WRITTEN TESTIMONY

Michael G. Williams
Interim Co-Executive Director, BlueGreen Alliance
Before the 116th United States Congress, House Committee on Natural Resources,
Subcommittee on Energy and Mineral Resources
Building a 21st Century American Offshore Wind Workforce
Longworth House Office Building, Room 1324
Tuesday, June 11, 2019

Thank you Chairman Lowenthal, Ranking Member Gosar, and distinguished members of the committee. My name is Michael Williams, and I am the Interim Co-Executive Director of the BlueGreen Alliance. On behalf of my organization, our partners, and the millions of members and supporters they represent, I want to thank you for convening this important hearing today.

The BlueGreen Alliance unites America's largest labor unions and its most influential environmental organizations to solve today's environmental challenges in ways that create and maintain quality jobs and build a stronger, fairer economy. Our partners strongly believe that Americans should not have to choose between a good job and a clean environment—we can and must have both.

The expansion of offshore wind is a demonstrable example of this principle. These projects are an opportunity to not only drive the nation's clean energy future, but create quality, family-sustaining jobs at the same time.

America's first offshore wind project at Block Island is a great model of this potential. This project was the result of years of collaboration between labor, environmental organizations, industry, and key government officials and entities. Its five turbines began generating power off the coast of Rhode Island at the end of 2016. They produce enough clean, local energy to power 17,000 homes.

This project was built with the highest standards of wildlife and environmental protection, and demonstrates the type of diverse, highly skilled workforce needed in the offshore wind industry. Though it was comparatively small, Block Island put more than 300 people to work

and employed electricians, welders, ironworkers, pipefitters, pile drivers, engineers, scientists, vessel operators, lawyers, and sales representatives.

America's offshore wind industry is growing dramatically and now has even larger projects in development in states like Connecticut, Maryland, Massachusetts, New Jersey, New York, and Rhode Island. This committed development has the potential to dramatically expand both clean energy and job creation in a relatively untapped sector. As these states lead the way and more follow suit, the need for a qualified workforce will grow.

By supporting a wide variety of workforce development strategies targeted at this burgeoning sector, including union training and apprenticeship programs, the Offshore Wind Jobs and Opportunity Act will help ensure that workers have access to the skills training they need to take advantage of this important and emerging industry.

Offshore Wind Development in the United States

The potential for responsible offshore wind development in the United States is substantial. According to the U.S. Department of Energy, if we utilized even one percent of the nation's technical potential offshore wind capacity, we could power nearly 6.5 million homes. We have the technology to harness wind power off the coasts of at least half of our states, and the industry is rapidly expanding both domestically and internationally. [i]

The University of Delaware's Special Initiative on Offshore Wind (SIOW) states in its recent white paper that the United States is now projected to create 18.6 gigawatts (GW) of clean and cost-effective offshore wind power in seven Atlantic states within the next decade. The Block Island Wind Farm is projected to produce more than 125,000 megawatt (MW) hours of electricity per year—enough electricity to power 17,000 homes.[ii] In New York State—home to some of the most energy-demanding cities in the nation—offshore wind generation has the potential to provide up to 39,000 MW of clean power for the state. That is enough to power 15 million homes.[iii]

While the concept of harnessing wind to produce energy is not new, Atlantic coast states have ramped up their interest in building out their offshore wind capacities in recent years. More and more state governments have begun passing laws to mandate the development of offshore wind. For example, Massachusetts has set a goal of 1,600 MW by 2027;[iv] New York has mandated 9,000 MW by 2035;[v] New Jersey requires 3,500 MW by 2030;[vi] and Rhode Island[vii] and Connecticut[viii] have also set similar (though smaller) commitments.

Offshore Wind Job Creation Potential

With this industry expansion comes tremendous potential to create and sustain quality, union jobs.

Jobs in the offshore wind industry include designing the wind farm; constructing the onshore substations; laying cable interconnections; erecting the turbines; permitting; manufacturing rotor and nacelle controls, gearboxes, drive trains, generator and power electronics, steel towers, electrical wiring, advanced polymers, and coatings; construction; and operations and maintenance. Trades included in these various stages include operating engineers, pile drivers, millwrights, welders, electrical workers, utility workers, ironworkers, steelworkers, and machinists.

Estimates put job creation potential off the Atlantic Coast alone at somewhere between 133,000 and 212,000 jobs per year in the United States.[ix] Additionally, the National Renewable Energy Laboratory (NREL) cites that the Atlantic coast states could create $200 billion in new economic opportunity, as well as over 43,000 high-paying, permanent jobs, simply by developing 54 GW of their 1,283 GW offshore wind energy potential.[x]

With the passage of the 2019 Clean Energy Jobs Act which commits to an additional 1,200 MW of offshore wind, Maryland alone stands to gain 25,000 highly technical jobs over the installation period. These jobs will be associated with more than $1.5 billion in associated worker and business owner income.

Ensuring Quality Job Creation

In order to truly capture the full benefits and potential of these projects, it is critical that they are built by skilled workers who are paid family-sustaining wages, with project labor agreements in place, and with materials manufactured here in the United States.

Offshore wind projects rely heavily on skilled labor and advanced manufacturing for construction, installation, maintenance, and operations. For example, the Block Island project—a comparatively small, demonstration project—created more than 300 jobs in the state alone[xi] for local unionized craftsmen in ten different building trades locals, working for 30 unionized contractors and subcontractors.[xii] This was thanks—in large part—to the project labor agreement (PLA) in place for Block Island.

PLAs have been utilized for almost a century and are collective bargaining agreements between contractors and building trades unions, which set out the terms and conditions of employment for all workers on the construction project—whether or not they belong to the union.[xiii] PLAs ensure that projects are completed on time and on budget, require that employees are properly trained, and encourage that public investment benefits local communities. In this way, PLAs benefit workers, contractors, communities, and taxpayers.[xiv]

PLAs are particularly critical in these projects because they bring coordinated, proactive planning to complex projects; provide crucial benefits to local communities in terms of skills training, employment opportunities, and future workforce development; and ensure that the most productive and skilled craft labor is available to work on a project.

Growing the Manufacturing Supply Chain

In addition to the construction phase of these projects, a critical component of the job creation potential for the offshore wind sector is the vast manufacturing supply chain that offers major opportunities for growth in a variety of sectors. While Block Island's PLA resulted in significant quality job creation through the construction of the project, it largely missed the mark when it comes to the materials that went into the project. The major parts and components of the Block Island farm—with the exception of the foundation—were manufactured outside the United States.

As the industry grows, sourcing components domestically represents a significant opportunity to help revitalize American manufacturing. The Special Initiative for Offshore Wind's recent white paper predicts an almost $70 billion buildout of U.S. offshore wind supply chain by calculating growth in a number of sectors, which include wind turbines and towers; turbine and substation foundations; upland, export, and array cables; onshore and offshore substations; and marine support, insurance, and project management.[xv]

Focusing on Operation & Maintenance

The operation and maintenance of the components will be crucial and will create and maintain jobs. As wind farms and their components age, skilled workers will continue to prove necessary to the operation of the farms. Since 80 percent of offshore wind turbines were built in the last ten years, every year up to 20,000 turbines worldwide will enter the second half of their 20-year design life.[xvi]

A report released by Zion Market Research valued the global wind operations and maintenance market at $12 billion in 2018, and has predicted that market to rise to $21 billion within the next five years.[xvii] As the need grows for an operations and maintenance workforce, we must ensure that jobs throughout the life cycle of a wind farm are quality, family-sustaining jobs.

Ensuring Responsible Development and Community Benefits

As the offshore wind industry grows, it is equally important to ensure that projects are developed responsibly, with strong protections in place for coastal and marine wildlife. We therefore support the development of science-based best management practices for offshore wind development, and believe that environmental mitigation must be a key priority for any project.

The development of wind energy off our coasts can also provide important and much-needed support to local communities in our coastal states. Community benefit agreements, designed in coordination with organized labor and local community organizations, help maximize a project's contribution to local communities, and ensure that local communities support the project in question.

The Offshore Wind Jobs and Opportunity Act

The Offshore Wind Jobs and Opportunity Act would create opportunities to educate and train a new generation of workers in a burgeoning sector. The bill creates a new federal grant program to assist colleges and universities, state and local governments, nonprofits, and unions to develop health and safety programs, curricula, apprenticeships, internships, and other necessary activities in order to bolster a robust offshore wind energy workforce. Critically, the legislation prioritizes grants in economically distressed communities, displaced workers, and individuals with a barrier to employment. This will help ensure that good-paying jobs are created in the communities that need them the most.

By supporting a wide variety of strategies to encourage workforce development in the growing sector of offshore wind, the Offshore Wind Jobs and Opportunity Act sets the tone for high-quality, middle-class jobs in this expanding energy market.[xviii]

The offshore wind industry holds great potential for creating quality, family-sustaining jobs while producing clean, renewable energy. As more wind farms spring up off America's coasts, demand for the highly skilled workers needed to complete these innovative projects will grow as well. We need our workers to be ready to embrace this opportunity.

The Offshore Wind Jobs and Opportunity Act will play a significant role in providing the skills needed for workers to break into this growing field. We look forward to working with this committee to advance this important legislation.

Thank you again for the opportunity to testify.

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