regulatory Reform

1. Section 211 – National Policy on Transmission

AWEA supports requiring, as proposed in the Draft Bill, transmission planning, permitting, and operations to “facilitate a reliable, resilient, and decarbonized electricity supply,” including the requirement that a broad range of benefits be considered and the prioritization of projects accessing clean energy. AWEA believes, however, that this

section could be made more effective if revised to amend sections 201, 205, and 206 of the Federal Power Act, with specific instruction to FERC that its statutory responsibilities include transitioning to a decarbonized electricity supply (without eliminating FERC’s current responsibilities of maintaining reliability and ensuring just and reasonable/non-discriminatory rates).

Similarly, the transmission planning and cost allocation subsections should provide express direction to FERC to implement a rulemaking on transmission planning that accounts for a broad range of benefits and requires a transparent benefit-based cost allocation regime. Past experience with Order No. 1000 suggests that much-needed transmission improvements will not occur (or will be significantly delayed) without requiring transmission planning and cost allocation to account holistically for all the public policy benefits of transmission expansion and bringing clean energy to market, as well as broadly spreading the costs for transmission upgrades to all the beneficiaries.

2. Section 212 – Interregional Transmission Planning

AWEA strongly supports the section of the Draft Bill that would require a FERC rulemaking to improve interregional transmission planning. We propose two improvements. First, section (b)(2)(D) should specifically identify, and require consideration of, the “range of benefits” from transmission. These should include: production cost savings, reduced transmission losses, reduced congestion and curtailment, reduced quantities of operating reserves, avoided reliability projects, generation capacity savings, increased competition and liquidity, and environmental benefits.¹ Second, the provision should specifically require that interregional planning account for achievement of federal or state clean energy policy goals. Even though the section refers generally to “public policy benefits,” AWEA believes more explicit

¹ See Brattle Group/WIRES, *The Benefits of Electric Transmission* at p. v, table ES-1 (2013), <https://cleanenergygrid.org/uploads/WIRES%20Brattle%20Rpt%20Benefits%20Transmission%20July%202013.pdf>.

language along these lines would aid in implementation and is consistent with the Draft Bill's overarching purposes.

3. Section 213 – Advanced Transmission Technologies

This section would require FERC to report to Congress on its progress in encouraging deployment of transmission technologies. AWEA believes that following several proceedings in 2019, FERC has a sufficient record to move forward with a rulemaking that provides a framework for Grid-Enhancing Technologies to be broadly deployed, and we recommend that this section require FERC to initiate a rulemaking within six months and conclude it within one year.

4. Section 217 – Market Barriers to Clean Energy Development

This section contains several provisions of interest to AWEA and its members, including the following:

i. 217(a) – Carbon Pricing

AWEA strongly supports clarifying that FERC may approve a carbon pricing regime under the FPA. While AWEA believes that FERC already has the authority to approve such a proposal under the FPA, this section would help make that authority explicit. This will also help send a clear signal to organized markets that FERC has authority to approve carbon pricing in wholesale markets and encourage such proposals.

ii. 217(c) – Mandatory Interconnection

Many parts of the country operate as part of regional, multi-state wholesale electric markets called independent system operators (ISOs) or regional transmission organizations (RTOs). While most states are at least partially within at least one RTO, some states, particularly in the Southeast and Mountain West, are not. The Draft Bill would require all states to place transmission facilities in their jurisdiction within an ISO

or RTO within two years. AWEA agrees with the objective to have all transmission-owning entities ultimately place their transmission facilities under the control of RTOs and ISOs. RTO and ISO expansion is a sound policy goal that could substantially improve the efficiency of electric markets and support the competitiveness of those markets and, in turn, clean energy development and deliverability therein. However, in light of our diverse membership and views on this issue, AWEA does not take a position as to the advantages of requiring mandatory RTO and ISO participation versus other approaches to encourage the expansion of organized markets.

C. Subtitle C – PURPA Reform

1. Section 221 – Consideration of Energy Storage Systems

AWEA supports this provision to require states and municipal/cooperative utilities to consider energy storage as part of resource planning. However, AWEA supports expanding it to include other grid-enhancing technologies, such as those identified in Section 213, in resource planning. This would ensure robust, simultaneous federal and state consideration of these technologies, which can support state resource planning goals (among other benefits) reducing congestion and curtailment to ensure energy deliverability.

D. Subtitle E – Clean Electricity Generation

1. Section 247 – Power Purchase Agreements

AWEA supports this provision in that it would allow federal agencies to “purchase electricity produced by a public utility using zero-emission technology” under contracts up to 40 years. However, we think long-term contracting for clean energy can better be accomplished if the phrase “by a public utility” is deleted. This would help increase flexibility and drive down costs by allowing contracts with third-party-owned generation (not just by a utility), enabling contracts with municipal and cooperative

utilities (which are not typically considered “public utilities” under federal law) and contracts with non-utility retail providers where applicable.

E. Comments on Other Titles

1. Section 701 – Controlling Methane Emissions from O&G

AWEA supports establishing a national goal for reducing GHGs in addition to carbon dioxide, including methane. Methane (through leakage, venting and flaring), has over 80 times the global warming potency of carbon dioxide when its impact is assessed over a twenty-year period. Therefore, we support the Draft Bill’s goal to limit methane emissions as well as carbon.

2. Section 801 – State Climate Plans

AWEA supports directing states to design climate plans to achieve the standards established by the Draft Bill. We think this will give states flexibility to meet carbon standards based on their own assessment of the best path for each state. However, we are concerned that the Draft Bill does not provide enough direction to states on compliance measures to achieve those goals, or provide the platforms necessary to facilitate meeting the targets through coordinated action among the states.

First, while the provision directs EPA to create several model control strategies that states will have the option to choose to adopt in their climate plans, it should also direct EPA to provide guidance to states to engage in measures that are cost-effective and proven. For instance, as was demonstrated in the Clean Power Plan, generation shifting (switching generation from higher to lower carbon sources of electric generation) is among the most cost-effective means of reducing GHG emissions. In contrast, carbon removal strategies, such as carbon capture sequestration, are not proven and are cost-prohibitive means of reducing emissions. Therefore, EPA should help states identify the most cost-effective and environmentally effective means of reducing GHGs.

Second, we appreciate that the Draft Bill authorizes two or more states to jointly submit climate plans or components thereof to achieve the standards established by the bill. However, to encourage states to submit joint plans, the Draft Bill should also facilitate trading between states to help reduce the costs of compliance. For instance, the proposal should direct EPA, or another federal agency, to create a national trading platform that will allow states with more zero-emitting resources to provide renewable energy credits to states that have less. With a global phenomenon like climate change, GHGs once emitted become well-mixed in the atmosphere—emissions in one state contribute no more to harm in any given state than emissions in another state. Thus, trading of renewable energy credits to meet targets helps lower costs, reflects the nature of how electricity is already transmitted, and is consistent with the nature of the pollutant.

Finally, the proposal should clarify that there is no preemption of state renewable energy programs and voluntary renewable energy credit purchases. In the same vein, the proposal should explain that it is not creating a ceiling for states that want to go further than the goals of the Draft Bill, nor should it prevent states that have already achieved targets from supporting compliance for states that have not.

3. Section 811—National Climate Bank

AWEA recommends removing the proposal for a National Climate Bank public financing entity. In our opinion, that is a highly inefficient use of funds that could otherwise be employed in pursuit of the 2050 clean energy economy goal. With a robust private sector renewable energy finance market already in place, any expansion of new or existing Green Banks in states (largely funded by the proposed National Climate Bank) would have to compete with private capital to finance wind, solar and other qualified clean energy projects. Instead, the Committee should consider more effective ways to bolster private capital investment in clean energy and climate-infrastructure, such as though low-cost debt instruments like the Qualified Resilient Infrastructure Bond program and the expansion of the well-proven tax credit structure for renewable energy and related enabling technologies.

III. Recommended Provisions for Addition to the Draft Bill

Below are additional areas that AWEA recommends that the Committee consider incorporating into the next iteration of the Draft Bill to help ensure deep decarbonization and incentivize clean energy.

A. Federal Siting for Electric Transmission Is Essential to Move Transmission Forward and Meet a National Carbon Policy

Effective federal siting for interstate electric transmission facilities that are in the national interest is essential to meet the goals of comprehensive climate legislation. While state transmission siting is often efficient at siting projects built by a single-state utility to serve its customers, it has proved ineffective in siting interstate projects whose benefits are national or regional in nature. There is currently a 10:1 difference in transmission development versus the generation development pipeline in the last decade. This is largely due to the fact that, unlike interstate gas pipeline siting (which is subject to FERC jurisdiction), electric transmission siting is governed by states and municipalities. Largely due to this fact, it can take upwards of 10 years to permit and build a transmission line—regardless of the significance of its benefits.

Comprehensive climate legislation should establish a federal regulatory structure to provide timely siting approvals for qualifying interstate transmission projects—those are critical to develop our energy potential, reduce costs to consumers, contribute to job growth, and enhance competition and reliability. AWEA proposes two main measures—first, backstop siting authority for transmission lines; and second, enhanced use of public-private partnerships with the Power Marketing Administrations to direct federal eminent domain where needed.

1. Federal Siting Authority for Transmission in the National Interest

In recognition of the need for a federal role in the permitting of transmission projects, in the Energy Policy Act of 2005,² Congress gave DOE authority to conduct studies of where electric transmission is needed, and to then designate areas as national interest electric transmission corridors (NIETCs) to meet those needs. Congress also gave FERC authority to issue permits for transmission projects within a NIETC as a backstop, if a state failed to permit a project within a NIETC within a reasonable period.³

To date, not a single construction permit for a project in an NIETC has ever been issued, and only two transmission corridors were established under this authority (more than a decade ago). Clearly, the federal role established by Congress for transmission permitting has not lived up to the intention to streamline the siting process for projects in the national interest. This is partially due to the bifurcation of the corridor designation and backstop authority between two agencies—DOE and FERC. This requires redundant and sequential review of environmental and other key considerations by the two agencies. Additionally, court decisions have been perceived as limiting DOE’s and FERC’s authority in this process.

To address this issue, comprehensive climate legislation should provide FERC, or another agency, explicit authority to approve and site new qualifying high-priority interstate electric transmission lines in specific cases. It is reasonable to require developers of a transmission project to first seek approval from local or state authorities to site and construct the project, and local involvement and input is important. However, state and local authorities should not halt or cause unreasonable delays to projects that provide regional or national benefits.

FERC should have clear authority to approve an interstate project authorized by one or more states, where one or more other states do not approve (by action or inaction) a project within one year after an application is filed. This would prevent one state from being able to veto a transmission project where other states identify significant benefits, while also respecting the role of states in transmission development. Specifically, FERC

² 42 U.S.C. § 15801 et seq. (2012), Pub. L. No. 109-58 (Aug. 8, 2005) (Energy Policy Act of 2005).

³ 16 U.S.C. § 824p (2012).



should be able to step in and provide “backstop” siting for the construction of high-priority regional and interregional transmission projects and authorize a Certificate of Public Convenience & Necessity (which would authorize eminent domain, consistent with treatment of natural gas pipelines today).

Specifically, the bill should clarify language presently codified at 16 U.S.C. § 824p(b)(1)(C) regarding a state commission “withholding” approval for more than one year to specifically mean that FERC’s “backstop” jurisdiction (over the otherwise state-controlled permit process for transmission line projects) is triggered when there is state silence *or* a refusal to approve an application for a year. These fixes would help put in place a viable federal regulatory structure for ensuring the timely permitting approvals for interstate transmission projects that are in the national and regional interests to meet clean energy goals. AWEA believes that this federal backstop siting authority would ensure productive involvement from the states, who would be empowered to identify the best possible siting and local benefits agreements in a timely fashion.

The bill should also explicitly specify that project proponents may propose the designation of NIETCs outside of the timelines specified for the review of the current triennial studies conducted by DOE, pursuant to 16 U.S.C. § 824p(a). This would provide an opportunity to “right size” a transmission corridor and to synchronize the timelines with those of the development process (which may not be consistent with the three-year corridor designation in the statute).

In addition, the FAST Act⁴ sought to streamline federal environmental review and permitting for “covered projects,” including interstate electricity transmission lines.⁵ However, unlike other covered projects eligible for streamlining under the FAST Act (in which the federal government typically has primary authority for permitting and environmental review), electric transmission projects have largely not benefitted from the

⁴ Public Law No. 114-94 (Dec. 4, 2015).

⁵ See 42 U.S.C. § 4370m(6), Pub. L. No. 114-94 § 41001(6) (Dec. 4, 2015); FAST-41, DEP’T OF ENERGY, OFFICE OF ELECTRICITY, <https://www.energy.gov/oe/mission/transmission-permitting-and-technical-assistance-division/fast-41> (last visited Nov. 22, 2019).

FAST Act’s promise to expedite permitting. This is due to the bifurcation of federal environmental review and state siting authority for transmission.

Congress could remedy this difficulty by ensuring that the environmental and permitting review for the limited number of electric transmission projects covered under the FAST Act can also be streamlined and completed in a timely manner. In order to ensure that outcome, Congress should give FERC narrow and limited authority to site certain covered transmission projects under the FAST Act. As under the backstop siting authority discussed above, states could retain their authority to approve or deny the siting of covered transmission projects in the first instance, but the federal government should have the authority to determine if a covered transmission project should be approved when a state unreasonably withholds approval for a year. Additionally, the statute should clarify that designation of NIETCs should be an action categorically exempt from NEPA, with environmental reviews appropriate for consideration of specific projects once a corridor is designated.

2. Public-Private Transmission Partnerships

Section 1222 of the Energy Policy Act of 2005 already allows DOE, through two of its Power Marketing Administrations (PMAs) (the Western Area Power Administration and the Southwest Power Administration, whose footprints collectively cover much the country outside the Northeast) to partner with private entities—including private funding—to develop transmission consistent with a national energy policy (granting those projects potential eminent domain authority).⁶ However, this potentially valuable tool has never been successfully used. Comprehensive climate legislation should consider: (1) appropriating dedicated funds to DOE and the PMAs to develop transmission using public-private partnerships; and (2) encouraging partnerships by PMAs with transmission developers.

3. Funding for Renewable Research

⁶ 16 U.S.C. § 16421 (2012).

A carbon pricing program does not, in and of itself, necessitate development of new technologies that drive down emissions at lower costs. Accordingly, comprehensive federal climate legislation should include distinct funding for a range of research, development, demonstration, and deployment initiatives for renewable technologies. Research at DOE has helped advance technologies and drive down the cost of wind power and other renewables. DOE’s investments in research have driven wind technology forward in the United States, including funding technologies to mitigate wind turbine impacts on radar and to more accurately measure and model wind flow at project sites. Previous funding spurred innovative wind turbine blade designs, which led to a 12 percent increase in the energy they capture.⁷ DOE field tests validated several ways of ensuring that wind farms can co-exist with radar at airports and military bases, working in collaboration with the Federal Aviation Administration, the Department of Defense, and the Department of Homeland Security.⁸ Funding from DOE for research initiatives in wind energy and other renewables is critically important to advancing these technologies and ultimately achieving net-zero emissions by 2050. Thus, the Draft Bill should incentivize continued and accelerated funding for research and innovation, and in this respect, AWEA supports the Wind Energy Research and Development Act of 2019 (H.R. 3609),⁹ which could be incorporated into the Draft Bill.

4. Support for Wind Workforce Training

The second fastest-growing job in America is that of a wind turbine service technician. However, in order to continue to grow the industry, training is needed to prepare our workforce for the future. To that end, AWEA supports Sen. Joni Ernst (R-IA) and Sen. Angus King’s (I-ME) Wind Workforce Modernization & Training Act of

⁷ See SANDIA NAT’L LABS., *Sweep Twist Adaptive Rotor Blade: Final Project Report* at XI, 11 (Jan. 2010), <https://windpower.sandia.gov/other/098037.pdf>.

⁸ See, e.g., *The Effect of Windmill Farms on Military Readiness*, U.S. DEP’T OF DEF. (2006), <https://archive.defense.gov/pubs/pdfs/WindFarmReport.pdf>.

⁹ H.R. 3609, 116th Cong. (2019).

2019 (S. 2415),¹⁰ which should be incorporated into any comprehensive climate legislation. The legislation does three important things for the wind energy workforce: (i) makes it easier for wind tech schools to acquire large, expensive wind equipment for training; (ii) creates a Wind Ready Vets program (modeled off of Solar Ready Vets) to attract more U.S. veterans into the wind workforce; and (iii) convenes a task force of industry, tech schools and government to catalog wind technician positions and their corresponding skill sets in order to provide recommendations for a wind tech credentialing system that will help modernize our workforce.¹¹

5. Qualified Resilient Infrastructure Bond Program

AWEA recommends appropriating funds for a “Qualified Resilient Infrastructure Bond” program, modeled on the previously successful Build America Bonds program. This would support public private partnerships and provide low-cost debt to finance transmission and other critical enabling infrastructure and resiliency improvements.

6. Stand-alone Storage ITC Should Accompany a National Carbon Policy

Another policy that would widely benefit other electricity technologies and enhance grid resilience is an Investment Tax Credit (“ITC”) for stand-alone energy storage systems. Energy storage technologies will help to integrate higher shares of renewable power and enable the electric grid to adapt to the increased demands. A tax credit could help to offset the high cost of stand-alone storage systems. Currently, only storage systems integrated with energy projects under a narrow set of conditions are eligible for a 30 percent ITC.¹²

For wind energy, a stand-alone storage ITC is estimated to support an additional two to four GWs of incremental wind power capacity additions through 2027, assuming

¹⁰ Wind Workforce Modernization & Training Act of 2019, S. 2415, 116th Cong. (2019).

¹¹ *See id.*

¹² *See* MOLLY F. SHERLOCK, CONG. RESEARCH SERV., IF10479, THE ENERGY CREDIT: AN INVESTMENT TAX CREDIT FOR RENEWABLE ENERGY (2018), <https://fas.org/sgp/crs/misc/IF10479.pdf>.



the tax credit is enacted by 2020. In particular, AWEA supports the *Energy Storage Tax Incentive and Deployment Act* (S. 1142 and H.R. 2096).¹³ Resolving the uncertainty facing companies who seek to utilize the ITC for energy storage will not only spur greater investment and create jobs among a diversity of industries, but also it will accelerate the U.S. transition to zero-carbon electric supply.

7. Offshore Wind ITC Could Accompany a National Carbon Policy

AWEA supports a 30 percent ITC for offshore wind energy production. With stable policies in place, the Department of Energy estimates the United States could develop a total of 22 GW of offshore wind projects by 2030 and 86 GW by 2050.¹⁴ As our nation continues to develop this homegrown resource, we will see new jobs and investments in manufacturing and port infrastructure. A tax credit for offshore wind energy will make this nascent industry more cost-competitive and save money for the consumers who are demanding more clean energy production in their states. Specifically, AWEA supports the *Offshore WIND Act* (H.R. 3473 and S. 1957)¹⁵ and *Incentivizing Offshore Wind Power Act* (S.1988).¹⁶

¹³ Energy Storage Tax Incentive and Deployment Act, S. 1142, 116th Cong. (2019).

¹⁴ U.S. DEP'T OF ENERGY, WIND VISION 130 (2015), https://www.energy.gov/sites/prod/files/WindVision_Report_final.pdf.

¹⁵ Offshore WIND Act, S. 1957, H.R. 3473, 116th Cong. (2019).

¹⁶ Incentivizing Offshore Wind Power Act, S. 1988, 116th Cong. (2019).