

COVID-19: Impact on the US Offshore Wind Industry

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A discussion of the effects of the 2019 novel coronavirus disease (COVID-19) pandemic on the US offshore wind industry including the supply chain, costs, and deal-making.

Unpredictability has emerged as one of the few certainties of the 2019 novel coronavirus disease (COVID-19) crisis. Government efforts to limit the expansion of the pandemic, notably stay-at-home orders and travel restrictions, have had repercussions throughout the US and global economies. These include market contraction and a precipitous decrease in deal-making activity. Every industry has seen the effects of the COVID-19 pandemic, including the renewable energy sector. This Article discusses the repercussions of the COVID-19 pandemic for the fledgling US offshore wind market, including the availability of wind turbines and other project components and access to federal tax credits. It also discusses government stimulus programs that may mitigate the effects of the pandemic for qualifying offshore wind projects.

UNDERSTANDING US OFFSHORE WIND INDUSTRY

The US offshore wind industry is not yet fully established. As of May 1, 2020, there is only one offshore wind project in commercial operation: the 30 megawatt (MW) Block Island wind farm off the coast of Rhode Island, which came online in December 2016. There are, however, many projects in the development pipeline. According to the American Wind Energy Association (AWEA), there were 7,483 MW of offshore wind capacity under construction or in advanced development at the end of 2019 (see AWEA: U.S. Wind Industry Fourth Quarter 2019 Market Report: Public Version (registration required)). The US also has an aggregate pipeline of more than 26 gigawatts (GW) in offshore wind capacity in federal lease areas, of which developers expect 14 offshore wind projects totaling 9.1 GW to be operational by 2026 (see Standard & Poor's: The Energy Transition: Foresight Is 2020: Tailwinds For U.S. Offshore Expansion (registration required)).

There are also several state and federal programs that could potentially increase the number of offshore wind projects in the US, including:

- Virginia, which has an offshore wind target of 5,200 MW (or 5.2 GW) of offshore wind capacity by 2034 (see Legal Update, Virginia Legislature Passes Bill to Be Carbon-Free by 2050 ([W-024-4539](#))).
- New York, which seeks to procure 9 GW offshore wind capacity by 2035 (see Legal Updates, New York Legislature Approves Climate Leadership and Community Protection Act ([W-020-9759](#)) and Governor Cuomo Launches New York's "Green New Deal" Aimed at Reducing Carbon Emissions ([W-018-5532](#))).
- Connecticut, which adopted legislation to require the solicitation of up to 2 GW of offshore wind capacity.
- The Department of the Interior (DOI), which has a program for commercial wind leases on the Outer Continental Shelf (see Legal Update, Federal Developments in Offshore Wind Development ([W-017-2979](#))).

While the international offshore wind industry is more developed (there are about 180 offshore wind projects in commercial operation with a total installed capacity of more than 23 GW), it is still relatively undeveloped compared to the onshore wind industry. According to the International Energy Agency (IEA), offshore wind energy provided just 0.3% of global electricity supply but it has the potential to be a significant source of global power generation. The IEA estimates over \$1 trillion would be invested in offshore wind projects by 2040, if the current project pipeline and trajectory come to fruition. The IEA also estimates that this would result in nearly 10% of renewable power coming from offshore wind within two decades, with an approximate 420,000 terawatt-hour annual portfolio from offshore wind. For more information on the global offshore wind market and the level of offshore wind energy penetration in certain countries, see IEA: Offshore Wind Outlook 2019 (registration required).

In the case of the US, it has vast offshore wind energy resources with a technical potential of more than 2,000 GW per year, or nearly double the nation's current electricity use. Harnessing America's offshore wind resources presents an enormous opportunity to

create tens of thousands of highly skilled jobs, revitalize coastal communities, and deliver large amounts of clean, reliable energy to the country's biggest population centers. The COVID-19 pandemic jeopardizes this potential growth.

IMPACT OF COVID-19 ON THE US RENEWABLE ENERGY SECTOR

The COVID-19 pandemic is affecting the renewable energy sector in several ways. Following the issuance of numerous “stay at home” orders by state governors across the country, wind and solar power-generating facilities have curtailed activity, including shutting down construction and operations and maintenance projects at many sites. For more information on these orders and their impact on renewable energy, see Practice Notes, COVID-19: Employment Law and Development Tracker ([W-024-5500](#)) and COVID-19: Select State and Local Business Closures Tracker (US) ([W-024-7550](#)). These quarantine measures and shutdowns are having ripple effects across the industry, leading to furloughs and layoffs of technicians, construction, and manufacturing workers, and project demobilizations in many cases. As a result, many solar and wind farms may struggle to maintain operations and maintenance.

Renewable energy employers that are not sufficiently capitalized to absorb long-term payroll impacts of the shutdowns, even with the recent federal economic stimulus provisions aimed at supporting small businesses under furlough conditions, may not be able to make the necessary progress on their projects. To make matters worse, supply chain problems may cause delays in necessary components coming from China and Europe. Where the COVID-19 pandemic has had a longer presence, and, therefore, a more disruptive effect, force majeure and business interruption claims are also piling up, further delaying the delivery of necessary materials for operation and construction. The COVID-19 pandemic may also make it difficult for renewable energy developers to secure project financing or equity investments.

Delays in supply chains, reductions in the workforce, and funding crunches are putting projects currently in the development pipeline at risk of missing development milestones and related tax incentives for construction and production.

For more information on these issues, see:

- Practice Note, Managing Supply Chain Disruptions in a Crisis ([W-024-5011](#)).
- Questions for Troubled Customers and Counterparties During the COVID-19 Crisis ([W-024-6100](#)).
- Practice Note, COVID-19: Construction Contracts and Potential Claims Under Business Interruption, Civil Authority, and Other Insurance Policies and Endorsements ([W-025-0046](#)).
- Article, COVID-19 and Force Majeure Provisions in EPC Contracts and Other Construction Contracts ([W-024-6088](#)).
- Article, COVID-19: Key Considerations for Privately Owned Construction Projects ([W-024-7816](#)).

In an effort to stabilize the renewable sector in the short term, industry organizations, led by the Solar Energy Industry Association (SEIA) and AWEA, are lobbying Congress to adopt flexibility in allowing existing policies, some of which are set to

expire imminently, to remain through the period of economic uncertainty created by the COVID-19 pandemic. AWEA is specifically seeking the extension of applicable safe harbors for two years for projects in the construction pipeline, which would provide access to tax credits for projects under development. AWEA is also advocating for developers to receive direct pay equal to the value of the tax credits to address potential decreases in the availability of tax equity. To date, none of the stimulus packages or programs that have been announced provide this relief (see Article, COVID-19: The Implications for Renewable Energy Project Development ([W-024-7855](#))).

ISSUES UNIQUE TO THE OFFSHORE WIND ENERGY INDUSTRY

The immediate demands for construction and maintenance components is less acute for offshore wind energy projects than other renewable energy sectors. This is because of the fewer number of these projects that are in commercial operation. The same development and financing obstacles troubling the solar and onshore wind sectors are also likely to create perils for offshore wind projects in the pipeline, however. Notably:

- These projects rely on tax credits or other tax equity mechanisms. A market contraction and reduced corporate profits that can be used to monetize these credits may jeopardize the industry's ability to generate renewable power at a competitive cost. Given the higher costs of offshore wind projects, the loss of these credits may make it harder for these projects to come online compared to onshore wind projects. For more information tax equity investments, see Practice Note, Sources of Available Project Financing: Tax Equity ([3-601-6606](#)).
- If the COVID-19 pandemic is a protracted one and there is a lengthy economic shutdown, offshore wind projects are also likely to be hampered by global and domestic supply chain delays and the trickle-down effects on the industry when construction on major projects begin.

Another potential challenge to the offshore wind industry concerns the US supply chain for construction, maintenance, and vessel solutions, which is only now beginning to take shape. The US does not have a significant domestic supply chain to support offshore wind installation. The financial uncertainty around the viability of the industry, and the long run-up to construction of the first commercial project in the US, has led to a bit of a “chicken or egg” approach to investments in the US supply chain. The industry, therefore, relies on turbines and other components from European and Asian manufacturers. Supply chains across the globe are strained and shipments are lagging significantly which, depending on the length and severity of the supply chain squeeze, could affect US offshore wind farm construction and may slow the growth and development of the development pipeline even further.

While supply chain issues may not be as acute for the offshore wind energy industry in the near-term as it is for the onshore wind projects, the COVID-19 pandemic is affecting these projects in interesting ways. Many US offshore wind projects are owned or being developed by European power companies. Quarantine measures in those countries and travel restrictions are making it difficult for these companies to manage their US assets (see Doing Deals in the COVID-19 Economy).

FEDERAL LEGISLATIVE EFFORTS TO STABILIZE THE RENEWABLE ENERGY INDUSTRY

ENVIRONMENTAL PROTECTION AGENCY

While divining regulatory direction can be complicated, the Environmental Protection Agency (EPA) has provided some direction with respect to several key areas that may serve as bellwether indicators for the renewable energy industry generally and the offshore wind industry, in particular. As an initial matter, the EPA and all other federal agencies and departments received a directive from the Office of Management and Budget to prioritize activities and resources to “slow the transmission of COVID-19, while ensuring our mission critical activities continue.” For more information on this directive, see Federal Agency Policy in Response to COVID-19 Chart ([W-024-5333](#)).

In compliance with the OMB directive, the EPA Office of Enforcement and Compliance (OECA) on March 26, 2020 issued guidance regarding operational adjustments to address the pandemic. In a guidance document entitled *COVID-19 Implications for EPA’s Enforcement and Compliance Assurance Program*, the EPA indicated that while it will require continued compliance with environmental reporting and operational requirements, it acknowledged the effects that personnel shortages and remote working conditions have had on environmental health and safety capabilities at regulated entities. Accordingly, the EPA has relaxed some routine reporting deadlines and made provisions for alternate procedures for monitoring and compliance procedures. For more information on this guidance, see Legal Update, EPA Eases Enforcement of Environmental Regulations in Light of COVID-19 ([W-024-8099](#)).

The EPA has also pooled its own resources to support initiatives to combat COVID-19, including working with manufacturers of disinfectants to expedite review processes and get products to market. This shift in focus will inevitably result in a reordering of staff support for less high-priority initiatives, although it remains to be seen the extent to which those efforts will result in reduced activity in support of offshore wind permitting matters.

The EPA has also:

- Indicated that it plans to waive compliance requirements and deadlines for a number of other industries, including oil refiners, water utilities, and sewage plants.
- Signaled its intent to postpone, or altogether waive, deadlines previously adopted requiring sources of air emissions to switch to cleaner-burning summer-grade gasoline.

These measures, while not targeted to renewable energy sector, appear to indicate a willingness by the EPA to consider relaxing regulatory requirements on regulated industries where compliance would work a hardship in the context of the COVID-19 pandemic.

DEPARTMENT OF INTERIOR

The DOI, along with its subsidiary agency, the Bureau of Ocean Energy Management (BOEM), is subject to the same OMB directive described above. Until recently, it appeared that the DOI was advancing its regulatory agenda in a manner as close to business as usual as possible. For example, within the last several weeks, the DOI moved forward with measures that would ease protections under the Migratory Bird Treaty Act (16 U.S.C. §§ 703-712), as well

as taking steps forward on pending oil and gas development projects. Further, on April 21, 2020, the BOEM indicated that despite teleworking conditions for BOEM employees, it currently plans to adhere to its current timeline to issue a final decision on the Vineyard Wind I permit by the end of 2020. This is a significant development for a number of other project developers with permit applications currently under BOEM review (see *Doing Deals in the COVID-19 Economy*).

The Business Network for Offshore Wind, among other renewable trade organizations, have worked to secure additional funding, contemplated in the Trump Administration’s 2021 Budget, to secure more regulatory review staff manpower at the BOEM to reduce the backlog of offshore wind permitting documents currently pending review. The expectation is that expedited permit review would lead to accelerated project approvals, and ultimately kickstart the construction phase for a number of offshore wind farms in the development pipeline. Given the Administration’s stated commitment to the oil & gas industry and its policies that have undermined renewable energy, the success of this initiative may be remote. For more information on these issues, see Practice Notes:

- Trump Administration Energy and Climate Change Policies and Regulations: 2017 and 2018 Tracker ([W-009-9027](#)).
- Trump Administration Energy and Climate Change Policies and Regulations: 2019 Tracker ([W-018-8838](#)).
- Trump Administration Energy and Climate Change Policies and Regulations: 2020 Tracker ([W-024-8593](#)).

FEDERAL SMALL BUSINESS ASSISTANCE MEASURES

On March 27, 2020, the US Congress passed the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) (Pub. L. No. 116-136 (H.R. 748)). While this legislation does not include any relief targeted toward the renewable energy, it may have some utility for the offshore wind industry. US companies working in and around the offshore wind sector that qualify as a small business may be able to take advantage of these programs to weather the COVID-19 crisis and maintain viability when the offshore wind market regains steam. These programs include:

- The Paycheck Protection Program. Under this program, up to \$10 million per company is available to provide cash-flow assistance to employers who maintain payroll during the COVID-19 emergency. It provides relief to small businesses, start-ups, veterans’ organizations, and nonprofits of 500 employees or fewer (with some limitations), sole proprietorships, and independent contractors. For more information on this program, see Paycheck Protection Program Lending Facility (PPPLF) Summary ([W-024-9731](#)) and the CARES Act: Small Business Administration Payroll Protection Program: Lender Guidance ([W-024-8662](#)).
- The Economic Injury Disaster Loan (EIDL) Program. This program is an expansion of the existing Small Business Administration (SBA) Economic Injury Disaster Loan Program (EIDL) and will provide up to \$10 billion in low interest loans to small businesses to pay payroll and certain operating costs and liabilities from January 31, 2020 through December 31, 2020. For more information on this program, see the CARES Act: Small Business Emergency Relief Chart ([W-024-8607](#)) and Legal Update, CARES Act: SBA Suspends Acceptance of Emergency Loan Applications ([W-025-0517](#)).

- Several loan and liquidity programs established by the Federal Reserve. These programs include the:
 - Main Street New Loan Facility. This program provides support for small and mid-sized businesses that were in good financial standing before the COVID-19 pandemic. For more information, see Main Street New Loan Facility (MSNLF) Summary ([W-024-9743](#)); and
 - Main Street Expanded Loan Facility (MSELF). This program allows small and mid-sized businesses that already had loans outstanding to expand the size of these loans. This facility will purchase 95% participations in the upsized loan tranches up to the \$600 billion aggregate limit of the two facilities. For more information, see Main Street Expanded Loan Facility (MSELF) Summary ([W-025-0003](#)).
 - These programs were recently revised to expand the number and types of businesses that can qualify for this program (see Legal Update, CARES Act: Federal Reserve Expands Scope and Eligibility for Main Street Lending Program ([W-025-2971](#)) and Main Street Priority Loan Facility (MSPLF) Summary ([W-025-2900](#))).

For more information on these programs and other efforts by the federal government to mitigate the effects of the pandemic, see Practice Note, COVID-19: Federal Reserve Lending and Liquidity Facilities ([W-024-9706](#)), Legal Update, CARES Act Includes Tax Relief for Businesses and Individuals ([W-024-6905](#)), CARES Act: Stimulus for Small Businesses Under the SBA Checklist ([W-024-6037](#)), and Practice Note, Road Map to the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) ([W-024-8846](#)).

The following programs may also be of significance to small businesses working to gain a foothold in the US offshore wind industry:

- The Coronavirus Preparedness and Response Supplemental Appropriations Act of 2020, which provides \$7 billion to fund the SBA's EIDLs. For more information, see Legal Update, COVID-19: Roundup of Select Finance News ([W-024-6338](#)).
- The Families First Coronavirus Response Act. This Act requires employers with fewer than 500 employees to provide two weeks' worth of paid sick leave if employees are unable to work due to quarantine or symptoms, are caring for someone affected by COVID-19 symptoms or quarantine, or have a child out of school where schools have closed. Employers receive tax credits to offset the costs of providing paid leave. For more information, see Legal Updates, Families First Coronavirus Response Act Mandates Paid Sick and Expanded FMLA Leave for Many Employees ([W-024-5619](#)) and CARES Act Contains Numerous Employee Benefit and Executive Compensation Provisions, Including Changes to COVID-19 Testing Mandate ([W-024-6763](#)).

DOING DEALS IN THE COVID-19 ECONOMY

The COVID-19 pandemic has led to a contraction of deal-making activity across the spectrum, and the offshore wind energy industry is no exception. For example:

- In January 2020, the New York State Energy Research & Development Authority (NYSERDA) sought authorization from the New York Public Service Commission (PSC) to solicit offshore wind bids for

up to 2,500 MW of offshore wind capacity. This solicitation follows the NYSERDA's earlier solicitations in 2018 and 2019 that resulted in NYSERDA contracting for 1,696 MW offshore wind capacity. On April 23, 2020, the PSC authorized an offshore wind solicitation in 2020 for at least 1,000 MW to help New York meet its clean energy goals. However, the NYSERDA is delaying the solicitation while the state deals with the COVID-19 pandemic. For information on the first round of solicitations, see Legal Update, New York Seeks Addition of 800 MW of Offshore Wind Energy ([W-015-8574](#)).

- On April 23, 2020, Orsted, a Danish power company, pushed back the expected start date of its Skipjack offshore wind farm in Maryland from late 2022 to 2023 because of federal permitting delays caused by the BOEM's analysis of the cumulative impacts from the build-out of US offshore wind projects and the effects of the COVID-19 pandemic.
- In March 2020, Vineyard Wind (a joint venture between Spain's Avangrid and Denmark's Copenhagen Infrastructure Partners), announced that its 804 MW offshore wind project in Connecticut is being affected by COVID-19, although in a less direct way. The developer sent a letter to Connecticut's Department of Energy & Environmental Protection seeking an extension to submit contracts with the state's utilities to the Public Utilities Regulatory Authority. Because of the effects of the COVID-19 pandemic on communications and business operations in Denmark and Spain, it was taking longer to review and negotiate the contracts.

There are several additional factors, however, that render the US offshore wind market potentially more at-risk in the face of a looming recession, including the lack of maturity of the industry and the uncertainty surrounding the regulatory status of major offshore wind projects. In a "cash is king" economy, the capital expenditures necessary to build and develop offshore wind projects may be chilled to some extent.

The news for the US offshore wind industry is not all bleak, however. Projects that are supported by multinational investment sources and that are in the advanced state of the development process may not be as affected by the COVID-19 pandemic. This is particularly true given that the projects in advanced stages of development are still subject to federal, state, and local regulatory review and, therefore, may not be ready for construction. As a result, the supply chain disruptions and labor shortages that are challenging the renewable energy sector may not be as relevant for these projects, at least not in the near term. For example, Vineyard Wind's 120 MW project, the first utility-scale offshore wind farm in the US which is being developed off the coast of Massachusetts, was not projected to receive regulatory approvals until the end of 2020, and that was prior to any potential COVID-19 crisis-related delays. However, as discussed above, this may change the longer the COVID-19 pandemic continues.

CONTRACT TERMS AND REVIEW

To the extent contracts are being negotiated for offshore wind projects, unprecedented concerns are affecting the course of those negotiations. Existing contracts are being reviewed for:

- Financial soundness.
- Exculpatory clauses.
- Force majeure provisions.

Already, COVID-19 riders are circulating, either as post-hoc amendments to existing contracts or prospective provisions in the cases where new contracts are being inked. This is an area that will likely generate significant litigation, and could portend significant economic consequences for contracts that are jeopardized by COVID-19 impacts.

COULD THE COVID-19 CRISIS CREATE OPPORTUNITY FOR A NEW INDUSTRY?

Despite the onslaught of negativity in the news cycles round the clock, the impacts of the COVID-19 crisis may not signal dire consequences for the US offshore wind industry. Indeed, the infancy of the industry could prove to be its best defense. Without an extensive network of commercial wind farms in operation, the need for a robust supply chain is less paramount than for existing renewable energy projects already in operation. Although regulatory delays are often seen as an obstacle for the industry to overcome, they may be an advantage in this case as they may provide the cushion necessary for the US offshore wind industry to absorb the impacts of the COVID-19 pandemic, without suffering the economic impacts that a more mature operating industry might experience.

The US offshore wind industry has been growing and developing over the last decade, despite the regulatory, economic, supply chain, training, vessel solution, and workforce challenges that are well-known to those in the space. The US offshore wind market has been operating in “building” mode for some time, laying the necessary infrastructure to scale up the industry once the regulatory logjam is broken and construction begins in earnest. The creation of an entirely new industry also provides an infusion of capital and jobs for skilled workers, at a time when the US economy will be searching for growth markets and employment opportunities.

The industry also lays the foundation for the case to ramp up and modernize US shipyards for vessel new-builds to support construction and maintenance activity, and a platform to manufacture products new to the US market, such as subsea power cables and wind turbine component parts. Perhaps the “can do” approach that foreign and domestic companies in the offshore wind market have displayed to

date will provide the nimbleness and creativity that will allow the US offshore wind market to emerge from the crisis without the drag that established, infrastructure-heavy industries will not be able to avoid. Finally, the offshore wind industry will not be saddled with the scale of economic losses that more mature industries will have to grapple with when emerging from the crisis. With this foundation, and support from the federal government through tax equity mechanisms and economic stimulus funds, the offshore wind industry presents a unique economic recovery and growth opportunity.

RELATED CONTENT

PRACTICE NOTE: OVERVIEW

- Insurance Policies and Coverage: Overview ([9-505-0561](#))
 - Law stated as of 15-Mar-2011

PRACTICE NOTES

- COVID-19: Construction Contracts and Potential Claims Under Business Interruption, Civil Authority, and Other Insurance Policies and Endorsements ([W-025-0046](#)) • Law stated as of 20-Apr-2020
- Insurance Terms: Types of Insurers and Insureds ([W-020-0049](#)) • Maintained
- Managing Supply Chain Disruptions in a Crisis ([W-024-5011](#)) • Maintained
- Property and Liability Insurance in Real Estate Transactions ([6-600-9765](#))

CHECKLISTS

- Insurance Coverage for COVID-19 Losses Chart ([W-024-5319](#)) • Maintained

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- Commercial and Contract Law Implications of the COVID-19 Pandemic ([W-024-5641](#)) • Law stated as of 24-Mar-2020

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