

Business Better (Episode 32): Recent Developments in the Offshore Wind Energy Industry with Special Guest Jennifer Simon Lento of Vineyard Wind

Speakers: Brendan Collins and Jennifer Simon Lento

John Wright:

Welcome to Business Better, a podcast designed to help businesses navigate the new normal. I'm your host, John Wright. After serving nearly 15 years as senior vice president and general counsel at Triumph Group Incorporated for global aerospace components supplier. I'm now a member of the securities in M&A groups at Ballard Spahr, a national law firm with clients across industries and across the country. This episode is the first in our new energy and environment review series, in which Ballard's energy and environmental lawyers will address the energy evolution driven by climate change, renewable energy innovation, electrification, and energy efficiency. As consumers, generators, and investors alike strive for a sustainable future. Today's episode features the discussion of the state of the offshore wind energy business in the US, including regulatory and environmental issues, developments under the Biden administration and coming areas of opportunity for further development.

John Wright:

Leading the discussion as Brendan Collins, a partner in Ballard's Philadelphia office, who is the practice leader of the firms manufacturing group, and an environmental lawyer who devotes his practice primarily to clients in the electric power sector and the oil and gas industry. Brendan's guest is Jennifer Simon Lento, general counsel, corporate secretary, and chief compliance officer at Vineyard Wind. A developer of one of the largest US offshore wind projects. So with that, let's turn the episode over to Brendan and Jennifer.

Brendan Collins:

Hi, I'm Brendan Collins and welcome to our podcast on the offshore wind energy business in the US today. My guest is Jennifer Simon Lento, general counsel of Vineyard Wind, which hopes to develop one of the first commercial scale offshore wind projects in the US. Jennifer is also a Ballard Spahr alumni, and we had the pleasure of working together for a number of years. Hello, Jennifer.

Jennifer Simon Lento:

Hello.

Brendan Collins:

Jennifer. Can you start out our discussion today by just giving us some background on Vineyard Wind and the types of projects it is involved with?

Jennifer Simon Lento:

Sure. I'd be happy to. So Vineyard Wind is a joint venture between Avangrid Renewables, which is a US-based developer and operator of primarily onshore wind projects, as well as some solar and Copenhagen Infrastructure Partners, which is a Danish based pension fund, so a couple of the funds under CIP are among our shareholders. So our company has... we were formed around 2017 or so, and we currently hold two lease areas in the outer continental shelf off the coast of Massachusetts, about 14 to 20 miles south of Martha's Vineyard. Those two lease areas we anticipate could hold up to five or six offshore wind projects. Currently we are developing two of those projects that are contracted through a couple of state procurements, where we were awarded contracts. The first one is what we're referring to as the Vineyard Wind one project.

Jennifer Simon Lento:

That one is... We were awarded a contract back in 2017, 2018, I think it was, before my tenure at Vineyard Wind began. So I apologize if I've got the year a little bit off, but at least that far back. We've been developing that lease area since 2017, when we submitted our application to the federal government for what they call the Construction And Operations Plan, the COP. And so that project, we're contracted to provide 800 megawatts under six power purchase agreements to each with Eversource, National Grid and Unitel, which are all EDC's located in Massachusetts. We will be providing enough electricity under these power purchase agreements to supply about 400,000 residences. So it's a pretty big project right now, and it's in the iteration that we believe to be the final design. We expect that the project will involve 64 offshore wind turbines.

Jennifer Simon Lento:

We're contracted with GE, which is great. It's an American based supplier to provide those turbines. Each of those turbines is about 13 plus megawatts, so they are very, very large, much larger than anything that you would see on land. The other project that we're developing is under contract in the State of Connecticut with two of the EDCs in Connecticut. We refer to that project as Park City Wind, and it will feature... It's also for about 804 megawatts worth of energy. It will interconnect into Massachusetts, but the electricity has been purchased by the EDC's that will benefit the rate payers in Connecticut, that will involve among other benefits for the rate payers.

Jennifer Simon Lento:

A lot of redevelopment work in Bridgeport, which is an area that is right for redevelopment, so we're very excited to be part of that. And then we have another lease area that is not yet under contract, but it's the 522 lease area. So right now we're still just looking at that area, doing some initial geophysical work, figuring out what the wind speeds are out there and assessing what the options are. There are a number of different states that have been issuing procurements and that are expected to issue new procurements. So as those procurements come out, we will likely develop bids that feature project in that.

Brendan Collins:

And so what's the geographic range that Vineyard Wind is operating in or has leases in then?

Jennifer Simon Lento:

Sure. So our current lease areas are, as I mentioned, both located off the coast of Massachusetts, it's about 15 or 16 miles south of Martha's Vineyard. So the distance of those projects, just to give a little bit of... distinguish between what, I think most people have heard about offshore wind, I think what most people think of when they think of offshore wind is Cape Wind, which was a project that was proposed before there were even regulations to govern how to develop an offshore wind project. So, we owe a debt of gratitude to the work done by the folks who pursued that project, even if it didn't come to fruition because that project laid a lot of groundwork for the regulations that came into play and that we're currently governed by, that make the process a little bit smoother and believe it or not, our process as tumultuous as has been, has been smoother than the Cape Wind process, but the major difference between the Cape Wind Project and the Vineyard Wind Project for most folks understanding is the location of the project.

Jennifer Simon Lento:

So that Cape Wind Project was supposed to be located in Nantucket Sound, would have been located about five miles off shore and definitely would have been part of the... When you stood on the beach, you were going to look out and you were going to see it. It might've been relatively small on the horizon, but you were still going to see it, you're going to be able to identify wind turbines. Our project is located, as I mentioned about 15 or 16 miles off shore. If you go to the Vineyard Wind website, you can actually pull up some simulations to see what it will look like from Martha's Vineyard, which would be the closest land area to the project. And really on a day with no sea haze whatsoever, you might see a blip on the bottom of the horizon.

Jennifer Simon Lento:

For any listeners who have spent any time in New England, you'll immediately say there's never, ever in the history of New England been a day without sea haze. So I think that's a significant thing. So in terms of what this does to the view shed for people who don't enjoy the view of an offshore wind farm that is a much diminished problem if you would refer to it as such for this project, as opposed to the Cape Wind Project.

Brendan Collins:

Yeah. I would've say that out of mind is more than just a NaFarism. There's a lot of truth to it, particularly when it comes to developing a project like this. Can you give us an overview of the regulatory processes that you have to navigate as general counsel?

Jennifer Simon Lento:

The way that things are structured. We work with a lot of Europeans on these projects and one of our shareholders is European based. The other shareholder actually has a European parent company. And part of that is because the technical expertise that's required to build these projects, we don't have it in the US yet, because we haven't done it before. So we're relying on folks who've been doing this for 20 years and building up projects overseas. But one of the things that my European counterparts are just baffled by, is the permanent process here. And a lot of that has to do with our legal system and the value that the US places on permitting stakeholders to have involvement with things that impact them. So, whereas you can look at it through a couple of lenses, you can view it as, "Oh my goodness there is infinite opportunity to litigate these things," and that just drags down the development process. And certainly that has felt like the case over the term of our efforts to bring this project to fruition to some extent.

Jennifer Simon Lento:

But at the same time, we also put an enormous emphasis on engaging with our stakeholders. And we think that it is critical to bring them into the tent with us, because we say it in everything from folks whose economic livelihood depends on use of the outer continental shelf like commercial fishermen to rate payers who are paying their electric bills, to people who live in communities, where there could be job creation as a result of these projects, and we want our staff to reflect the people that we serve.

Jennifer Simon Lento:

So from a diversity standpoint that's important, but from a permitting standpoint, I think it is important that we... the way that it's currently structured, there is overall federal permitting process. The lead agency for that is the bureau of ocean energy management, which is a bureau that sits under the department of the interior. So they oversee our federal permitting and there are a number of agencies who are coordinated pursuant to the BOEM permitting process, which is pursuant to a set of regulations issued. So, but in addition to that, we also have state and local permits that are required because these projects, while they are located on federal waters, need to interconnect directly into... they land on beaches and beaches are within states. So, and then they have to connect to electricity lines that are also located in states and towns.

Jennifer Simon Lento:

So, all of these various entities have an interest in weighing in. So we have state permits that impact our... the cables that transmit the electricity from the project to the grid. We have local permits to deal with things like the location of the onshore subsection, where we've got landfall, where our operations and maintenance facilities are going to be located, where our lay down areas are going to be located. So it's everything from zoning issues, to concerns about endangered species. So one of the critical issues for offshore wind on the Atlantic Coast right now is consideration of the North Atlantic right whale, which is a deeply endangered whale species. There's only about 400 of them left, and they migrate up and down the Eastern seaboard. So we entered into a groundbreaking agreement with a number of environmental NGOs to ensure that we are going above and beyond what is even required under the endangered species act with respect to protecting that species.

Jennifer Simon Lento:

So we're limiting our construction season to ensure that we're not interfering with the migration season and the mating season of the North Atlantic right whale. We have agreed to put in additional mitigation around noise during the construction season, because they are noise sensitive. We have certain restrictions regarding... If a North Atlantic right whale is encountered by any of our installation vehicles, we have to stop construction for a certain period of time. We're being very, very careful about all of that. And we think that that's important because we don't see our projects as having dominance over the ocean. We recognize that this is a shared resource and one of the great benefits of the wind energy in both onshore and offshore is that it's designed to... it is an improvement over fossil resources.

Jennifer Simon Lento:

The idea is to provide climate mitigation, to do something good for the planet, not to contribute and make it worse. And we think that knocking out endangered species probably wouldn't be a great idea. So we do want to be cognizant about all of those things. So as complex as the permitting system is, we are cognizant and respectful of the rationale behind it. We... This is a work in progress and I think the regulators would agree and we're looking for ways to improve on efficiencies, I know that Biden administration and the new director of BOEM is focused on that as well, because these are new and we're figuring it out as we go. We expect that there will likely be modifications to the regulatory process to make it a little bit more efficient, but without cutting corners that could potentially damage stakeholders or species, or other aspects of things that are impacted by these projects.

Brendan Collins:

Well, you mentioned the Biden administration, and certainly I think that the landscape has, or in your case, perhaps the seascape is changed a little bit in the last few months. Are there specific initiatives coming out of the Biden administration or Congress that are keeping that you're keeping your eye on at Vineyard Wind?

Jennifer Simon Lento:

Absolutely. So there's been a number of great developments over the last several months, I think, for offshore wind generally. I would go back even before the new administration took office, and point to some new legislation that came out in December of last year with respect to the investment tax credit. For the first time the Congress enacted an investment tax credit available for offshore wind projects specifically, that grants 30% investment tax credit for all projects that begin construction from 2016 through 2024. And it's not a declining value, it's a straight across 30%. So that's a great boon for these projects and working to make them financeable because they are very expensive infrastructure projects. On average, we're looking at these projects running about \$3 billion per project, so it is a lot of money on the line.

Jennifer Simon Lento:

And for US banks, I think particularly for a new technology, they need a little something to feel comfortable with it. So this is definitely something that helps, and we're very grateful to the folks who led that campaign in Congress to move that along. IRS also extended the safe harbor provision to make that tax credit possible. So it used to be a four year safe harbor now it's a ten-year safe harbor, given the extended timelines on developing these projects that was also a great win. So, even in Europe where they have been building these projects for 25 years, the average length of time and they have a much, much more efficient permanent process, kind of a more of a one-stop shop than we do. Those projects, average seven to 10 years from naissance to Cod.

Jennifer Simon Lento:

So given... it was pretty ambitious to try to get these projects done in a four-year timeframe in the US, so we are also grateful to IRS for hearing the industry's call to make the safe harbor something that was more tailored for what this industry requires to get off the ground, so to speak. With the incoming administration, of course, the Biden administration campaigned on and is putting a huge focus on climate mitigation. So offshore wind is a critical piece of that. I'm sure you're seeing it where you are

as well, Brendan, but a lot of the old school base-load fossil fuel plants are retiring, and we've got to find a way to replace them. And in order to do that in a clean way, we're looking towards renewable resources but we need to find renewable resources that are both geographically accessible to demand areas.

Jennifer Simon Lento:

So for the east coast of the United States, we have very congested grid. We have highly populated areas and not a lot of landmass available. So it's not like the West Coast where you can just throw up a gigantic solar farm. We don't have that resource, especially when it snows. And we don't have the land area to make that work, but what we do have is some of the best wind speeds and great shallow waters off the coast that really create... There are some, and I'm sure folks who have followed wind have heard this applied to a variety of wind resources before, but it really is true that the east coast of the United States is like the Saudi Arabia of wind.

Jennifer Simon Lento:

There's just spectacular winds out there. They blow all the time. And the concerns about intermittency are greatly reduced when you've got this constantly blowing wind out at sea, and you can place these very, very large turbines that can create enormous quantities of energy and bring them to demand centers like Boston, Massachusetts, like Cape Cod, like New York city, all of these large demand centers up and down the east coast, it's a perfect kismet.

Brendan Collins:

Yeah. And I think it's hard to appreciate the scale. I know that you mentioned revising your projects, and I know recently you revise your project by reducing the number of turbines because the turbines could be bigger and more productive. And when I hear you talk about 13 megawatt turbines I think of the land side, wind farms where a two megawatt turbine is a very big turbine. And now you have a 13 megawatt turbine would certainly amplifies that capacity for production, that is so important to the economics of these turbines, because they, as you said, have to go all the way down to the ocean floor, which it's not that easy.

Jennifer Simon Lento:

That's right. That's right. Just to give a sense of the scale of these things, in the turbine point from the end of the blade to the end of the other blade, you can essentially fit two football fields. These things are just massive. And one spin of the turbine is enough to supply the electricity for your house for a whole day, just from one turn. So they're very, very powerful.

Brendan Collins:

Now, a number of Atlantic Coast states, keeping in your theme is a very resource rich area. A number of Atlantic Coast states have been making strong moves. There've been moves in the State of New Jersey, which has a big program underway. We have wind farms down as far south as Virginia off shore, I believe. What do you see over the next 10 years as areas of opportunity and maybe that's just these coast of the US and maybe we're bringing another coastal areas as well.

Jennifer Simon Lento:

Yeah. So the Biden administration they recently issued some goals for what they want to do with offshore wind over the next really tend to 10 to 20 years. And because these projects do have long development lines, they have a great opportunity to set this industry often running, even if there aren't that many projects up and running by the end of a four year term, getting them rolling is a really good start in part, because the ability of this industry to really take hold in the US will depend on having enough stability in the development process to give the manufacturing and supply chain partners reason to invest in building factories in the United States. So, one of the things that I find so compelling about offshore wind in terms of the economic benefits that it can ultimately bring to the US, the US has seen a significant decline in manufacturing facilities, and that's really hurt a lot of folks.

Jennifer Simon Lento:

Certainly we've seen it in steel manufacturing in Pennsylvania where you are, and in mining and all kinds of areas and people have lost jobs over it. And the offshore wind industry presents a great opportunity to reinvest in our manufacturing sector. These projects as I've noted, these structures are humongous. There is never going to be a good reason to import these structures from overseas if we can build them here. It's just always going to be cheaper to build them here. So we can't say that about a lot of things that it's frankly cheaper through manufacturer in China or in Europe, but when it comes to offshore wind, it's just going to be cheaper to build it here. So we just need to get to a point where the supply chain feels confident to build here. It will also be an opportunity to reinvigorate the ship building industry, these projects... You may be familiar with the Jones Act, which is a piece of legislation that requires boats that are vessels that go back and forth between what's referred to as coastal points have to be US flagged and US crew.

Jennifer Simon Lento:

That's a big simplification, but that's the baseline of it. And these projects, the installation vessels, the construction vessels, the jack-up vessels, they're all European right now because we haven't had an industry here that's demanded them. One of our competitors is already begun to invest in developing or rather building one of these ships. And as this industry moves forward, we expect there to be a lot more vessels that are commissioned in the US which we see as just another great opportunity for US economic development.

Brendan Collins:

That's fantastic. There has been a lot of... In addition to the maritime infrastructure, there's also a lot of short time infrastructure. And this comes from the manufacturing that you mentioned, and New Jersey recently announced the large program of investment to begin to create that capacity in the Mid-Atlantic States. What are you seeing happening up there in New England?

Jennifer Simon Lento:

Yeah, so one of the pieces of... We were talking about state procurements or for... The state procurements are largely to enter into a power purchase agreements, but they tend to be issued by the state and they compel the EDCs to enter into long-term energy supply agreements. The bids that are requested by the states nearly always require the bidding parties to accompany, it's not just about your project. It's also about what kind of economic development investments are you going to make in our state? How are you going to make things better on top of this? So Massachusetts is currently on the verge of issuing its third round of procurements. We expect to see... again, there will be an economic development requirement under that procurement.

Jennifer Simon Lento:

We're beginning to also see inclusion of diversity requirements under those procurements, how are we going to ensure that businesses that are owned and staffed by women and people of color are going to be included in this industry? How are we going to directly invest in low-income areas or areas that are right for development? How are we going to handle environmental justice concerns? All of that is being factored into procurements. I think at this point, I would still say that the biggest factor of course that most states are considering is price, because at the end of the day, these are still revenue contracts and the EDCs are still looking to get the best benefit that they can for the rate payers.

Jennifer Simon Lento:

So, and pricing is becoming more competitive, especially with, as I mentioned the ITC and as we begin to develop a manufacturing supply chain here, prices will continue to drop because it will just become more economic as time goes on.

Brendan Collins:

Well, thank you, Jennifer. And we're getting to the end of our time, but I did want to get a look ahead if you care to have a try at the crystal ball for the timeline of Vineyard Winds projects, we're certainly looking forward to the chance to see how one of these large offshore wind projects comes together and performs in practice. What does it look like for the Vineyard Wind One and Park city Project?

Jennifer Simon Lento:

Sure. So, our goal right now, you may have heard that our final environmental impact statement was recently issued by BOEM, that's been a bit of a long haul, that was issued in late March. The next step is receipt of our record of determination, which is our record of decisions, sorry. Which is our final federal permit. Actually, that's a bit of a misstatement there. Three additional federal permits that are contingent upon the issuance of the rods, so those will come out shortly afterwards but we've seen drafts of a couple of them and it's really the rod that's the big news. So we are looking forward to that. We have high hopes that BOEM will issue that in the near future.

Jennifer Simon Lento:

And once the rod is issued, the next step for us, of course is getting to financial close, making sure that the project is fully funded and we'll begin construction. We expect that under our current agreements, we need to reach COD within the next couple of years. So it's going to be a busy construction period. The Park City Wind Project is a little further behind. We entered into that procurement or into those PPA's a little bit later in time. And one of the things that I think is important to think about with these projects is that BOEM as the lead regulator on these projects creates a queue for these projects and much to our chagrin, we're not the only ones out there.

Jennifer Simon Lento:

So there are other developers and we do have to fit into the queue. So I think the Vineyard Wind One Project is the first one in line, and that's probably why it's getting as much attention as it's getting. And one of the things that slowed us down a little bit, but I think will ultimately end up being a benefit to the project is we did end up having to... and part of the reason the FVIS was delayed was we needed to get a supplemental environmental impact statement that provided an assessment of the cumulative impact of the projects that are currently in the queue, in the area where our project will be located. So, in some ways it was frustrating of course, because the cumulative impact that you can make arguments around that.

Jennifer Simon Lento:

But at the end of the day, I think it really boosts our... the ultimate assessment that they reached in the final environmental impact statement to know exactly how the cumulative impact of these projects will impact stakeholders as well. So we feel that we have a pretty strong administrative record and in the event, there are any challenges to the record of decision, which is always a possibility with large infrastructure projects permitted by the government. We feel that we've got some solid ground to stand on.

Brendan Collins:

That's fantastic. So we hoping for 2024.

Jennifer Simon Lento:

I would hope that we get there by then, yes.

Brendan Collins:

Well, Jennifer, thank you so much for taking the time to share with us your thoughts and your knowledge of the industry. And we'll look forward to seeing that whether it's in 2023, 2024 or whatever it is. And we'll come up to New England and we'll light a lamp and we'll think of Vineyard Wind.

Jennifer Simon Lento:

That sounds great. Thanks, Brendan. It's been a pleasure.

John Wright:

Thanks again to Brendan Collins and Jennifer Simon Lento. Make sure to visit our website www.ballardspahr.com, where you can find the latest news and guidance from our attorneys. Subscribe to the show in Apple Podcasts, Google Play, Spotify, or your favorite podcast platform. If you have any questions or suggestions for the show, please email podcast at [ballardspahr.com](mailto:podcast@ballardspahr.com). Stay tuned for a new episode coming soon. Thank you for listening.