BLUEGREEN ALLIANCE

CREATING GOOD JOBS, A CLEAN ENVIRONMENT, AND A FAIR AND THRIVING ECONOMY

BlueGreen Alliance
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**REGIONAL TRANSMISSION INITIATIVE NOTICE OF REQUEST FOR INFORMATION and SCOPING MEETING**

The BlueGreen Alliance unites labor unions and environmental organizations - collectively representing millions of members and supporters - to solve today's environmental challenges in ways that create and maintain quality jobs and build a stronger, fairer economy. Our partnership is firm in its belief that Americans don't have to choose between a good job and a clean environment—we can and must have both. We thank the states of Connecticut, Maine, Massachusetts, New Hampshire, and Rhode Island for their work to identify the offshore transmission infrastructure necessary to meet our offshore wind goals. Offshore wind energy presents a once-in-a-generation opportunity to advance our climate goals, if developed in an environmentally responsible manner, with high road labor standards and attention to environmental justice. The strategic buildout of an offshore transmission network is an opportunity to not only meet our climate goals, but also ensure electric reliability for coastal and inland communities alike. Further, a well-planned offshore network could reduce the amount of onshore termination points, re-employ workers who have seen job loss in the incumbent energy sector, and streamline interconnects, while reducing impact for critical habitats. Offshore transmission and grid infrastructure can ensure that clean power is delivered to communities across the country, while also ensuring that our infrastructure is resilient and reliable.

Offshore wind energy is critical to meet our nation's climate goals, particularly in New England where its technical energy resource potential is greater than all other clean energy resources combined.[i] Adding even a modest amount of offshore wind to the New England grid could drive down wholesale energy costs, especially during cold snaps and storms when ratepayers often see a sharp spike in energy prices.[ii] The levelized cost of offshore wind energy has declined more than 50% since 2014 for fixed bottom technologies with similar declines for floating offshore wind expected by 2030.[iii] This RFI represents a significant and necessary step towards ensuring success for offshore wind

development and securing this untapped energy potential for New England and across the country. In order to make this clean economy work for everyone, we must leverage every resource we have, including federal investments from the Inflation Reduction Act and Bipartisan Infrastructure Law. Early planning efforts with stakeholders across the spectrum, from labor organizations, community leaders, environmental organizations, and developers is essential to protecting marine life, uplifting communities, and maximizing family sustaining careers.

In these comments we make specific recommendations regarding onshore interconnection points and a 'planned mesh' offshore transmission network. We further recommend high road labor standards and domestic content be central to any offshore transmission network. Finally, we recommend that the states prioritize high-quality and accessible jobs, a diverse workforce, and input from environmental justice communities while planning for offshore wind deployment, including transmission.

**Federal Resources**

*Comment on how individual states, Participating States, or the region can best position themselves to access U.S. DOE funding or other DOE project participation options relating to transmission, including but not limited to funding, financing, technical support, and other opportunities available through the federal Infrastructure and Investment Jobs Act and Inflation Reduction Act.*

The following programs should be considered for advancing offshore transmission, including financing and siting and permitting resources. The eligible entities for these programs are specified below, however, states should work with developers to identify federal funding resources for which they are not eligible for:

**Bipartisan Infrastructure Law Programs:**

1. **Transmission Facilitation Program:** The Bipartisan Infrastructure Law (BIL) authorized the Transmission Facilitation Program, which invests $2.5 billion for high-capacity and interregional transmission lines. These investments are implemented through competitive loans and by leveraging private/public partnerships. High-capacity transmission lines are the missing link for a strong and resilient grid. These lines will

connect existing and new clean energy projects across the country with all corners of the grid to ensure that clean energy isn't going to waste. The States identified in this RFI should look to the Department of Energy and the Transmission Facilitation Program for funding opportunities to reduce the cost of an offshore wind transmission network. This program is administered through the DOE, Office of Grid Deployment. These competitive grants are available for developers, co-ops, and utilities.

2. **Smart Grid Investment Grant Program:** The BIL also authorized $3 billion for the Smart Grid Investment Grants Program, which aims to develop and deploy advanced technologies that support high capacity transmission networks. New England states should identify with transmission developers, utilities, and ISO-NE which technologies need additional domestic manufacturing support in order to reach the scale necessary for an offshore transmission network. The Smart Grid program could be used for developing more efficient offshore substations, ensuring that undersea cables are resilient and efficient, as well as upgrading onshore termination points. This program is administered through the DOE, Office of Grid Deployment. These are competitive grants available for utilities, developers, and co-ops.

3. **Grid Resilience and Innovation Programs:** The Grid Resilience and the Grid Innovation programs authorized in the BIL aim to ensure existing energy infrastructure has resources to retool degraded, damaged, or aged infrastructure with innovative technology. These programs should be considered for establishing an offshore transmission network. Specifically, these programs could provide needed support upgrading existing infrastructure onshore to receive the increased amounts of offshore energy production that will be driven by offshore wind generation. These programs could also work to retool and convert shuttered power plants as interconnection points or termination points for offshore cables. Using federal funds in this way could also have the additional benefit of retaining displaced workers and ensuring the next phase of energy development. We will provide more comments on that in another section.  This program is also administered by the DOE

Office of Grid Deployment. These are competitive and formula grants available for states, tribes, local governments, as well as utilities and co-ops.

**Inflation Reduction Act**

4. **Transmission Line and Intertie Incentives:** The IRA authorized $2 billion for construction of new, high-capacity transmission lines. Along with the dedicated transmission funding in the BIL, this is an additional opportunity to help mitigate and reduce the overall cost of these large scale projects. This funding is via a loan and competitive grants program in which a 50% cost share is necessary.

5. **Siting of Interstate Electricity Transmission Lines:** The IRA also designated $760 million to facilitate siting and permitting of both onshore and offshore transmission networks. State agencies can use these grants for: transmission project studies, alternative siting corridors, hosting negotiations with relevant stakeholders, and identifying impacts and benefits to local communities. The states identified in this RFI should work in coordination to apply for these grants to ensure new offshore wind transmission is built equitably, benefits the region, and meets individual state clean energy deployment goals.

6. **Energy Infrastructure Reinvestment Program (EIR):** The IRA authorized $5 billion in loans and $250 billion in loan guarantees for this program, which will redevelop and reinvest in existing energy infrastructure. Authorized under Title XVII in the Loan Program Office, this investment will provide much needed financial security to upgrade infrastructure for the purposes of accommodating clean electricity. This could be used for retooling a retired coal-fired power plant and using it for a cable landing and distribution location for offshore wind. This program could also include upgrades to existing transmission to ensure the reliability and capacity needs for new renewable projects connecting to the grid, including offshore wind power. The states should work with LPO and the EIR to identify facilities that could benefit from this type of investment.

**Interregional and Offshore Wind Electricity Transmission Planning:** The states identified in the RFI should work with DOE to help inform stakeholder engagement. This program was created to model and analyze offshore wind transmission planning. This program will specifically be used for convening stakeholders and conducting offshore wind analysis for the deployment of offshore wind. Considering that the New England states are leading the way with offshore wind deployment, the region is a perfect test case for this program and analysis. This, along with ongoing DOE modeling and analysis, appropriates $100 million, which will remain available until September 30, 2031, to cover expenses for convening stakeholders and conducting analysis related to interregional transmission development and development of transmission for offshore wind energy. While this funding is not directly available to states, offshore wind states should work with DOE to inform stakeholder engagement and make recommendations that uplift an integrated offshore wind transmission network.[iv]

**Onshore Interconnect**

*Identify potential Points of Interconnection (POIs) in the ISO-NE control area for renewable energy resources, including offshore wind. What are the benefits and weaknesses associated with each identified POI? To the extent your comments rely on any published ISO-NE study, please cite accordingly.*

Offshore transmission points of interconnects (POIs) should be concentrated and prioritized at points with existing electric transmission infrastructure. Specifically, priority should be given to retired or soon to be retired incumbent energy generation facilities that are adjacent to open water should be retooled to receive offshore wind transmission stations. The benefits for this approach are numerous:

1. Retooling existing facilities, such as the Brayton Point Coal Plant in Somerset, Massachusetts, could provide an onshore interconnect as a cable landing location for the nearly 1600 MW of energy produced from adjacent Massachusetts offshore wind projects, Commonwealth Wind and Vineyard Wind. [v] The existing generation capacity at Brayton Point is 1600 MW and has an HVDC converter station, which will be vital to connect offshore power to the grid.

2. Opening shuttered facilities, like Brayton Point, is an opportunity to ensure re-entry for workers who were once employed at the coal fired power plant. It also provides an opportunity to employ members of the local community that have been impacted by energy systems and ensure equitable access to benefits of the transition. States identified in this RFI should ensure that any facility being retooled or rehabilitated to receive offshore wind power is employing the highly trained, previously employed workforce that once operated the facility. We should prioritize hiring dislocated workers, and to the extent relevant, retain a unionized workforce. Further, any effort to retool or rehabilitate a facility should be done through a labor peace agreement, to ensure union neutrality.

3. Further, shuttered facilities have other potential economic development opportunities that can support offshore wind deployment. The Brayton Point facility will be a manufacturing and staging hub for New England offshore wind. An offshore cable manufacturing facility is planned at the Brayton Point site, taking advantage of the deepwater port adjacent to the facility. This manufacturing facility will be another opportunity for local workforce development, growing the domestic supply chain, and reducing distance between manufacturing and construction. These kinds of investments can be economic development multipliers in the region.

Currently, the National Renewable Energy Laboratory (NREL) at the DOE is conducting a two-part Atlantic Offshore Wind Transmission Study. The first part of the report from NREL is expected at the end of October 2022, which will contain initial analysis on the scope, scale, and logistics of an offshore transmission network. This study will include analysis on plausible land based and offshore transmission expansion scenarios, including points of interconnections[vi]. States associated with this RFI should help inform and identify facilities that could be suitable as interconnection points. Other examples of locations already planning for offshore wind connection include Mystic Reliability Wind Link, formally Mystic Powerplant in MA; and Bridgeport Powerplant in Connecticut, which would host a substation as well as transmission. [vii]

The New England states in the RFI should also coordinate potential points of interconnect in coordination with the DOE Wind Energy Technologies Office and Grid Deployment Office and submit analysis on capital investment needed to retool or rehabilitate these facilities for the second part of the NREL study.

**Offshore Wind Transmission Network**
*Comment on how to develop transmission solutions that maximize the reliability and economic benefits of regional clean energy resources.*

The states identified in the RFI should continue to advocate for a planned offshore transmission network, or planned mesh network, in which adjacent wind farms utilize connected and reliable power infrastructure that delivers power onshore. This approach will require states, RTOs, developers, labor unions, DOE, BOEM, and state public utility commissions to coordinate construction, cost share, and timeline for projects. While this approach may take additional time to plan, the benefits, particularly for the overall cost of the project, are notable.

A report from Brattle analyzed a planned approach versus a generator lead line approach and found that a planned approach was preferential for the overall cost of a project. [viii] The overall cost savings are notable in the significantly fewer cable miles necessary for connecting a mesh network. The Brattle report shows that a planned network would use approximately half the amount of undersea cable to connect all of New York and New England's offshore wind potential compared to each wind project connecting individually. [ix]

A mesh network would also offer cost savings in the form of increased competition among offshore transmission developers. Because there are fewer transmission lines to construct, project bids in state solicitations could come in lower, and thus could reduce the overall cost for ratepayers. [viii] Alternatively, reducing costs related to transmission could allow developers to make additional financial commitments to support local economic development, supply chain, and workforce training, increasing both the local benefits and opportunities to access them.

Because a mesh network relies on fewer cables and substations, the overall impact on marine life and habitat is estimated to be significantly reduced as well. This approach means fewer seabed disturbances, coastal cable termination points, and a reduced number of corridors for transmission cables. Additionally, if mesh network termination points are located at existing facilities, the overall impact is diminished even further. [viii]

New York State Energy Research and Development Authority (NYSERDA) also conducted an offshore wind transmission study that found that a planned mesh network would be beneficial for environmental and cost savings reasons, in addition to preparedness for future deployment. The study outlines that in order to be prepared for future OSW construction, a planned mesh network offers a modular design that will allow for future projects to connect to existing substations and the offshore transmission network.[ix]

The New England States in the RFI should ensure that all of these aspects are considered when planning offshore transmission. Not only should a mesh network provide reliability, cost savings, and reduced environmental impact, but also should be designed to integrate future offshore wind projects, without increasing the burden of onshore transmission networks.

***Domestic Content***

***Ensuring the use of domestic content in the construction of transmission and grid infrastructure projects will maximize economic benefits.***
The states identified in the RFI should ensure the use of domestic content, particularly if federal funds and resources are utilized. The Build America Buy America Act (BABA), passed as part of the Infrastructure Investment and Jobs Act (IIJA) on November 15, 2021, was enacted to improve our domestic supply chains and establish robust, comprehensive domestic content preferences across all federal aid infrastructure spending.[x] Transmission construction projects, including offshore transmission funded with federal dollars, must ensure use of domestic content and Buy America standards in the construction of new and upgraded transmission lines. As the BABA provisions in the BIL come into effect and strengthen the Buy America requirements associated with federal investments, the positive market and employment effects of transmission investments will be further magnified. The

New England states should also encourage supply chain reporting and disclosure while incentivizing assembler/supplier commitments and accountability.

The industry/sector is well positioned to do this. According to a WIRES/Brattle Group report, nearly 65% of the steel associated with the transmission towers, structures, and related components are currently sourced domestically, while 35% of the aluminum and other components for transmission wires are sourced domestically. An estimated 70% of substations, including circuit breakers and transformers are made domestically. Towers, wires, and transformers make up about 95% of the materials cost for any given project.[xi]

New England states should work with DOE to identify gaps in the offshore wind supply chain and work with federal and state agencies, manufacturers, and developers to address them, without slowing down transmission and grid deployment.

By boosting demand for U.S. manufacturing of steel, aluminum, and other materials in transmission projects, domestic content provisions will also help to mitigate the increase in economic and racial inequality driven by the decline in U.S. manufacturing. The erosion of domestic manufacturing is responsible for a significant rise of income inequality in the U.S. The loss of manufacturing jobs has been disproportionately worse for Black workers and workers of color. According to an EPI report, Black workers have lost more than 600,000 manufacturing jobs since the late 1990's, a 30% fall in Black manufacturing employment.[xii]

This has further exacerbated the wage gap between Black and white workers. DOE must ensure that the Buy America provisions in the Bipartisan Infrastructure Law are strictly enforced. Strong domestic content standards would yield a significant impact for manufacturing jobs, and specifically for Black workers and workers of color across the country if targeted correctly.

***High-Road Labor Standards***

Family-sustaining, union jobs must be created and retained across the energy sector and the associated manufacturing supply chain to ensure economic

benefits are realized. To do this, New England states must consider the following high-road labor standards:

- **Prevailing Wage**: States should require all contractors and subcontractors to comply with the Davis-Bacon Act and Related Acts (DBRA). Contractors and subcontractors shall therefore agree that all employees shall be paid the local prevailing wages and receive accompanying benefits as identified under DBRA in the construction of projects funded by this program.
- **Project Labor Agreements** (PLA): Large construction projects, not subject to Executive Order 14063 requiring use of Project Labor Agreements (PLA) for Federal Construction Projects over $35 million, can still benefit from a PLA. PLAs control the terms and conditions of employment of workers on specific construction projects, including wages, hours, working conditions, and dispute resolution methods. These agreements can be utilized at the state and local level to ensure high-road labor standards; a qualified workforce; diverse and equitable hiring, training, recruitment, and retention; and timely development of projects.
- **Registered Apprenticeship, Pre-apprenticeship, and Labor-Management Partnerships**: One of the main mechanisms for building career pathways is through registered apprenticeship, pre-apprenticeship, and other union-affiliated training programs. Apprenticeships are registered through a state apprenticeship agency or through the DOL. Registered apprenticeships are paid positions that combine on-the-job training with classroom instruction in a trade. Construction unions operate robust registered apprenticeship programs while industrial unions work with employers on joint labor management training programs that also provide a combination of classroom and on-the- job skills training. Some of these labor management training programs also include DOL Registered apprenticeship programs for non-construction occupations.

  Pre- apprentice programs aim to ensure that workers can qualify for entry into an apprenticeship program and have the skills and support they need to succeed. Pre-apprenticeship programs have become a key tool for improving equitable access to jobs in the building trades and are generally designed to target certain populations or demographics

such as low-income workers, workers of color, women, and other marginalized communities. The most successful pre-apprenticeship programs are those affiliated with registered apprenticeship programs or other contractually agreed on-the-job training programs. Wraparound services such as transportation and childcare also help with recruitment and retention of underrepresented and disadvantaged workers.

States should also consider additional high-road labor standards, such as: union neutrality; high-road wages and benefits; and occupational health and safety standards and programs. Furthermore, it is imperative that all program guidance sets parameters and incentives to avoid misclassification and excess use of contracted or temporary employees.

Projects that increase interconnection in a region with numerous clean energy projects, projects that look to upgrade energy infrastructure in an economically disadvantaged community, or projects located in areas that historically have employment in the traditional energy sectors should prioritize retention of those jobs and employment for workers dislocated from traditional energy sectors and from those environmental justice host communities. Selecting new construction or upgraded projects that utilize union labor (i.e. a union organization in the construction trade or maintenance of electric grid infrastructure) would create quality opportunities for skilled training and long-term employment to the greatest number of residents in a region.

***Benefits must be maximized for workers and communities that need it most.***
This should be done by:

a. Pursuing transmission in a manner consistent with the administration's Justice40 Initiative, targeting investments in disadvantaged communities with a focus on deindustrialized, impacted, and underinvested in communities;
b. Utilizing hiring and procurement policies that benefit low-income communities, people of color, and women; and requiring or incentivizing community benefit/community workforce agreements that increase economic opportunities for communities and local workers—especially for people of color and low-income individuals;

c. Ensuring investments and policies are in line with the scale of change needed to meet targets for climate action, quality job growth, and economic, racial, and environmental justice. New England states should prioritize projects that will result in the greatest net decrease in GHG emissions and the greatest benefits for impacted workers and fenceline communities;
d. Community Workforce Agreements (CWA) and Community Benefit Agreements (CBA) would offer clear means of ensuring meaningful community and worker engagement in projects funded by this program. A CWA reflects a common pledge between labor and the community to work together to build a high-road path to economic revitalization that includes good jobs. In addition to the collective bargaining aspects of a PLA, CWAs frequently include local hire provisions, targeted hire of low-income or disadvantaged workers, and the creation of pre-apprenticeship pathways for careers on the project. A CBA typically includes more than economic benefits and utilizes a community input process to develop an agreement with the community for a broader array of benefits (i.e., housing or transportation priorities).

## Conclusion

When done right, offshore wind power will create hundreds of thousands of high-quality, family-sustaining jobs including in the construction and maintenance of an offshore transmission network as well as the associated supply chain. The states identified in this RFI are taking a vital step to ensure offshore transmission is built in a way that limits environmental and habitat impacts, engages with local communities, and builds and retains a strong union workforce. Thank you for considering how Connecticut, Massachusetts, Maine, New Hampshire, and Rhode Island might further strengthen their roles in ensuring that offshore wind energy is developed responsibly and reliably. We appreciate your effort to solicit stakeholder input to inform the construction of an offshore wind transmission network.

[i] For New England renewables, see: NREL, Renewable Energy Technical Potential, https://www.nrel.gov/gis/re-potential.html. For Imported hydropower, see: EER, et al., Deep Decarbonization in the Northeastern United State and Expanded Coordination with Hydro-Quebec, April 2018. Maps: Copyright © 2019 S&P Global Market Intelligence.

[ii] Science Daily, "Study finds offshore wind could drive down energy costs in New England, US." April 21, 2022. Available online: https://www.sciencedaily.com/releases/2022/04/220421154138.htm

[iii] Applied Energy: "Impacts of Turbine and plant upsizing on the levelized cost of energy for offshore wind." May 25, 2021. Available Online: https://www.nrel.gov/docs/fy21osti/78126.p

[iv] Electricity Transmission Provisions in the Inflation Reduction Act of 2022

[v] NBC Boston, President Biden Talks Climate Change, Clean Energy in Mass.

[vi[ Atlantic Offshore Wind Transmission Study | Wind Research | NREL

[vii] UWUA Urges Large-Scale Investment in Transmission Infrastructure Before House Energy and Commerce Committee

[viii] An Analysis of New England and New York Offshore Wind Integration

[iv] New York Power Grid Study - NYSERDA

[x] Federal Register :: Request for Information Relating to the Implementation of the Build America, Buy America Act

[xi] Employment and Economic Benefits of Transmission Infrastructure Investment in the U.S. and Canada

[xii] Economic Policy Institute, Botched Policy responses to globalization have decimated manufacturing employment with often overlooked costs for Black, Brown, and other workers of color

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