



VINEYARD WIND

Testimony of Lars Thaaning Pedersen, CEO of Vineyard Wind Before the House Foreign Affairs Subcommittee on Europe, Energy, the Environment and Cyber

July 29, 2021

Chairman Keating, Ranking Member Fitzpatrick and members of the House Foreign Affairs Subcommittee on Europe, Energy, the Environment and Cyber, my name is Lars Thaaning Pedersen and I am the CEO of Vineyard Wind. I appreciate the opportunity to testify today on how international collaboration on offshore wind benefits American workers.

Vineyard Wind is an offshore wind development company headquartered in New Bedford, Massachusetts, that will build the first commercial-scale offshore wind energy project in the U.S. Our company is a joint venture, 50 percent owned by Copenhagen Infrastructure Partners (CIP) and 50 percent by Avangrid Renewables, a subsidiary of AVANGRID.

In 2018, our first project, an 800 MW wind farm located approximately 15 miles south of Martha's Vineyard known as Vineyard Wind 1, was selected by Massachusetts to power 400,000 homes.

We're also in the early stages of state and federal permitting for our Park City Wind project, which was selected by Connecticut in 2019 and will utilize Bridgeport for both staging and construction and eventually operations and maintenance.

Both projects will interconnect to the ISO-NE electricity grid in Barnstable, Massachusetts and together will power over 800,000 homes and businesses.

I have been fortunate to work on commercializing offshore wind since the early days of this industry and have worked on more than 15 offshore wind projects in all stages throughout my career – from planning and development to construction and operations.

In the mid-2000s, offshore wind was an expensive, niche technology in Europe. What we learned though in those early days was that in order to drive down cost, we needed to scale-up the industry.

Scaling up is directly tied to the technology, and indeed you are seeing that play out today. Wind Turbine Generator (WTG) size has increased by a factor of almost 6 over the last 15 years, lift boats have increased significantly in size, cables are receiving higher ratings and foundation sizes have increased to be installed in deeper waters.

But scaling up also means bringing larger projects on-line and most importantly, expanding the pool of a highly skilled, dedicated workforce engaged in developing and building safe projects in addition to manufacturing.

While Europe is certainly farther along in terms of steel in the water, the U.S. is launching this industry in many ways at the perfect time.

And while there is certainly much that should be learned from past experience in Europe, I want to be clear that the U.S. based offshore wind industry is poised to be thoroughly and uniquely American.

Engaging Stakeholders

Since acquiring our first lease area in 2015, Vineyard Wind sought to create a new course for offshore wind in the U.S. We know the tremendous potential this industry has when it comes to investment and job creation. But none of these benefits can come to fruition if the project doesn't have public support.

If there is one term that defines Vineyard Wind up to this point, it's stakeholder engagement.

The Vineyard Wind 1 project has been through an unprecedented and exhaustive public review process that generated more than 30,000 public comments, more than 90% of which supported the project. The Construction and Operations Plan (COP) was reviewed by more than two dozen federal, state, and local agencies over the course of more than three and a half years.

From the, globally unique, 1 x 1 nautical miles spacing to the significant mitigation measures we've put in place, stakeholders – from commercial fishing to scientists to local residents – have shaped a project in a way that has gotten us to the point where we are on the brink of launching this new U.S. industry.

Focus on Local Hiring, Diversity

Another great example of this community/stakeholder approach is our Project Labor Agreement (PLA) with the Southeast Massachusetts Building Trades. Just two weeks ago Vineyard Wind and the Southeastern Massachusetts Building Trades Council came together alongside federal and state policymakers, union members, and representatives from the Massachusetts Clean Energy Center to sign a project labor agreement that sets the standard for building offshore wind in the U.S. using a U.S. workforce.

Though it took a long time and countless hours of work, we never lost sight of our ultimate goal – hiring local people to work on the project. What we ended up with is an agreement that ensures that roughly 500 of the 1000 construction jobs that will be created as a result of Vineyard Wind 1 will be good paying union jobs. We have specifically targeted the four counties

located near our main base of operations – Bristol, Plymouth, Barnstable and Dukes – to provide the bulk of the local labor needed for construction and staging.

The agreement also includes aggressive targets for Diversity, Equity and Inclusion, with 10% of jobs set aside for women and 20% for people of color. To reach these goals, we have formed a committee with the different affiliate unions and our contractors that will analyze barriers for underserved communities and look to implement policies and programs that overcome these challenges.

I was particularly inspired by some of the stories that we heard at the signing ceremony we held on the 19th of this month.

We heard from Kristin Wozniak, a member of the International Brotherhood of Electrical Workers Local 223, who spoke passionately about the need for workers to represent the diverse communities where they come from and about her desire to take her skills to the front lines in the battle against climate change.

We also heard Josh Griggsby, a member of the Piledrivers Local 56, who got down to the heart of the matter and talked about how this job will help his family and how proud he was to tell his 5-year-old son that he was working on the project. Josh is currently going through the Global Wind Organization (GWO) training and will in all likelihood be working on the Vineyard Wind 1 project in the coming months.

Building Out the Supply Chain

Equally important to the many jobs in construction and operations, a significant opportunity in the long term to maximize job creation in this industry remains in the supply chain and for the first project, we have sought to work with U.S. based suppliers wherever possible. It's not in the interest of Vineyard Wind or any other developer to import components or labor from outside the U.S. compared to buying these components locally as importing components only increases costs and logistical concerns for what are already incredibly complex projects.

We have partnered with Linxon, headquartered in North Carolina, to provide a turnkey substation that will connect our first project to the ISO-NE grid. The substation work is going to utilize local union labor, with construction commencing later this year. The substation is expected to be commissioned in 2023 and will provide decades of local employment in operations and maintenance.

We've also partnered with Southwire, the company that will be leading the onshore cabling effort. The Vineyard Wind 1 project will require 32 miles of onshore cabling. As a result of our PLA, the installation of that work will be done by local union labor.

It's impossible to talk about our first project without mentioning the Jones Act. Vineyard Wind fully supports the Jones Act and will comply with its transport requirements. However, as we

look toward the immediate future, there are currently no US flagged jack-up installation vessels large enough to install the components for our first project.

For Vineyard Wind 1, we sought to turn these installation challenges into opportunity. We are working with DEME, one of the leading offshore wind construction companies in world to provide the large jack-up vessel we need to install the components of the project.

But in order to get components from the staging area at the Marine Commerce Terminal in New Bedford out to the DEME vessel, we've contracted with a U.S. based, union company called FOSS Maritime Company.

And like our other agreements, this is will likewise create good paying union jobs for American maritime workers and furthers our commitment maximizing American jobs in the industry.

Creating an Offshore Wind Ecosystem

We also recognize that it will take a thriving ecosystem of companies of all sizes if we are going to truly maximize the benefits of the industry, which is why we've also partnered with Greentown Labs, a startup incubator in Boston.

Through this partnership, we supported the Offshore Wind Challenge, a program designed to engage startups with promising technology to help us increase our ability to monitor and avoid marine mammals during all phases of the project.

Working with Massachusetts startups like SICdrone and Rhode Island based Night Vison Technology Solutions, we've tested cutting edge technology that can significantly improve our ability to avoid endangered species.

Most importantly, the experience these companies now have will make them more competitive for work in the broader industry.

Potential Government Action

There are currently three bottlenecks that could slow the growth of this industry.

The first is port availability. Right now, there are only a handful of ports capable of serving as construction and staging areas for the OSW industry. Most ports are disqualified because they are obstructed by bridges, which prohibit access for jack-up vessels.

Industry and federal/state funds are needed for to improve port capacity, both for project construction AND manufacturing, if we are going to see the full deployment of offshore wind.

In our case, the Port of New Bedford, the only port in the U.S. specifically designed to support the infrastructure for offshore wind staging, has been supported by \$113 million in state

funding to build areas for offshore wind staging, create more room for other commercial vessels, and to remove contaminated materials.

In order to manufacture, pre-assemble and marshal for construction of these components you need ports with significant acreage and without overhead restrictions.

Unlike Europe and the Gulf of Mexico, the US Eastern Seaboard does not have a lot of these port facilities available, an aspect that will need to change if we are going to fully deliver the US jobs in this industry.

The good news is that there are many locations where ports could be built. The question becomes, WHO should do it. The lessons learned from Europe is that the most successful developments have been led by or involved public entities with a long-term view of maximizing the value beyond any one project.

Developers like Vineyard wind typically have a 3-5 year horizon when building a portfolio of projects and in my view ports are infrastructure in the same way as highways, bridges and airports. We need to take a similar approach to our ports as we do with other infrastructure projects and figure out how to maximize the value over 30-50 years.

The second challenge is the electrical grid. As the states and the federal government pursues a future with renewable generation significant investments are needed to transform the grid to be capable of handling increasing amounts of distributed generation, or in the case of offshore wind, enabling the grid to transport large amounts of power away from the coastline.

Development of new grid infrastructure is as complex as developing offshore wind projects and needs coordination and engagement from local, state and federal agencies as well as coordination across the agencies that oversee the electrical wholesale market such as FERC and regional Transmission operators.

A very important lesson learned from Europe has been that development of the grid infrastructure needs to run in parallel and sometimes ahead of a large-scale expansion of offshore wind generation. This is a significant challenge especially along the Eastern Seaboard and should in my own opinion be a key priority.

The third challenge is the significant need in recruiting and training a new workforce.

We need skilled workers developing the electrical grid on and offshore, scientists to study wildlife and plan projects so they have minimal environmental impact and engineers and scientists to design projects and components and operate them safely and effectively for 30 years.

Therefore, my message is that a significant effort across states and the federal government is needed to prepare a workforce that can work in this exciting new industry.

Furthermore, public investments are not about helping any one project or any one company. They're about helping an industry take root and keeping American workers working, building the next great energy infrastructure projects.

Conclusion

The Vineyard Wind 1 project represents a giant step forward for the US offshore wind industry, but it is only the beginning.

Over time, as workers gain experience in construction and operations and management, more jobs will go to local workers. And given the goals of both the Biden Administration and state governments up and down the East Coast, these are jobs that will endure for years and perhaps decades to come.

I look forward to the day when port cities that for too long have been left to die on the vine become thriving hubs of US construction and manufacturing, ones that hire locally and represent the people where these projects are being built.

We have the chance now to make this happen. We can't let the opportunity pass us by.

Thank you, and I look forward to answering any questions you may have.