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Helping Offshore Wind Take Flight

An article written in collaboration with Julia Pettit, General Counsel, Atlantic Shores Offshore Wind

Julia Pettit began working in renewable energy as an attorney at Stoel Rives, a law firm with a well-established energy practice. In her 14 years with the firm, she focused primarily on project finance and merger and acquisition (M&A) transactions in renewable energy.

Through this work, Julia developed relationships with members of EDF Renewables' legal team, and when a position in the legal department opened in 2015, she successfully applied for it. "I was very interested in transitioning to a new way of lawyering," she remembers. "As external counsel, you're often advising on risks and tactical decisions limited to a specific project or a limited set of facts. I wanted to be more connected to long-term strategic decision making – 'How does this project fit into our portfolio, how have we successfully managed or mitigated risks, and how are things going to play out over the long run?' Being on the inside gives you that seat at the table."

During her first few years with EDFR, Julia worked on onshore wind and solar projects at various stages of development, but in the summer of 2018, the company began looking at opportunities to enter the East Coast offshore wind space, including the acquisition of an offshore wind lease owned by U.S. Wind. "I raised my hand and offered to help support the team with the negotiation and acquisition documents. The transaction closed in December of that year. Shortly thereafter we formed a joint venture (JV) with Shell New Energies US called Atlantic Shores Offshore Wind,[1] and not long after that, I shifted from supporting EDFR's involvement in Atlantic Shores to serving as general counsel for the new company."

[1] Atlantic Shores was the first JV between EDFR and Shell New Energies; it was followed in 2021 by Mid-Atlantic Offshore Development, a JV between the two companies that will develop transmission lines in New Jersey to support offshore wind.

"The JV made a lot of sense," Julia explains. "Acquiring the lease was a significant investment, and although we are very encouraged by the current and future demand for offshore wind that is being created by state requirements in places like New Jersey and New York, getting from a lease to a financed, operational project is a long journey with a lot of uncertainty. It's prudent to share that risk with a partner, and Shell is an ideal choice because of its interest in renewables and knowledge and relationships in the offshore space."

Her new focus on offshore wind has meant she's "had to do a lot of learning," but Julia describes her current role as an extension of the skillset she acquired doing project finance and M&A work. "When you're dealing with financing entities, investors or buyers, you quickly discover that solid core agreements are key to making counterparties comfortable. Details matter in terms of framing and reducing risks. Having been through the process many times, I know what can cause problems! That said, I also know my limitations and when to call in a subject matter expert."

In June 2021, Atlantic Shores announced that the New Jersey Board of Public Utilities awarded its subsidiary, Atlantic Shores Offshore Wind Project 1, the right to receive offshore wind renewable energy certificates (ORECs) for a 1,510 megawatt (MW) offshore wind project (Atlantic Shores Project 1). It's estimated that the project, which will be located between 10 to 20 miles off the coast of New Jersey between Atlantic City and Barnegat Light, will produce enough clean energy to power over 700,000 homes while bringing $848 million in guaranteed local economic benefits to the state. Slated to come online in 2027, Atlantic Shores Project 1 is the largest single renewable energy project in New Jersey and the third largest in the United States.

Although the U.S. onshore wind industry is relatively well-developed and has seen substantial growth over the past decades, offshore wind is still in its infancy here. "States on the eastern seaboard want to move toward low carbon sources of electricity, but many of them don't have enough land to support large onshore wind or solar farms. That makes offshore wind appealing," Julia remarks.

However, like any fledgling industry, U.S. offshore wind faces several challenges. "State policy is playing a critical role in terms of creating incentives that will allow the market to take shape, first and foremost by initiating demand that will get the utilities to come to the table," she observes.

Offshore wind is more expensive than onshore, so individual projects need to be bigger and use larger turbines to produce enough power to justify the capital expenditure. "The logistics are much more complex, especially given the size of the componentry. We could soon see offshore turbines that are 15 MW in size, which is massive. Finding cranes and jack-up vessels that can handle equipment of this size, not to mention ports with enough space to accommodate these parts, and water deep enough to accommodate vessels big enough to transport these parts, takes some legwork. As a developer, you have to figure out if the infrastructure will support your plans."

Supply chain issues also present a major obstacle facing the U.S. offshore wind industry. "Europe is far ahead of us in this respect," Julia notes. "Tower sections will likely come from Europe, but the nacelles and blades could be made here. States are competing to attract manufacturing, and companies that are early movers will be well-positioned when things start to take off."

A third issue is that unlike most onshore wind farms, which are typically on privately owned land, offshore wind is constructed in either state territorial waters or the U.S. outer continental shelf, which is governed by the U.S. Department of Interior's Bureau of Energy Management, which means the siting and permitting process is quite different and very complex.

"These are all areas in which we'll be looking to our JV partner for support. Both the Development and Technical teams have been leveraging Shell's expertise on offshore-related matters due to its significant experience in the offshore environment and large network of longstanding relationships with agencies and contractors. We believe the two companies' complementary knowledge and skills will increase our overall chances of success," Julia says.

A fourth critical issue for offshore wind is transmission. "New Jersey just closed an RFP for transmission solutions for offshore wind. Mid-Atlantic Offshore Wind, which is a separate EDFR-Shell JV, submitted a proposal," she clarifies. "We won't know the results for more than a year, but it will be interesting to see how it all plays out in terms of finding solutions for the successful integration into the grid of the volume of offshore wind that the State of New Jersey is currently targeting. Other states are contemplating similar approaches."

These challenges notwithstanding, Julia is excited about the prospects for growth of this new industry. She continues to build her expertise, while also working with colleagues to build the Atlantic Shores team. "It's been a wonderful experience to be a part of something that's emerging and taking shape like this!"

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