

Using Non-Price Criteria in State Offshore Wind Solicitations to Advance Net Positive Biodiversity Goals



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EXECUTIVE SUMMARY

THE UNITED STATES IS ON THE PRECIPICE of a massive energy transformation, which will include large scale deployment of offshore wind. Ambitious state forecasts and targets for offshore wind are being converted into contracts and agreements. The federal government’s target of 30 GW of installed offshore wind by 2030 has already been outstripped by state solicitation processes that have more than 51 GW of contracted offshore wind in the development and construction pipeline.

There is a narrow window of opportunity for states to plan for and maximize the economic, social, and environmental benefits that can come from building offshore wind off their coasts. For example, a state’s terms and requirements for a wind farm commencing operations in 2032 may have been set by a contract signed in 2022. The rules for how future offshore wind projects will be designed, constructed, and operated are being written right now and implemented, in part, through competitive state solicitation processes. Offshore wind is a multi-solving opportunity; it can help decarbonize our energy systems, mitigate the effects of climate change, and provide a whole range of other economic, environmental, social, and cultural benefits.

States are using non-price criteria in their offshore wind solicitation processes to advance specific policy goals. Our review of state statutory language and state offshore

wind solicitations found that non-price criteria focus primarily on workforce development, domestic supply chain initiatives, community benefits and mitigating negative environmental externalities. Environmental protections are primarily compensatory mitigation focused (avoid, minimize, and mitigate) and do not incentivize project design, construction, and operation practices that produce net gains or net positive impacts. This is likely because projects are only seen to have negative environmental impacts. Therefore, the solicitation processes are designed to select projects that minimize those impacts. The environmental non-price criteria in use reflect the current state of solicitations laws and government preferences, which are based on the compensatory mitigation hierarchy.

In states with multiple rounds of solicitation, there is a trend of increased and more pointed mitigation efforts for biodiversity and ecosystems. States are requiring more precise statements from developers on specific actions that will be taken. States are requiring greater investment in data collection and monitoring practices as well as enhanced transparency. These actions set the groundwork for introducing net positive non-price criteria, but they do not compel it.

European countries are employing net positive non-price criteria to protect and enhance the ecology and biodiversity of marine and aquatic ecosystems. Many European countries give significantly more weight to non-price criteria than is done in the United States. The Netherlands, France, Germany, and Belgium have or are considering including net positive non-price criteria in their offshore wind tenders because of specific statutory or executive agency guidance. In the United States, environmental non-price criteria are often grouped and scored with other non-environmental policy objectives and project developers are not given specific point allocations for how their proposals would be scored.

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INTRODUCTION



THIS REPORT EXAMINES HOW OFFSHORE WIND is solicited in the United States and if states have the ability and capacity to allow and consider bids that address non-price criteria requiring investments in ecological mitigation and ecological gains. The report surveys and compares existing state solicitation processes, assesses the authority of key decision-making agencies, considers how the federal government is using non-price criteria in its leasing procedures, and highlights how European countries are leveraging offshore wind auctions to invest in the ecological enhancement of their marine and aquatic ecosystems.

Offshore wind has always been the unrealized prize in the clean energy transition. For many years, policymakers, utilities, developers, scientists, and politicians have pointed to the massive potential for offshore wind development off U.S. coasts. Finally, the moment is arriving where potential is being turned into production. The seven turbines that have been operating in U.S. waters for the last five years will soon be joined by thousands more as, in a few short years, the offshore wind industry will move from 42 MW of installed generation capacity to tens of GWs of installed generation capacity. This sea change will alter our energy system and by doing so will change our economy, our environment, and our society.

Shortly after his inauguration, President Biden announced the federal government's goal to deploy 30 GW of offshore wind in the United States by 2030 and an additional 15 GW of floating offshore wind by 2035.¹ To meet this target, the Bureau of Ocean Energy Management plans to advance leasing of new areas on the Atlantic Coast, Pacific Coast, and in the Gulf of Mexico and to complete reviews of at least 16 Construction and Operations Plans by 2025, representing more than 19 GW of generating capacity.²

The ambition of the federal government is being exceeded by the actions of states. As of January 2023, state offshore wind procurement goals hit 77 GW.³ By May 2023, states will have contracted more than 51 GW of offshore wind, which is in the project development and operations pipeline, and will have contracted more than 40 GW that is under construction or in active development.⁴ In 2023, Massachusetts, Connecticut, New York, New Jersey, and Rhode Island will complete solicitations to procure offshore wind capacity.⁵ There is more development to come. Attaining the federal goal of installing 30 GW by 2030 is the first step to unlocking 110 GW of capacity by 2050.⁶ Modelling state decarbonization targets shows that between 150 and 197 GW of offshore wind will be needed by 2050.⁷ Expanding to the federal decarbonization goal would require the development of between 220 and 460 GW of offshore wind generation capacity.⁸ That is a lot of new generation capacity, but it is small relative to the U.S. Department of Energy's estimated technical resource potential for offshore wind which exceeds 2000 GW.⁹

Forecasts are just projections and projections can change based on a multitude of factors. Moving from ambition to actual generation at the pace set forth by states and the federal government requires navigating federal and state rules and eliminating obstacles that could slow or stop progress. Moving from seven turbines to seven hundred or seven thousand turbines will result in economic, environmental, social, and cultural impacts that will need to be planned for, managed, and mitigated. But if mitigation of impacts is the only goal, then an opportunity to capture and maximize the available economic, environmental, social, and cultural benefits will be lost.

The impacts and benefits of the offshore wind deployment will be shaped by the processes that guide the development of the industry. The design of the systems used to procure offshore wind energy and the authority of the parties creating, running, and evaluating offshore wind procurement processes are critical to determining whether forecasts and targets are converted into actual wind projects that deliver all their potential benefits. Maximizing the non-economic benefits of offshore wind requires policymakers and regulators to work in concert with each other. It will require clear directions from state legislatures and governor's offices that non-economic benefits are to be prioritized and that state agencies should employ net positive non-price criteria in solicitations. The direction must clearly include language that discusses mitigation of negative impacts and incentivize delivery of positive benefits. A purposeful outcome requires a purposeful process.



WHAT ARE NET POSITIVE NON-PRICE CRITERIA?

NON-PRICE CRITERIA ARE ALL OTHER CRITERIA EXCEPT FOR PRICE used in a tender, bid, or proposal. Non-price criteria help objectively identify weaknesses and strengths of different bids that are not properly captured by a purely economic comparison. They expand the geographic and temporal scopes of the bid comparison to capture a larger range of impacts and opportunities. They enable non-economic policy goals to be integrated into the bidding process. The coming offshore wind build out offers a singular opportunity to maximize the benefits of the clean energy transition. The benefits of the transition can and should be expanded to encompass economic, environmental, social, and cultural benefits. Non-price criteria are a vehicle for maximizing those net benefits.

Non-price criteria can be quantitative or qualitative, but they must be objective, measurable, and capable of comparison between different proposals. A properly designed non-price criterion will encourage innovation and investment in maximizing the potential benefits of offshore wind, not just procuring the lowest-cost source of energy. As offshore wind energy becomes more cost competitive with other generation resources, an opening is being created to extract additional value from the development of new generation. European countries and American states are using non-price criteria in their offshore wind auctions to advance policy goals. The non-price criteria can be broadly assigned to four categories: biodiversity protection or environmental impact

mitigation; energy system integration; economic and workforce development; and community benefits (with a focus on disadvantaged communities). In the U.S., states are including non-price criteria in their offshore wind solicitations, but most states are focused on maximizing the workforce development and supply chain benefits of the offshore wind build out, particularly for disadvantaged communities. The states are also focused on mitigating environmental impacts and are not considering how the installation of offshore wind farms could be leveraged to create net positive impacts. European countries are taking a more progressive tack by seeking to maximize potential ecological gains from how facilities are constructed and operated.

Before a single new offshore wind turbine is installed off the coast of the United States, our marine ecosystems are already under stress. Ocean and near-coastal marine areas are under stress from rising temperatures, acidification, deoxygenation, pollution, and overfishing.¹⁰ Marine ecosystems, the flora and fauna that live in them, and the people that rely upon them experience those stresses every day. A thousand-fold expansion in the number of wind turbines located in U.S. coastal waters will further disturb these ecosystems. Understanding, mitigating, and reversing those impacts is critical to maximizing the benefits of offshore wind. However, restoring and enhancing biodiversity and ecological function requires institutions and systems that can request and evaluate proposals that build support biodiversity and ecological function. Net positive non-price criteria are an opportunity to recognize and respond to the ecological pressures on our marine environments and a tool that legislators and regulators can employ when soliciting and evaluating offshore wind bids.

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biodiversity protection or environmental impact mitigation



economic and workforce development



energy system integration



community benefits (esp. disadvantaged communities)

In this report, we use the term “net positive non-price criteria” to denote criteria that incentivize developers to design projects that produce a net positive impact on ecosystem function and biodiversity. Net positive impact or net gain are common principles embedded into international safeguard standards and policy.¹¹ Net positive impact or

net gain occurs at the individual project level through autonomous choices made by individual companies. The idea is that projects go beyond just mitigating the harm caused by their pre-construction, construction, and operation activities and seek to leave the impacted area in a better condition than it was found. It requires the adoption of best practices, a focus on direct and cumulative impacts from all activities, a decommissioning plan, consistent and transparent data collection, careful planning, and thorough documentation. It also requires solicitation processes that reward bids that exceed regulatory standards, that invest in enhancing ecological function of the affected area and propose innovative projects that build up marine and aquatic ecosystems.

Net positive impact or net gain projects contribute to the larger goal of being nature positive. Nature positive is a global, holistic cumulative goal that seeks to stop and reverse biodiversity loss and diminishment of ecosystem function. Net gain and net positive projects can contribute to the goal of being nature positive, but they cannot be nature positive on their own.

THE PROCESS AND THE PARTIES



THIS REPORT FOLLOWS AND STUDIES THE PROCESS for moving an offshore wind procurement target from goal to reality and the authority and capabilities of the parties charged with making that happen. It is when we understand both, that we can see how net positive non-price criteria can be incorporated and incentivized into offshore wind solicitations.

The process of procuring offshore wind starts with the establishment of a procurement target via legislation or executive order.¹² Whether the action is initiated in the state house or the office of the governor, offshore wind procurement starts with establishing a target and a schedule for achieving the target. The level of direction contained within the enabling legislation or executive order can vary significantly. Every bill or executive order specifies how much offshore wind is to be procured, energy or environmental attributes, and which agencies will conduct the process.¹³ Some offer additional direction on how the solicitation will be conducted including what factors must be included in prospective bids.

In the United States, offshore wind energy is procured through state-run competitive processes. Once the target and schedule are established, there are two phases to the process: the solicitation and the evaluation of the winning bid. In the solicitation phase,

a request for proposals (RFP) is issued which contains the eligibility requirements for participants, sets forth the rules for submitting a proposal, and defines what information must be included in the proposal and how that information will be evaluated. The development of a request for a proposal is the critical point for expanding the use of net positive non-price criteria to assess and compare competing bids. The composition of the RFP reflects the requirements set out in state law and the discretion afforded to the parties running the solicitation. A solicitation can only include what state law mandates and what agency discretion affords. Without specific statutory, regulatory, or executive agency guidance, what non-price criteria are included is often left to the discretion of the parties running the solicitation.

Procurement contracts signed with winning bidders are evaluated by state public utility commissions. Offshore wind procurements are used by electric distribution utilities (EDUs) to comply with state renewable energy mandates whether it is through the procurement of the energy or the environmental attributes of the facility. The contracts signed by EDUs are subject to review and approval by the state public utility commission, the body charged with authorizing the electricity rates for regulated utilities operating in the state. Commission approval of the contract allows for cost recovery through rates charged to the utility's customers. Review of the contract ensures that the contract complies with the state's laws and policies and with the commission's mandate.

In this report, we examine states that have held solicitations, are holding solicitations, and are likely to hold solicitations. We cover key New England states – Massachusetts, Rhode Island, Connecticut, and Maine; East Coast States – New York, New Jersey, and Maryland; West Coast States which have or will conduct solicitations – California and Oregon. For each state, we assess how the structure of the solicitation process and the authorities given to state agencies and public utility commissions set the stage for or limit the inclusion of net positive non-price criteria. Our goal is to show how the structure of the process and the authority of the parties implementing the process shape potential outcomes because a purposeful outcome needs a purposeful process.

The Regulatory Challenge - Old Authorities and New Priorities

One of the biggest challenges to maximizing the potential benefits of the offshore wind build out is not technical or scientific, it is regulatory. Regulators are often given new tasks that must be completed under old mandates and with old tools. In many instances, new priorities must fit into the historic governance objectives that have guided how our energy systems are regulated. Nowhere is that more clearly seen than in public utility commissions. In the early 20th century, monopoly electric utilities were brought under the oversight of public utility commissions.¹⁴ Commissions were tasked with

regulating in the public interest to balance the interests of utilities, consumers, and the public. Historically, commissions focused on achieving traditional regulatory objectives of providing low cost, reliable, and safe service.¹⁵ Commissions adopted the view that they were economic regulators whose primary task was to ensure safe, adequate, and reliable service at low cost which made environmental impacts into a secondary consideration after the pursuit of low cost, reliable service.

Relying on commissions as pure economic regulators is an outdated and incorrect concept but it is a concept that still influences many decisions. Commissions often take a strict interpretation of their authority; restricting their decisions to specific areas identified in their implementing statutes or to ensuring compliance with other statutes and government policies. Even if a commission believes it has the authority to consider and weigh specific factors, that may not lead it to exercise its discretion to do so. If we are to ask commissions and other state agencies to take new steps, we must understand how to support and direct them.

Commissions are best empowered and activated when given additional clarity on the extent of their authority and instructions on when and how that authority should be used. Many commissions have the authority to consider direct and indirect environmental impacts of their decisions and have only exercised it because of concerted legislative and executive branch action.¹⁶ Whether it is changing a mandate to add new regulatory objectives like system resilience and energy justice¹⁷ or clarifying interpretations of existing mandates to allow for consideration of climate change impacts,¹⁸ there are pathways to enable existing regulatory processes to pursue new goals. Potential pathways to change are discussed below to show how change can occur. An example is also presented on how a lack of clarity can hamper and limit efforts to expand traditional regulatory objectives to include new priorities and goals.

How Can Change Occur?

Changes to agency and commission mandates or processes can come from different sources.

Legislation

Legislative changes can come in many forms. A legislature can change state statutes to revise a commission's mandate, issue directives on how state statutes should be interpreted, or require specific factors be considered in a solicitation, or designate a lead agency. For state agencies constrained by their enabling statute or state commissions limited to considering the record of evidence presented before them, legislative action can empower and bring clarity.

Executive Orders

Executive orders can bring clarity and direction to offshore wind solicitations, but orders are limited to authority already granted by legislation. Executive orders can be empowering when the executive branch clarifies the scope of authority already available to the commission, but this tool can be limited when seeking to expand the authority of a commission to consider and weigh new factors in its decision-making processes. For example, an executive order can leverage the commission's investigatory powers to build a record for future action, but it might not be able to compel action.

Agency and Commission Reinterpretation

Some agencies and commissions have expansive mandates that create leeway for them to reinterpret their mandates. A broad mandate, when exercised, allows the state agency or commission to act without requiring additional instruction. However, reducing discretion not to act may require legislative or executive branch action.

Agencies and commissions are best empowered and activated when given clarity on the extent of their authority and instructions on when on how that authority should be used. Legislation, executive orders, and agency and commission reinterpretation can provide the clarity needed to tackle new challenges.

What Happens When an Old Mandate Meets New Objectives

Oregon exemplifies how a state can change agency authority to consider new priorities against historic objectives. Until recently, the Oregon Public Utility Commission regulated electric utilities under a mandate developed in 1911 that focused on low cost, reliable service. In 2017, the Oregon legislature passed SB 978 which required the Commission to “explore changes to the existing regulatory system and incentives that could accommodate developing industry trends and support new policy objectives without comprising affordable rates, safety, and reliable service.”¹⁹ In 2018, the Commission completed the process and one of its conclusions in response to a call to act on climate and equity issues was that “The PUC cannot require utilities to accomplish societal objectives that are outside the scope of utility regulation and that impose costs that the Legislature has not required utilities and their customers to bear.”²⁰ The Commission stated that reducing GHG emissions, and improving equity and affordable access to energy services are high priorities for the state, but it lacks a clear mandate to address these issues outside of being an economic risk and that if the Legislature wanted action on this issue, it had the onus and the ability to correct this regulatory gap.²¹

The reaction to the report came first as an executive order and then as new legislation. In 2020, Executive Order 20-04 (EO 20-04) directed the Public Utility Commission, among other government agencies, to “exercise any and all authority and discretion vested in them by law to help facilitate Oregon’s achievement of the GHG emissions reduction goals” established in the Order.²² EO 20-04 brought about several procedural changes at the commission, but it did not alter the Commission’s mandate.²³ In 2021, the legislature passed two bills that altered the Commission’s mandate. HB 2475 added a new requirement that in ratemaking dockets, the PUC must consider the differential energy burdens and other economic social equity or environmental justice factors that affect certain classes of utility customers.²⁴ HB 2021 created a requirement for regulated utilities to file a clean energy plan consistent with state goals and empowered the commission to evaluate proposed plans according to set criteria that included reductions in GHG emissions, any related environmental or health benefits, economic and technical feasibility of the plan, effect of plan on reliability and resiliency of the electric system, costs and risks to customers, and other factors.²⁵

A vibrant underwater photograph of a coral reef. Sunlight rays penetrate the clear blue water from the top right, illuminating the diverse coral structures and a school of small fish swimming in the background. The image is framed by a dark, diagonal overlay on the left and bottom right, with a green and yellow graphic element at the bottom right corner.

STATE SOLICITATION ANALYSIS

THE REVIEW OF STATE SOLICITATION PROCESSES is split into three groups of states. The first group is states that procure environmental attributes or Offshore Wind Renewable Energy Credits (ORECs) – New York, New Jersey, and Maryland. The second group is states with solicitation processes that procure energy and environmental attributes – Connecticut, Massachusetts, and Rhode Island. The last group is states without a solicitation process but are in the middle of developing procurement plans and strategies – Maine, California, and Oregon.

States that solicit ORECS and not energy run their procurement processes through their state utility commissions. Using the existing commission structure to open dockets, accept public comments, and conduct hearings enables a greater degree of transparency and often facilitates greater exercise of discretion in expanding the criteria upon which competitive bids are evaluated. In states where only energy is procured, the role of the utility in shaping the procurement process and the evaluation criteria is greater and the role of the public utility commission is often reduced to evaluating negotiated procurement contracts. For each state, we have identified key statutes governing the procurement process and documented how those statutes are interpreted. Our goal is to show where state statutes and agency processes would permit the use and consider-

ation of net positive non-price criteria and where state statutes and agency processes inhibit their use. Knowing what is possible is the first step to knowing where change can occur.



New York

In 2019, New York established its current offshore wind goal of 9 GW by 2035.²⁶ The state is almost halfway to its 9 GW of offshore wind goal and initiated a third solicitation process in late 2022 seeking an additional 2 GW.²⁷ The 132 MW South Fork Wind Project was approved in 2017 and the state has since completed two additional solicitations completed in 2018 and 2020 that procured almost 4.2 MW of capacity.²⁸

Under New York law, the state procures the Offshore Renewable Energy Credits (ORECs) created by the energy generation facilities and not the energy produced.²⁹ This approach requires a governmental structure that allows for both quantitative and qualitative evaluations. The Offshore Wind Orders issued by the New York Public Service Commission (NYPSC) authorize the New York State Energy Research and Development Authority (NYSERDA) to act as the central administrator of the Offshore Wind Standard program.³⁰ NYSERDA issues a RFPs to procure renewable energy credits on behalf of the load serving entities (LSEs) which fall under the jurisdiction of the NYPSC.³¹ NYSERDA sells the ORECs to the LSEs for compliance with their offshore wind obligations.³²

The NYPSC has broad authority to direct the consideration of non-economic factors through its orders. Each time, NYPSC has issued an offshore wind order, it has pointed to Public Service Law § 5(2) which requires it to encourage “all persons and corporations subject to its jurisdiction to formulate and carry out long-range programs, individually or cooperatively, for the performance of their public service responsibilities with economy, efficiency, and care for the public safety, the preservation of environmental values and the conservation of natural resources.”³³ Furthermore, PSL §4(1) expressly gives the NYPSC all powers necessary or proper to carry out the purposes of the PSL, including safe and reliable service at just and reasonable rates, environmental stewardship, and the conservation of resources.³⁴ In establishing the procurement framework of each RFP, NYPSC has weighed requests to require enhanced environmental protection. In approving the 2018 solicitation process, the Commission considered requests from environmental, industry, and labor interests to require best management practices for the siting of infrastructure, but it declined on the grounds that the best practice standards had not yet been developed by NYSERDA and might not be available prior to the close of the solicitation.³⁵ In its 2020 order authorizing the next procurement of offshore wind, NYPSC received suggestions, from NYSERDA’s Environmental Technical Working Group (E-TWG), proposing additional environmental considerations

be included as either eligibility conditions or as beneficial scoring criteria.³⁶ E-TWG proposed requiring additional best management practices for noise control practices and technology, and standards for when to implement mitigation measures. NYPSC declined to adopt the prescriptive approach advanced by E-TWG, instead opting to afford NYSERDA the flexibility to take into account these considerations when structuring and evaluating bids.³⁷

E-TWG is one of NYSERDA's four Offshore Wind Technical Working Groups – commercial fishing, the environment, maritime commerce, and jobs and supply chain – that were established to inform and shape development practices.³⁸ E-TWG's mission is to provide “advice and guidance to help steer the State's efforts to advance offshore wind development in environmentally responsible ways.”³⁹ NYSERDA's Offshore Wind Master Plan specified that the Working Groups could assist in developing best management practices for wildlife monitoring and mitigation, encouraging and coordinating research, and recommending a framework for funding and administering an environmental conservation fund.⁴⁰

NYSERDA has included non-price criteria in the scoring system for its last three solicitations. Projects are scored on a 100-point scale, with 70 points awarded based on the offer price and 30 points awarded to non-price factors. There are two non-price factor categories, the New York Economic Benefits category which is worth up to 20 points and the Project Viability category which is worth up to 10 points.⁴¹ The Economic Benefits category focuses on workforce development, supply chain development, local economic benefits, and labor standards.⁴² The Project Viability category focuses on multiple factors that demonstrate whether each project can reasonably be expected to be in service on or before the proposed operation date and can continue to operate effectively and reliability throughout the term of the contract.⁴³ Evaluation factors include permitting and financing plans, project development experience, logistics viability, stakeholder consultation and impact mitigation plan for addressing adverse impacts on commercial and recreational fishing and the environment during the construction and operation of the project and how the plans incorporate best management practices, and engagement with disadvantaged communities.⁴⁴

NYSERDA's E-TWG provides advice and guidance on environmentally responsible development of offshore wind resources. Its membership includes developers; science-based environmental NGOs; state, federal, and regional agencies.

The evaluation of environmental mitigation plans under the Project Viability category has changed slightly across the last three solicitations. Under the 2018, 2020, and 2022 solicitations, fisheries mitigation and environmental mitigation plans were considered together in the evaluation process.⁴⁵ In 2020, a change was made to create the opportunity for a higher Project Viability score for projects using “acoustically “quiet” foundation design or foundation installation technology solutions that reduce acoustic stress to sensitive marine life, beyond the current regulatory standards.”⁴⁶ Bidders still had to submit separate mitigation plans for each RFP, but the methods for evaluating and scoring the plans was altered.⁴⁷ A 2022 RFP Environmental Mitigation Plan must provide a roadmap of the practical, specific measures that the project developer will take to avoid, minimize, and/or mitigate potential environmental impacts of the proposed project. Environmental mitigation plans must also include species specific risk identification plans for marine mammals, birds and bats, fish, invertebrates, and benthic communities.⁴⁸ The RFP states that flexibility is allowed in devising avoidance, minimization, and restoration/offset measures, but there are mandatory elements required off all plans.⁴⁹ Amongst the required elements is a plan for environmental monitoring and research pre-, during, and post-construction. Importantly, this section notes that there is a paucity of empirical information that development may have on ecological communities specific to the New York Bight. Thus, the plan requires collection and dissemination of new baseline data research in peer reviewed publications to serve as a building block towards better project design, construction, and operational management for current and future projects.⁵⁰ Bidders must also support research by third parties on the environmental sensitivities and/or impacts of offshore wind energy development on the environment.⁵¹



New Jersey

New Jersey is one of the most active states in the procurement of offshore wind. The state has the highest procurement target, 11 GW by 2040, and has issued three solicitations since 2018.⁵² Two rounds of solicitation have been completed with a third to conclude in 2023. The first solicitation took place in 2018 and ended with Ørsted’s 1,100 MW Ocean Wind proposal being selected.⁵³ In 2020, the second solicitation resulted in Atlantic Offshore Wind’s 1,510 MW and Ørsted’s 1,148 MW Ocean Wind II proposals being selected.⁵⁴ The third round of solicitations was opened in March 2023 for between 1.2 GW and 4 GW of new offshore wind with bids due in June 2023.⁵⁵

The New Jersey Board of Public Utilities (NJBPU) is a key player in New Jersey’s push to procure more than 11 GW of offshore wind. The legislature has imbued the NJBPU with the traditional powers of ensuring just and reasonable utility rates⁵⁶ and that utilities provide safe, adequate, and proper service.⁵⁷ The NJBPU’s legislatively granted

New Jersey is one of two states that have the term “benefits” in its offshore wind solicitation statute. State law requires proposals to demonstrate positive environmental net benefits.

authority also extend to other non-economic factors. New Jersey laws states that the NJBPU may also require a public utility to furnish and perform “service in a manner that tends to conserve and preserve the quality of the environment and prevent pollution of the waters, land and air” of the state.⁵⁸ Like the state of New York, the NJBPU procures ORECs and not the energy produced pursuant to the 2010 Offshore Wind Economic Development Act (OWEDA).⁵⁹

Much of New Jersey’s offshore wind activity has been driven by executive orders.⁶⁰ The Governor has called on the NJBPU to issue solicitations and increased the state’s procurement target. The first solicitation was conducted after Governor Murphy issued Executive Order No. 8 (EO 8) in 2018.⁶¹ Executive Order No. 92 issued in 2019, increased the state’s procurement goal to 7.5 GW by 2035 and the Governor later updated the solicitation schedule to include five solicitations of at least 1,200 MW running through 2028.^{62,63} Executive Order No. 307, issued in 2022, increased New Jersey’s goal to 11 GW of offshore wind energy generation by 2040 and directed the NJBPU to complete a study on the feasibility and benefits of meeting this goal and to provide recommendations on how to achieve the goal.⁶⁴

OWEDA and its implementing regulations require the NJBPU to determine that an application demonstrates positive economic and environmental net benefits to the State.⁶⁵ Prospective bidders must submit an analysis of anticipated environmental benefits and environmental impacts of the project including documenting all associated impacts, from pre-construction to decommissioning, on the environment, water use and quality, avian, marine mammals, sea turtles, and endangered species.⁶⁶ The NJBPU has interpreted and applied these requirements to expand the use and consideration of non-price criteria.

NJBPU’s inclusion of non-price criteria has evolved and increased with every solicitation. The original 2018 solicitation guidance document included six total evaluation criteria: the (1) OREC Purchase Price; (2) Economic Impacts; (3) Ratepayer Impacts; (4) Environmental Impacts; (5) The Strength of Guarantees for Economic Impacts; and (6) Likelihood of Successful Commercial Operation.⁶⁷ Environmental Impacts criteria includes net reductions of pollutants for each MWh generated and the feasibility and strength of the applicant’s plan to minimize environmental impacts created by project construction and operation.⁶⁸ The evaluation criteria were not assigned weights or

given a priority order. However, the solicitation guidance stated that the goals of EO 8 must be reflected in the NJBPU's ranking and weighing of the criteria.⁶⁹ The guidance document lists the goals in EO 8 as: "(a) contributing to a stronger New Jersey economy by anchoring an offshore wind supply chain in the State; (b) combating global climate change to protect New Jersey and also to protect New Jersey's natural resources; (c) providing added reliability for the transmission network and transmission rate relief for ratepayers and (d) achieving all of this at the lowest reasonable cost and risk to New Jersey ratepayers."⁷⁰

The second solicitation clarified and expanded the criteria and the scoring system for non-price criteria. The six criteria remained the same as the first solicitation, but the specificity of criterion was broadened. For example, "Environmental Impacts" was expanded to "Environmental and fisheries impacts" and included additional requirements to avoid, minimize, and mitigate impacts on surrounding lands, communities, environmentally and culturally sensitive areas, and commercial and recreational fishing. The solicitation guidance also explicitly stated that evaluation criteria would include consideration of project design elements that would facilitate expansion of offshore wind delivery capability and avoid, minimize, or mitigate future incremental environmental and fisheries impacts.⁷¹ For the first time, evaluation criteria were assigned weights: 50% for price and ratepayer impacts, 20% for economic impacts and strength of guarantee for economic impacts, 20% for environmental and fisheries impacts, and 10% for likelihood of successful commercial operation.⁷²

New Jersey's third solicitation further clarified the use and evaluation of non-price criteria. The six criteria used in the first two solicitations were consolidated into two sections – OREC purchase price and ratepayer impacts and non-price considerations.⁷³ OREC purchase price and ratepayer impacts were assigned a weight of 70% while non-price criteria were weighted at 30% of the total bid.⁷⁴ There are two non-price considerations in the third solicitation: Economic Impacts and Strength of Guarantee of Economic Impacts and Environmental Impacts and Fisheries Impacts.⁷⁵ The third solicitation mirrors the language of the second solicitation in requiring an evaluation of efforts to avoid, minimize, and mitigate onshore and offshore impacts.

The Environmental Protection Plans (EPP) submitted by winning bids have become more complex in each solicitation as the solicitation guidance has added new filing requirements. An EPP must accomplish three tasks: describe all environmental impacts; detail any proposed mitigation measures for identified impacts; and summarize the bidder's plans for acquiring all necessary project permits. NJBPU also has the authority to require any information it deems necessary for conducting a thorough review of a proposal and it is through the exercise of this power that it has increased the bidding requirements related to environmental impacts.⁷⁶

The first solicitation required prospective bidders to provide an EPP that only the requirements listed in administrative code.⁷⁷ Fisheries impacts were included in the EPP, as prospective bidders also had to address project effects on finfish and shellfish, as well as commercial and recreational fisheries off the coast of the state, to ensure that all activities are consistent with NJDEP Baseline Ecological Studies, and describe how impacts might be mitigated.⁷⁸

In the second solicitation, applicants had to submit an EPP and a Fisheries Protection Plan. In the EPP, applicants had to provide an analysis of anticipated environmental benefits and impacts as set forth in the state regulations. NJBPU exercised its discretion to increase the bidding requirements and asked bidders to provide information on how they would share their findings on impacts to affected species, to describe the baseline and monitoring data that they intended to collect, how the physical infrastructure could be used to provide direct ocean and ecological observations, their plans to address identified impacts (including any innovative measures to avoid, minimize, or mitigate impacts), and more.⁷⁹

In the third solicitation, the filing requirements for environmental protection measures, data transparency, using offshore wind infrastructure to support monitoring equipment are split out into separate attachments that detail the minimum requirements for each plan.⁸⁰ NJBPU exercised its discretionary authority to further expand the range of environmental impacts and mitigation actions presented in a bid by adding requirements to submit a scientifically rigorous description of associated environmental impacts from pre-construction through decommissioning on different species and coastal ecosystems, to submit maps of sensitive habitats within or in the vicinity of the project footprint, a description of how cumulative impacts will be identified, a description of any commitments to fund additional research related to the assessment and avoidance of environmental impacts.⁸¹



Maryland

Over the past decade, Maryland has taken multiple legislative steps to start and accelerate the development of the offshore wind industry. Legislators have established a solicitation schedule, empowered the Maryland Public Service Commission (MDPSC) to run the solicitation process, boosted procurement targets, and added enhanced requirements for investment in and consideration of non-price criteria. Maryland's legislation and regulations focus both on mitigating environmental impacts and creating net environmental benefits. Maryland has completed two solicitation rounds. In 2017, the Maryland Public Service Commission approved two projects: US Wind's 248 MW project and Skipjack Offshore Wind's 120 MW project.⁸² MDPSC invited a second

round of proposals after the Clean Energy Jobs Act of 2019 increased the offshore wind procurement target to 1,200 MW. In 2021, two proposals were selected with a total of 1,654.5 MW of power and in making its decision, MDPSC found “that approval of these projects will also provide substantial positive net environmental and health benefits to the State, including by putting the State on a path of deeper decarbonization to fight the effects of climate change.”^{83 84}

In 2013, the Maryland legislature passed the Maryland Offshore Wind Energy Act of 2013 (MOWEA), which established both a procurement target and a project evaluation framework. Maryland opted to procure offshore wind renewable energy credits (ORECs) and MDPSC was assigned the lead agency role in approving qualified offshore wind energy projects.⁸⁵ The authority of MDPSC is, by law, restricted to carrying out functions assigned to it by law.⁸⁶ However, under Maryland law, MDPSC has a broad mandate that extends beyond traditional regulatory objectives. MDPSC is required to regulate jurisdictional utilities to ensure their operation is in the public interest, and to promote the adequate, economical, and efficient delivery of utility services without unjust discrimination.⁸⁷

When regulating its public service utilities, the MDPSC must consider:

- the public safety;
- the economy of the State;
- the maintenance of fair and stable labor standards for affected workers;
- the conservation of natural resources;
- the preservation of environmental quality, including protection of the global climate from continued short-term and long-term warming based on the best available scientific information recognized by the Intergovernmental Panel on Climate Change;
- the achievement of the State’s climate commitments for reducing statewide greenhouse gas emissions, including those specified in Title 2, Subtitle 12 of the Environment Article.⁸⁸

Parts III, V, and VI were added in 2021 to allow MDPSC to consider labor and environmental standards in conjunction with its historical regulatory objectives.⁸⁹ As noted, under Maryland law, MDPSC is only imbued with the powers specifically conferred by law; however, those powers shall be construed liberally.⁹⁰

MOWEA created the project assessment framework that forms the basis of Maryland’s current solicitation process. The framework has a high degree of specificity while maintaining flexibility for the MDPSC to modify evaluation criteria. MOWEA requires that proposals be evaluated on criteria including “the extent to which the cost-benefit

analysis ... demonstrates positive net economic, environmental, and health benefits to the State,” as well as the extent to which the applicant’s plan engages small businesses and provides for the use of skilled labor compensation for skilled laborers.⁹¹ MOWEA also contains detailed criteria for evaluating and comparing proposed offshore wind projects. There are thirteen enumerated criteria – a mix of ratepayer cost impacts paired with economic, environmental, and health considerations –and a fourteenth criterion permitting MDPSC to consider any other appropriate standard.⁹² Notably, MDPSC did not establish a weight for non-price criteria, instead it makes a qualitative finding that the project provides net economic, environmental, and health benefits. Only projects that are found to provide those benefits can be qualified to receive ORECs.

The MDPSC developed rules for the process of accepting, evaluating, and approving qualified offshore wind energy projects that further refine the net environmental benefits analysis. Projects are evaluated using a qualitative analysis that includes an analysis of net environmental and health impacts, including “impacts on the affected marine environment based on publicly available information, to the State including impacts during construction, operation and decommissioning of the proposed project, including completeness of descriptions and documentation, verifiability of model inputs, and reasonableness of outputs, and the extent to which the analysis demonstrates positive net environmental and health benefits to the State.”⁹³

MDPSC has exercised its discretionary powers to impose reporting conditions in its contract approvals. In the docket opened to evaluate Round 2 proposals, it received several requests to include a requirement to contribute to a regional research fund.⁹⁴ MDPSC opted not to make this a formal requirement, but instead accepted the proposal of the applicants to share the lists of current and planned research activities.⁹⁵ Every six months, the project developer must submit a comprehensive report to the Maryland Energy Administration sharing findings from its fishery and wildlife monitoring program and any other environmental research initiative.⁹⁶ Skipjack’s February 2023 report presented the status of current and planned research on fisheries, marine mammals, sea turtles, benthic communities, coastal habitat, and geophysical and geotechnical investigations.⁹⁷ Reporting has not started yet as the project is still in its pre-construction phase and monitoring will begin one to two years prior to construction. The reporting requirement has the potential to gather the baseline data needed

The MDPSC is empowered to add evaluation criteria to offshore wind solicitations as it deems necessary, without requiring additional legislative direction.

to assess and compare potential environmental benefits and since the research, where practicable, will be carried out using research techniques and sampling gear configurations that are compatible with existing regional data collection efforts, it could contribute to a larger database of environmental impacts and benefits.⁹⁸

Maryland continues to pass legislation to address and advance specific policy goals in the offshore wind industry. In April 2023, the legislature passed the Promoting Offshore Wind Energy Resources Act increasing the state's procurement target to 8,500 MW while also placing a new emphasis on projects to address transmission system integration, use union labor, and sign community benefit agreements.⁹⁹ The law also changes how bids are invited and evaluated. In issuing the solicitation, MDPSC must take into account the social cost of greenhouse gas emissions and the state's climate commitments.¹⁰⁰ New required evaluation criteria include the extent to which an applicant's proposals provides for financial and technical assistance to support monitoring and mitigation of wildlife and habitat impacts associated proposed project.¹⁰¹



Massachusetts

Massachusetts' offshore wind ambition has grown rapidly in recent years. In 2016, the state set its first offshore wind energy target of 1.6 GW by 2027. State law now authorizes Massachusetts to procure up to 5.6 GW by 2027.¹⁰² Massachusetts has procured 3.4 MW of generation capacity towards this target through three separate solicitations.¹⁰³ In May 2022, the state released a draft solicitation for up to 3.6 MW of offshore wind which represents 25% of the state's annual electricity demand.¹⁰⁴

The first three solicitations were conducted under the same set of laws and regulations that prioritized cost management as the state's primary goal. The recently issued fourth solicitation will be conducted under amendments passed in 2022 that change the role and authority of state agencies. Even as the laws have changed, the solicitation process continues to prioritize cost control and mitigation of environmental and socioeconomic impacts.

Under Massachusetts law, every electric distribution utility was required to jointly and competitively solicit proposals for offshore wind energy and, provided that reasonable proposals were received, enter into cost-effective long-term contracts.¹⁰⁵ In coordination with the distribution utilities, the Department of Energy Resources (DOER) proposes the timetable and method of solicitations of long-term contracts.¹⁰⁶ DOER contracts and consults with an Independent Evaluator to assist in the review of proposals before issuing a final, binding determination of the winning bid.¹⁰⁷ Long-term contracts are subject to review by the Department of Public Utilities (DPU) who is also assisted by the Independent Evaluator.¹⁰⁸

Under the amended law, DOER is still required to coordinate the solicitation of proposals with the distribution utilities, to propose the timetable and method for solicitations of long-term contracts in coordination with the distribution utilities, to produce a numeric score for each bid's economic development commitments and for plans for financial and technical assistance to support wildlife and habitat monitoring.¹⁰⁹ But now, the law directs DOER give preference to proposals that, among other factors, demonstrate benefits from minimization of ratepayer impacts, commitments to in-state supply chain components; mitigation, minimization, and avoidance of detrimental environmental and socioeconomic impacts; support for workforce harmony, community benefits, and low-income communities and ratepayers.¹¹⁰ DOER is authorized to issue a final, binding determination of the winning bid, with the distribution utility responsible for executing the final contract that is then subject to review by the DPU.¹¹¹

The authority and direction given to the DPU to review long-term contracts signed by distribution utilities was also amended in 2022 to add new policy goals and to refine existing priorities. Traditional requirements remain, such as providing enhanced reliability; contributing to reducing winter electricity price spikes; to be cost effective to ratepayers over the length of the contract, taking in consideration potential economic and environmental benefits to ratepayers; advancing economic development in the state; and mitigating, where possible any environmental impacts.¹¹² New requirements include: an initial environmental and fisheries mitigation plan for the construction and operation of the offshore wind facility, including consideration of commercial, recreational, and indigenous fishing rights; mitigating impacts to the marine environment providing financial and technical assistance to support robust wildlife and habitat monitoring , and including benefits for environmental justice communities and low-income ratepayers in the state.¹¹³ Prior to the amendment, the DPU promulgated rules for evaluating long-term offshore wind contracts focused on traditional regulatory objectives of maintaining reliable, low-cost, secure service while allowing consideration of efforts to mitigate, where possible, environmental impacts, and creating, where feasible, employment and economic development in the state.¹¹⁴ No new regulations have been issued following the passage of the new statute.

The first three solicitations conducted under the old law evaluated proposals with a focus on cost control and system performance. For each RFP, an Evaluation Team consisting of the distribution utilities and DOER was formed to receive bids and to conduct an evaluation of the bids in three stages.¹¹⁵ In Stage One, bids must meet the RFP threshold requirements before proceeding to the quantitative analysis portion of the evaluation.¹¹⁶ In the 2021 solicitation, threshold requirements included site control; technical and financial viability; contribution to reducing winter electricity price spikes; contribution to employment and economic development benefits; a fisheries mitigation plan that avoids, minimizes, and mitigates impacts on the commercial fishing industry.¹¹⁷

Each Massachusetts offshore wind solicitation has increased the attention given to environmental impacts, but the focus remains on avoiding, minimizing, and mitigating potential harm.

Proposals that passed the threshold analysis proceed to a second state of review where they undergo a quantitative and qualitative analysis. The weight afforded to the quantitative versus qualitative criteria as well as the criteria have changed from one solicitation to the next. In the first and second solicitation, proposals were scored on a 100-point scale with 75 points available for quantitative factors and up to 25 points for qualitative or non-price factors.¹¹⁸ The third solicitation increased the points awarded for qualitative factors to 30 points and reduced the points awarded for quantitative factors to 70 points to reflect an increased emphasis on economic benefits to the commonwealth and diversity, equity, and inclusion; low-income ratepayers; and environmental and socioeconomic impacts from siting.¹¹⁹ The choice to adjust the scoring weights was a discretionary choice and not mandated by statute.

Each completed solicitation has ramped up the requirements for documenting and mitigating environmental and socioeconomic impacts. The third solicitation added Appendix J which contains details on how environmental and socioeconomic impacts criteria will be considered.¹²⁰ Appendix J contains four elements that will be considered for Environmental and Socioeconomic Impact criteria: Stakeholder and Mitigation Experience, including past and current relationship with stakeholders and track record of past mitigation experience; Environmental Impacts, characterizing potential environmental impacts from pre-construction through operation including impacts on protected species, identifying sensitive habitat areas, how environmental baseline and monitoring data will be collected, used and shared, and a preliminary plan to avoiding, minimizing, and mitigating environmental impacts; Environmental Justice Impacts, identifying impacted communities and plans or investments for avoiding, minimizing and mitigating environmental burdens and negative impacts; and Fishing Impacts, how the project will avoid, minimize, and mitigate impacts on commercial and recreational fishing industry, including a compensation plan for commercial fishing.¹²¹

The draft RFP for the proposed fourth solicitation process further refines the use of non-price criteria. The allocation of points is clearer even as the total number of points available remains the same at 30 points for qualitative factors. The 30 points are divided between two categories: Bidder Experience and Project Viability criteria (up to 15 points) and Economic Development and Project Impact criteria (15 points).¹²² The Environmental and Socioeconomic Impacts from Siting subcategory is included in the

Economic Development and Project Impact criteria which also includes the economic development, low-income ratepayer impact, and diversity, equity, and inclusion plan criterion.¹²³ The Environmental and Socioeconomic Impact Criteria have been enhanced from the third solicitation with the addition of a preference for projects that provide financial and technical assistance to support wildlife and habitat monitoring through contributions to regional and tribal research efforts.¹²⁴ Otherwise, most of the requirements for specific types of data collection have been transferred from prior RFPs with some small changes seeking impacts on specific species and habitats. The focus remains on avoiding, minimizing, and mitigating impacts while increasing the collection and sharing of environmental impact data.¹²⁵



Rhode Island

Home to the Block Island Wind Farm, the nation's first commercial offshore wind farm, Rhode Island is moving to fill its 1,400 MW procurement goal. Since the establishment of the Block Island project, Rhode Island completed a solicitation in 2018 for 400 MW (Revolution Wind) and issued a new solicitation in October 2022 for between 600 and 1000 MW.¹²⁶ Rhode Island requires its electric distribution utilities to issue RFPs for offshore wind energy and renewable energy credits (RECs). Each solicitation included non-price criteria as an evaluative factor although the type of non-price criteria and the weight given to non-price criteria differed.

In 2018, National Grid released a request for proposals¹²⁷ for renewable energy supply and RECs, pursuant to the Long-Term Contract Standard for Renewable Energy (LTCS).¹²⁸ The 2009 law creating the LTCS did not explicitly mandate the procurement of offshore wind energy, it instead required utilities to annually solicit proposals from renewable energy developers and if commercially reasonable proposals were received, to enter into long-term contracts of up to 15 years to purchase the energy, capacity, and environmental attributes from the resources.¹²⁹ Utilities were required to develop and issue the solicitation and evaluate proposals according to criteria established in law that focused on project economics and ratepayer impacts. Proposals had to contain specific pieces of information including timelines for permitting, licensing and construction; pricing projections for all market products sold under the long-term contract; and an economic justification for the proposal; a description of the economic benefits to Rhode Island, including creation of jobs in Rhode Island.¹³⁰

Proposals were evaluated in three stages. Stage One requires proposals to be timely submitted and satisfy eligibility, threshold, bidder certification, and pricing requirements.¹³¹ Stage Two evaluates price and non-price criteria of each proposal with price

weighted at 80% and non-price criteria weighted at 20%.¹³² In stage two, the 2018 RFP used seven categories of non-price criteria, which were allocated a weight of 20% in proposal evaluations.

Rhode Island’s 2018 RFP used seven categories of non-price criteria:

- siting and permitting;
- project development status and operational viability;
- experience and capabilities of bidder and project development team;
- interconnection and deliverability;
- financing;
- contract risk;
- economic benefits to Rhode Island.¹³³

Specific scoring and weighting of each factor were submitted under seal to the Rhode Island Public Utilities Commission (RIPUC) before bids were analyzed and were not made available to companies submitting proposals or for public comment.¹³⁴ Stage Three provides a further review of the bids to select the proposal or portfolio that provides the greatest value consistent with the stated objectives and requirements of the RFP. National Grid was required to consider and weigh the ranking of the bids, the commercial reasonableness of the bid, the risk associated with project viability, the extent to which the bid would create additional economic and environmental benefits to Rhode Island, and the overall impact of any combination of portfolios.¹³⁵

After National Grid selected a winning bid and signed a long-term contract, the rules by which the RIPUC evaluated that contract were also set out in law. If a utility-scale offshore wind farm was selected under the LTCS, RIPUC was required to hold a proceeding to review the application to determine if the proposal was in the best interests of electric distribution customers in Rhode Island.¹³⁶

In making its determination, the commission shall consider:

- The economic impact and potential risks, if any, of the proposal on rates to be charged by the electric distribution company;
- The potential benefits of stabilizing long-term energy prices;
- Any other factor the commission determines necessary to be in the best interest of ratepayers.¹³⁷

In October 2022, Rhode Island Energy (no longer National Grid) issued the second solicitation for offshore wind energy supply and RECs.¹³⁸ This RFP was conducted under a

new law, the Affordable Clean Energy Security Act (ACES), which was signed into law in June of 2022, and that required Rhode Island Energy to solicit proposals for between 600 and 1000 MW of newly developed offshore wind capacity.¹³⁹

ACES changed the solicitation process to increase state agency participation and to clarify mandatory elements of the request for proposal. The solicitation is conducted in consultation with the Rhode Island Office of Energy Resources (OER) and the Rhode Island Division of Public Utilities and Carriers (the “Division”).¹⁴⁰

ACES established that the RFP must require all bids to provide, at a minimum, information on:

- An environmental and fisheries mitigation plan;
- A site plan, including all onshore and offshore equipment and facilities;
- Annual estimates for all economic benefit, including in-state expenditures and employment;
- A diversity, equity, and inclusion plan;
- Identification of Rhode Island vendors and offshore wind supply chain opportunities;
- A labor negotiation plan for construction activities.¹⁴¹

These required elements had to be incorporated into the evaluation and scoring criteria. Rhode Island Energy was required to file the RFP with the RIPUC who would make it available for 30 days of public comment.¹⁴²

The 2022 RFP expands the weight, number and type of non-price criteria used to evaluate proposals. Proposals are still evaluated in the three-stage process used in the 2018 solicitation with non-price criteria evaluated in the second stage. However, in a change not mandated by law, the weight allocated to non-price criteria increased from 20% in the 2018 solicitation to 25% in 2022 solicitation, to reflect an “increased emphasis on economic benefits to Rhode Island, in particular.”¹⁴³

The 2022 RFP uses nine non-price criteria:

- siting and permitting;
- greenhouse gas emissions and statewide environmental impacts;
- project development status and operational viability;
- energy security and reliability impacts;
- interconnection;
- financing,
- contract risk;
- statewide economic impacts resulting from the proposed contract;
- proposals for labor agreements to cover the construction of the project.¹⁴⁴

Rhode Island increased its use of non-price criteria in its most recent solicitation to reflect an increased emphasis on economic benefits to the state.

The factors are intended to assess the viability and feasibility of projects and the likelihood of meeting the proposed commercial operation date.¹⁴⁵ Within each of the non-price evaluation factors, a variety of project and proposal related factors will be assessed. The factors are divided into the following categories: siting and permitting; Environmental Impact and Fisheries Mitigation Plan (EFMP), project development status and operational viability, energy security and reliability impacts, interconnection and deliverability, financing, contract risk, and economic benefits to Rhode Island.¹⁴⁶

The 2022 RFP is the first solicitation to require an EFMP. For the EFMP factor, proposals are assessed on the comprehensiveness and credibility of how they plan to avoid, minimize, or mitigate, to the maximum extent practicable, environmental impacts, including those on commercial and recreational fishery resources and consistency in the achievement of the state's greenhouse gas reduction targets.¹⁴⁷ The EFMP detail must include several agreements: an agreement to make publicly available information or data relating to environmental characteristics, or use by wildlife, of any offshore, nearshore or onshore areas and any data on potential impacts on environment and wildlife; an agreement to follow BOEM's guidance on mitigation of fishing industry impacts; an agreement on how noise will be mitigated; and an agreement to report compensation requests and value for fishing gear loss related to the project.¹⁴⁸ The EFMP must also address how the project will affect environmental justice communities and the bidder's plan to mitigate those impacts.¹⁴⁹

In the final stage of the analysis, Rhode Island Energy is required to consider and weigh, at its discretion, the ranking of bids in the second stage by commercial reasonableness, risk associated with project viability, contingent bids, customer bill impacts, the extent to which the project would satisfy ACES' goals, additional economic and environmental benefits within Rhode Island created by the bill, and portfolio effects.¹⁵⁰

Under ACES, RIPUC is permitted 120 days to review contracts signed by the utility to ensure compliance with the conditions of the RFP and with other statutory requirements.¹⁵¹ RIPUC must approve the contract if it determines that the contract is commercially reasonable, the requirements for the solicitation have been met, the contract is consistent with achievement of the states GHG reduction targets, and the contract is consistent with the purposes of the chapter.¹⁵² Commercial reasonability, as used in this section of the state statutes, means "terms and pricing that are reason-

ably consistent with what an experienced power market analyst would expect to see in transactions involving regional energy resources and regional energy infrastructure.”¹⁵³ The purposes of the chapter include securing the future of the Rhode Island and New England economies and their shared environment, by making state and/or coordinated cost-effective, strategic investments in energy resources infrastructure to improve system reliability and security, increase economic competitiveness by reducing energy costs, and protecting the quality of life and environment for all residents and businesses; ensuring that total energy security, reliability, environmental and economic benefit to the state and its ratepayers exceed the costs of the projects and that benefits and costs are shared appropriately amongst New England states; advance the objective of meeting GHG reduction goals at a reasonable cost to ratepayers.¹⁵⁴ The directive given the RIPUC mirrors the historic pattern of ensuring that ratepayer impact is a primary factor for evaluating potential investments.



Connecticut

In 2019, Connecticut passed Public Act 19-71 and established a 2 GW offshore wind energy procurement target for 2030.¹⁵⁵ The state has concluded two solicitations for offshore wind; one before the establishment of the target and one after. The Park City Wind project conducted under Public Act 19-71, procured 804 MW of generation capacity.¹⁵⁶ In March 2023, the Department of Energy & Environmental Protection (DEEP) announced its intention to conduct another solicitation for offshore wind in 2023.¹⁵⁷

Public Act 17-91 placed the offshore wind procurement process within the state’s integrated resource planning process.¹⁵⁸ The solicitation and evaluation elements of the process must comply with Connecticut’s Comprehensive Energy Strategy, the Integrated Resources Plan, and the Conservation and Load Management Plan along with any other statutes that may import authority on the organizations.¹⁵⁹ Integrated Resource Plans (IRPs) are approved by DEEP and PURA oversees their implementation.¹⁶⁰ The Integrated Resource Planning process requires regulated utilities to submit plans for how they will meet future customer demand. In Connecticut, a utility IRP must consider a number of factors including resource diversity, fuel security, reliability, maximization of demand-side measures, and the impact on costs to customers.¹⁶¹ The Comprehensive Energy Strategy is produced every four years by DEEP and reflects the legislative findings and policy contained in Section 16a-35k of the Connecticut General Laws which are focused on energy efficiency, energy conservation, and resource diversity.¹⁶² Under Connecticut law, when developing a solicitation, DEEP must include a requirement for paying the prevailing wage and for a commitment to engage in the good faith negotiation of a project labor agreement.¹⁶³ Public Act 19-71 required that all bids have an environmental and fisheries mitigation plan for the construction

and operation of the facility that includes, but is not limited to, an explicit description of best management practices that will be employed to avoid, minimize, and mitigate impacts to wildlife, natural resources, ecosystems and traditional or existing water-dependent uses such as commercial fishing.¹⁶⁴

The solicitation process begins with DEEP issuing a request for proposals after consultation with the PURA Procurement Manager, the Office of the Attorney General, and the Office of Consumer Counsel. and approved by the Public Utilities Regulatory Authority (PURA).¹⁶⁵ An Evaluation Team is formed to receive and evaluate bids and to rank the bids. The Evaluation Team consists of the aforementioned parties and the three investor-owned utilities operating in the state.¹⁶⁶

For every solicitation, DEEP must establish a Commission of Environmental Standards (CES) to assist in the development of the RFP.¹⁶⁷ CES provides input on the best practices for avoiding, minimizing, and mitigating any impacts to wildlife, natural resources, ecosystems, and traditional or existing water-dependent uses, including, but not limited to commercial fishing during construction and operation phases.¹⁶⁸ DEEP considers the final recommendations of CES before it finalizes the RFP, but it is not required to adopt the recommendations. For the 2019 RFP, CES' final recommendations included having an adaptive operational plan that would inform mitigation efforts and future planning efforts, developing a mitigation fund to offset economic losses to the commercial fishing industry, requiring developers to provide details on how they would fund facility decommissioning, and requiring developers to institute a wildlife inventory and monitoring plan that would feed into mitigation efforts.¹⁶⁹

Bids submitted for the 2019 RFP were evaluated on quantitative and qualitative criteria developed in accordance with state law and in consideration of the CES recommendations. All bids were assessed in the first stage of review ensures that bidders meet minimum threshold requirements for competitive pricing, additionality, project size, interconnection, technical and environmental viability, and other factors.¹⁷⁰ The environmental viability category included a plan to acquire all necessary permits and licenses, an Environmental and Fisheries Mitigation Plan for the construction and operation of the facilities which includes an adaptive management plan to avoid, mini-

For every RFP, DEEP establishes a Commission of Environmental Standards to provide input on the best practices for avoiding, minimizing, and mitigating any impacts to wildlife, natural resources, ecosystems, and traditional or existing water-dependent uses.

mize, and mitigate risks to stakeholders, and a plan for how the bidder will inventory, avoid, minimize, and mitigate risks to commercial fisheries, marine mammals and sea turtles, birds and bats, and to other species.¹⁷¹ The second stage of review ranks the bids on a 100-point scale system with 75 points awarded for quantitative factors and 25 points for qualitative factors. The 2019 RFP included several non-price criteria which reflect existing statutory mandates including consistency with the Comprehensive Energy Strategy and Integrated Resources Plan, plans for use of skilled labor, system reliability, economic development impacts, and plans to avoid, minimize, and mitigate impacts on wildlife, natural resources, ecosystems, and commercial fishing.¹⁷² Bidders could provide different pricing options for elements responding to any of the qualitative factors, such as different technologies to avoid or minimize impacts to wildlife, ecosystems, or commercial fishing.¹⁷³

The Selection Team – consisting of DEEP, the PURA Procurement Manager, and OCC – review the evaluation results and project rankings to determine projects for selection, which projects are selected is determined by DEEP.¹⁷⁴ The utility then negotiates a contract with the successful bidder that is subject to PURA review.¹⁷⁵ Completed contracts are reviewed by PURA who must follow specific criteria for evaluating agreements between state electric distribution companies and offshore wind projects for the procurement of offshore wind energy. PURA has 120 days to complete a review of an agreement and must approve agreements that it determines “(A) provide[s] for the delivery of adequate and reliable products and services, for which there is a clear public need, at a just and reasonable price, (B) are prudent and cost effective, and (C) are between an electric distribution company and a respondent to the solicitation that has the technical, financial and managerial capabilities to perform pursuant to such agreement.”¹⁷⁶



Maine

The Gulf of Maine is one of the nation’s most promising sites for offshore wind and Maine is beginning to develop processes for approving projects after several stops and starts. In 2010, the Maine Public Utilities Commission (MEPUC) issued an RFP for a deepwater offshore wind energy pilot project or tidal energy demonstration project.¹⁷⁷ In 2013, in response to a bill passed in the legislature, MEPUC issued a supplemental RFP for long-term contracts for deep-water offshore wind energy pilot projects.¹⁷⁸ In 2014, MEPUC selected a winning bid. In 2018, MEPUC decided not to approve the contract negotiated between the project developer and the state’s largest utility.¹⁷⁹ In 2019, Governor Janet Mills launched the Maine Offshore Wind Initiative to “explore thoughtful development of floating offshore wind development in the Gulf of Maine, while ensuring balance with [the] state’s maritime industries and environment.”¹⁸⁰

In 2019, the governor signed LD 994 which required MEPUC to approve the long-term contract for offshore wind which it had refused to approve in 2018.¹⁸¹ In 2019, MEPUC approved the contract that it had previously rejected.¹⁸² In 2021 the Governor signed LD 336, which directed MEPUC to work with utilities to negotiate a power purchase agreement for a floating offshore wind research array.¹⁸³ In the same legislative session, due to concerns about impacts on lobster fishing grounds, the legislature passed LD 1619, which prohibits new offshore wind projects in state waters, where most lobster fishing grounds are located, with exemptions only provided for limited duration pilot projects and demonstration projects.^{184 185}

Management of adverse environmental impacts has been a constant theme throughout Maine's efforts to restart its offshore wind procurement process. In 2019, the legislature amended the Maine Wind Energy Act to guide the potential future development of offshore wind generation off the coast of Maine. The Act acknowledged the economic feasibility of large-scale offshore wind generation projects while identifying and recognizing concerns on how to site wind energy development in locations where it is most compatible with existing development and resource values.¹⁸⁶ The legislature found that development of wind energy can bring beneficial and adverse environmental effects and siting and permitting decisions should be made according to approval criteria tailored to issues specific to wind energy projects including wildlife, wildlife habitats, and other ecological values.¹⁸⁷ In 2019, the Maine Offshore Wind Research Consortium was formed to advise the state on research priorities that would support the responsible development of offshore wind in the Gulf of Maine.¹⁸⁸

In February 2023, the State issued its Maine Offshore Wind Roadmap (Roadmap), a strategic economic development plan for the offshore wind industry in Maine. The Roadmap expresses the state's desire to responsibly develop offshore wind while protecting Maine's marine economy, protecting the environment, wildlife and fisheries ecosystem of the Gulf of Maine, and preserving Maine's traditions and culture.¹⁸⁹ The Roadmap states that the Governor's Energy Office will continue to work with other stakeholders and other state entities to determine Maine's procurement target and strategy.¹⁹⁰ The Roadmap leaves open the option for using ORECs or Power Purchase Agreements as the procurement vehicle.¹⁹¹ The Roadmap recognizes that the procurement process for energy can also be a vehicle for guiding the development of the

Maine acknowledges that the successful development of commercial offshore wind farm projects will depend on how it addresses and avoids impacts on its natural resources and fishing industry.

industry in a manner that protects natural resources and the fishing industry while driving economic development, research, equity, and innovation.¹⁹² Preservation of Maine’s historic fishing industry and unique natural resources is a focus of the Roadmap. The Roadmap presents several strategies for ensuring the development of the offshore wind industry minimizes and avoids impacts on the fishing industry.¹⁹³ It also includes a framework for gathering data on seafloor habitats, marine and non-marine species populations and activities, and paleocultural resources to enable above and below water ecological baseline monitoring that can be shared in an open and timely manner.¹⁹⁴

At present, Maine is focused on developing a research array in federal waters. In October of 2021, the Maine Governor’s Energy Office (GEO) applied to BOEM to lease 15.2 square mile area, approximately 30 miles offshore, for the nation’s first floating offshore wind research site in federal waters.¹⁹⁵ The state engaged numerous stakeholders to choose a site with minimal lobster and groundfish activity.¹⁹⁶ The purpose of the research array is to “foster better co-existence between floating offshore wind projects and Maine’s heritage industries and the marine environment.”¹⁹⁷ The research array will consist of twelve or fewer turbines using University of Maine’s VoltturnUS concrete hull floating platform technology.¹⁹⁸ In January 2023, the Bureau of Ocean Energy Management (BOEM) published its determination of no competitive interest in the proposed research lease area in the Federal Register, which is one of the final steps in granting approval for the research array.¹⁹⁹

As all the offshore wind legislation was being debated and enacted, MEPUC also saw its mandate updated to include new environmental priorities. In 2021, the legislature added reducing greenhouse gas emissions to the MEPUC’s governing statute in addition to requirements to provide safe, reasonable, and adequate service, to assist in minimizing the cost of energy to the State’s consumers, to ensure that the rates charged by the utilities are just and reasonable.²⁰⁰ MEPUC is obligated to facilitate the achievement of the state’s GHG reduction levels while ensuring system reliability and resource adequacy.²⁰¹



California

California is planning for offshore wind. In December 2022, the federal government conducted two lease auctions for wind energy areas that will support floating offshore wind installations. California has not issued an RFP for offshore wind procurement, but planning is ongoing. In 2021, the legislature directed the California Energy Commission (CEC), in conjunction with other state agencies including the California Public Utilities Commission (CPUC), to develop a strategic offshore wind energy development plan.²⁰²

California has begun an assessment of suitable sea space that can accommodate its offshore wind planning goals of 2-5 GW by 2030 and 25 GW by 2045. A proposed research-scale project could assist in filling in information gaps in advance of commercial scale projects.

The development plan must evaluate five key areas: identifying sea space, economic and workforce development, transmission planning, permitting, and potential impacts on coastal resources, fisheries, Native American and Indigenous peoples, and national defense.²⁰³ The CEC must also evaluate and quantify the maximum feasible capacity of offshore wind to achieve reliability, ratepayer, employment, and decarbonization benefits and it shall establish offshore wind planning goals for 2030 and 2045.²⁰⁴ The determination of maximum feasibility must consider, among other factors, potential impacts on coast resources, fisheries, Native American and Indigenous peoples, and national defense, and strategies for addressing those potential impacts.²⁰⁵ When identifying potential sea space to accommodate offshore wind planning goals, the CEC must consider existing data and information on offshore wind resource potential and commercial viability; existing and necessary transmission and port infrastructure; and protection of cultural and biological resources with the goal of prioritizing least-conflict ocean areas.²⁰⁶ The CEC, in coordination with state, local, federal, and private entities, must make recommendations “regarding significant adverse environmental impacts and use conflicts, such as avoidance, minimization, monitoring, mitigation, and adaptive management” that are consistent with the state’s long-term renewable energy, greenhouse gas emission reduction, and biodiversity goals.²⁰⁷ The CEC established preliminary planning goals of 2-5 GW of offshore wind by 2030 and 25 GW of offshore wind by 2045; however, work is still ongoing to complete the assessment of suitable seabed space.²⁰⁸

In California, the procurement of offshore wind will likely take place through the resource planning process which is under the jurisdiction of the CPUC. The legislature established that a principal goal of the resource planning process, in addition to ratepayer protection objectives, is to minimize the cost of providing reliable service, and to encourage investments in energy efficiency, the development of renewable energy resources, and transportation electrification.²⁰⁹ In calculating the cost-effectiveness of resources, the CPUC shall include a value to any costs and benefits to the environment, including air quality.²¹⁰ The CPUC has a statutory duty to optimize the integration of renewable energy resources which is exercised through the integrated resource planning process. In that process, the CPUC must identify a diverse and balanced portfolio

of resources that will preserve reliability while optimizing cost-effective integration of renewable energy resources.²¹¹ CPUC's IRP decision adopts the rules that will govern how utilities will prepare and submit a procurement plan that meets future demand.²¹² The most recently completed planning process added offshore wind for the first time as a response to state goals for offshore wind deployment of 2-5 GW of offshore wind capacity by 2030 and 25 GW by 2045.^{213 214}

California is one of the few states where the creation of the commission is authorized by the state constitution not by state statute.²¹⁵ The Commission is authorized to fix rates, establish rules, examine records, and take other actions;²¹⁶ however, the legislature retains the power to confer additional authority and jurisdiction upon the commission.²¹⁷ In the state Public Utility Code, the legislature granted CPUC the authority to "prescribe such reasonable, uniform, and nondiscriminatory rules in the interest and aid of public health, security, convenience, and general welfare as, in its opinion, are required by public convenience and necessity."²¹⁸ This is a broad mandate that lacks many of the constraints imposed on other state commissions on the self-exercise of commission initiative.

California is evaluating an application to build a research-scale floating offshore wind facility in state coastal waters near the Vandenberg Space Force base. The facility would have four turbines, using two new forms of foundations, with a maximum production capacity of 60 MW.²¹⁹ The project will facilitate research into and monitoring of the environmental impacts of floating offshore wind along the west coast and is intended to provide information in advance of the construction of commercial scale projects.²²⁰ As of May 2023, the project is undergoing an environmental impact review by the California State Lands Commission.²²¹




Oregon

Oregon continues to move forward on procuring offshore wind energy. In 2021, the state legislature passed HB 3375 which included a declaration to plan for a state goal of up to 3 GW of floating offshore wind in federal waters off the Oregon coast by 2030.²²² The legislature made several findings about floating offshore wind, including: (1) when responsibly developed, floating offshore wind can provide economic, resilience, and environmental benefits to the state and nation; (2) that the state’s estuarine ecosystem health must be protected; and (3) the commercial and recreational fishers should be engaged in designing policies that promote coexistence and shared net benefits.²²³ The legislature directed that the planning should be conducted to maximize benefits to the state while minimizing conflicts between offshore wind, the ocean ecosystem, and ocean users.²²⁴ The state Department of Energy (DOE) was directed to complete a literature review on potential benefits of and challenges of developing up to 3 GW of offshore floating wind and to consult with state, regional, and national entities.²²⁵ On September 15, 2022, DOE issued its report and identified environmental impacts as a key potential challenge. Primary concerns identified included the impact on fishing practices and fishing communities and ecosystem impacts – the oceanography, ocean bottom habitat, and wildlife species – from project infrastructure and operation.²²⁶

As discussed earlier, the changes to the mandate of the Oregon Public Utility Commission (ORPUC) and new instructions on how to conduct energy procurement processes will allow it to take a more holistic approach to considering future offshore wind energy projects. However, the structure to solicit and evaluate proposals still needs to be created.

Oregon’s legislature has directed the offshore wind planning be conduct to maximize benefits to the state while minimizing conflicts between the industry, other ocean users, and the ocean ecosystem.



BUREAU OF OCEAN ENERGY MANAGEMENT: MULTIPLE-FACTOR AUCTIONS

IN THIS SECTION, WE LOOK AT THE USE OF NON-PRICE CRITERIA in federal auctions of wind lease areas to facilitate the inclusion and evaluation of non-monetary factors. The federal government uses non-price criteria to advance specific policy objectives and as a conflict management tool. BOEM is the division of the Department of the Interior that oversees the offshore wind energy siting process including conducting competitive lease auctions, approving construction plans, and consulting with federal and state agencies about lease area selection and mitigation requirements.²²⁷ Starting in 2022, BOEM switched to a multiple-factor auction (MFA) format which allows it to consider both monetary and non-monetary factors. Under its regulations, BOEM can select between different auction formats and can adjust the auction format for different leases.²²⁸ Prospective bidders receive a bidding credit of a percentage of its cash bid for agreeing to make contributions to qualifying policy objectives. The bidding credits are used to boost financial offers in the auction.

The use of bidding credits has differed in each of the auctions where it has been used or proposed. The differences between auctions highlight a key point, that bidding credits reflect current federal and state policy goals and can be adapted to the specific circumstances of an individual auction. Presently, the federal government and state governments are jointly focused on developing a domestic supply chain and training

a workforce to support the deployment of offshore wind.²²⁹ Each offshore wind auction using the MFA format has issued bidding credits for domestic supply chain development and workforce training programs.

Under BOEM rules, the format of the auction and the use of bidding credits must be defined for every auction conducted. To start the auction process, BOEM issues a Proposed Sale Notice (PSN) which establishes the conditions under which the auction will be conducted. A public comment period is held after which BOEM publishes the Final Sale Notice (FSN) in the Federal Register which contains the finalized version of the auction format and identifies which bidding credits will be used and their respective weighting.

BOEM employs a panel to evaluate non-monetary factors before the auction, but after it has received the Bidder's Financial Form (BFF) from each eligible bidder. BOEM convenes an internal panel that evaluates, on a pass-fail basis, whether the application meets the criteria set out in the proposed lease and the BFF.²³⁰ Applicants who pass the test receive the full allocation of bidding credits. After the panel has completed its review, BOEM notifies each bidder whether it qualifies for bidding credits prior to the auction.

BOEM's Multiple-Factor Auctions

BOEM has conducted two auctions under the MFA format and will hold the first Gulf of Mexico auction using the MFA format sometime in 2023. Every auction assigned a non-cash value to domestic supply chain investments and workforce development initiatives, but no auction has been conducted under the same set of rules. In the Carolina Long Bay Auction, which auctioned wind energy leases off the coast of North Carolina and South Carolina in May 2022, prospective bidders were eligible for up to a 20% non-cash bidding credit for domestic supply chain development investments and for workforce development initiatives.^{231 232}

The December 2022 auction of the Humboldt and Morro Bay lease areas of the coast of California provided up to a 25% non-cash bidding credit allowance. Prospective bidders could receive a 20% non-cash bidding credit for domestic supply chain development investments and workforce development initiatives, and an additional 5% non-cash bidding credit for a community benefits agreement (CBA).²³³ The 5% non-cash bidding credit was for a Lease Area Use CBA with one or more communities, stakeholder groups, or Tribal entities whose use of the geographic space of the lease area or resources harvested from the lease area would be impacted by the potential development.²³⁴

In the upcoming lease auction in the Gulf of Mexico, the PSN included a 20% bidding credit for supporting workforce training programs and/or assistance in the development of a domestic supply chain and 10% bidding credit establishing or contributing

to a fisheries compensatory mitigation fund or contributing to an existing fund to mitigate potential negative impacts to commercial and for-hire recreational facilities caused by outer continental shelf offshore wind development in the Gulf of Mexico.²³⁵

BOEM made it clear that non-cash bidding credits are a vehicle for advancing specific policy goals and reducing potential conflicts that could hamper project development. The compensatory mitigation fund is intended to “minimize potential economic effects on commercial fisheries impacted by potential offshore wind development, as cooperation with commercial fisheries impacted by OCS operations will enable development of the Lease Area to advance.”²³⁶ The addition of a fisheries compensatory mitigation fund reflects BOEM’s efforts to engage with stakeholders through its Regional Intergovernmental Renewable Energy Task Forces to identify and reduce potential opposition to offshore wind development.²³⁷ By placing compensation in the lease process, BOEM can standardize a process that is currently piecemeal in its application.²³⁸ However, the potential uses of the fund are limited to being first spent on compensation for gear loss or damage or compensation for lost fishing income in Gulf of Mexico wind energy lease areas. If excess, unallocated funds remain, they can be spent on promoting participation of fishers and fishing communities in the offshore wind project development process, promoting research in the co-existence of multiple ocean industries, and offsetting the cost of gear upgrades and transitions for operating within a wind farm.²³⁹

For the auctions described above, BOEM caps the use of non-cash bidding credits at 30%. In January 2023, it promulgated a draft rule, Renewable Energy Modernization Rule, that proposes creating a formal cap on the use of non-cash bidding credits and identify what types of bidding credits could be included. BOEM is seeking public comments on whether to establish a formal cap for the percentage of bidding credits that can be used in auction, how bidding credits could be tailored to mitigate possible adverse, project-related impacts, and on alternative means to achieve public policy goals, such as through lease stipulations.²⁴⁰ According to the provisions of the rule, a MFA may take into account one or more non-monetary factors, including: (1) power purchase agreements; (2) eligibility for, or applicability of, renewable energy credits or subsidies; (3) development agreements by a potential lessee that facilitate shared transmission solutions and grid interconnection; (4) technical merit, timeliness, financing and economics; (5) environmental considerations, public benefits, or compatibility with State and local needs; (6) agreements or commitments by the developer that would facilitate OCS renewable energy development or other OCS Lands Act goals; or (7) any other factor or criteria to further development of offshore renewable energy in a sustainable and environmentally sound manner, as identified by BOEM in the PSN and FSN.²⁴¹



NET-POSITIVE NON-PRICE CRITERIA IN EUROPEAN OFFSHORE WIND TENDERS

OFFSHORE WIND DEVELOPMENT IN THE EUROPEAN UNION (EU) is guided by several environmental laws, most notably the State aid rules (Guidelines), Renewable Energy Directive (RED II), and the Maritime Spatial Planning Directive (MSPD). The Guidelines expressly permit state aid schemes to be used to promote expansion of offshore wind through competitively awarded auctions. However, auction formats that permit state subsidization of projects, aid awarded via contract for differences (CFDs), are limited in the weight afforded to non-price of no more than 30% of the analysis.²⁴² Contrastingly, subsidy-free auctions are free to weigh non-price criteria as the member state wishes. As more member states move towards subsidy-free auction formats, the use and weighting of non-price criteria are expanding to allow greater consideration of environmental goals. RED II drives the development of offshore wind to meet Europe's rapidly scaling renewable energy development commitments. RED II sets both binding

As more member states move towards subsidy-free auction formats, the use and weighting of non-price criteria are expanding to allow greater consideration of environmental goals.

EU-wide and state specific decarbonization metrics and requires expedited offshore wind permitting.²⁴³ The MSPD is the framework for sustainable use of marine resources and the conservation of marine ecosystems. It coordinates different activities occurring in Europe's marine waters. States must develop marine spatial plans based on ecosystem-based principles and consider the various uses of the marine environment.²⁴⁴

In this section, we present how the Netherlands and France have used non-price criteria in recent tenders and how Germany and Belgium are proposing to use non-price criteria in forthcoming tenders. In Europe, most offshore wind sales occur through the tender process where bids are submitted and evaluated without having multiple rounds of bidding. The use of non-price criteria to enhance ecological function is a choice to incentivize nature-positive investments and innovation and it is a choice to act to address future issues that could impair decarbonization efforts.



The Netherlands

The Netherlands is a global leader in offshore wind development and a global leader in the use of non-price criteria. As the Netherlands has ramped up its offshore wind capacity procurement target, from 11 GW target to 21 GW by 2030 with potentially between 38 GW and 72 GW by 2050, it has sought to use its auction format to eliminate potential future conflicts.²⁴⁵

Unlike the United States, the Netherlands auctions a fully packaged permit not a lease. The winning bid receives the lease area, a preliminary study that is sufficient to complete preliminary engineering design, the interconnection substation, and the right to construct and operate the facility for up to forty years.²⁴⁶ The subsurface cabling and interconnection substation are built in advance of the permit auction and are not the responsibility of the developer.²⁴⁷ A mix of price and non-price criteria are used to evaluate bids. The Dutch government's decision to move to subsidy-free auction has allowed it to weigh non-price criteria at 50% of the total bid weight.²⁴⁸ Two issues were identified as critical to developing hitting the procurement targets: addressing environmental impacts in the North Sea and connecting offshore wind facilities to the electrical grid. The two tenders held in 2022 contained non-price criteria designed to address these concerns. Hollandse Kust West VI included a 50% weight for contributions to investment and innovation in the ecology of the North Sea. Hollandse Kust West VII had a 50% weight for system integration.

The evaluation of non-price criteria was structured to provide independent and transparent review. The evaluation of non-price criteria in the Hollandse Kust West VI auction was completed by an expert panel using scoring criteria submitted for public comment. Applications were assessed by staff from the Netherlands Enterprise Agency

The Dutch use independent experts to develop and evaluate the use of non-price criteria designed to incentivize investments and innovation in the ecology of the North Sea.

(RVO) and experts on the ecology of the North Sea.²⁴⁹ Members of the committee are disclosed on the RVO's website, but only after the application period has closed.²⁵⁰ In March 2022, the RVO published a draft version of the qualitative criteria which included awarding points to project designs that mitigate potential adverse impacts or promoting positive effects on the conservation of marine habitat types under the EU Habitats Directive or promoting positive effects on the environmental status (EU Marine Strategy Framework Directive, MSFD) in the Dutch part of the North Sea for the 'fish community' and/or 'benthic habitats'.²⁵¹ The qualitative criteria and the points awarded for each category and subcategory were finalized in May and published in September in advance of the December 2022 auction.²⁵² In the draft, scoring of the qualitative criteria were presented with potential points for each category and sub-category.²⁵³ A winning bid was selected in December 2022 from the 49 submitted applications.²⁵⁴

Newly announced tenders also include ecological non-price criteria. Sites Alpha and Beta in the Ijmuiden Ver Wind Farm Zone, a potential capacity of 2GW each, use a higher valuation and a wider range of non-price criteria to score applications. Draft bid scoring criteria for Site Alpha in the Ijmuiden ver Zone adds 40 potential new points for circular design and for compliance with the International Responsible Business Conduct Agreement ("IRBC").²⁵⁵²⁵⁶ Projects designs can also receive up to 180 out of 400 total points for contributions to the ecology of the North Sea,²⁵⁷ but will need to contribute to specific species and environments of interest such as Brown Bank Species (referring to an area with high concentrations of cetaceans and seabirds), harbor porpoises, and migratory birds.²⁵⁸ The Site Beta tender uses the system integration scoring option instead of the ecological scoring options, but it does reserve 12 points for efforts to minimize harbor porpoise disturbance.²⁵⁹ By changing the criteria, RVO can continuously tweak its desired policy goals to match knowledge of the impacts on the North Sea ecosystem and biodiversity.



France

France has committed to significantly expand its offshore wind capacity by 2050. France has four wind parks totaling nearly 2GW currently under construction and a commitment to build 40GW of offshore wind by 2050.²⁶⁰ Almost 3.5 GW of offshore wind procurement will be finalized in 2023, including three floating wind farms,²⁶¹ and France plans to auction a minimum of 2 GW annually starting in 2025.²⁶²

France has begun testing incorporating non-price criteria into tenders, but since all current tender schemes involve state aid, France must adhere to 30% limit on non-price criteria. Non-price criteria are developed through a flexible auction design known as “competitive dialogue” in which a consultation document is published, and input is solicited from the public.²⁶³ The consultation document is created by the Ministry of Energy and covers the subject matter, timeline, technical requirements, and the criteria (weighted by importance) for the selection process.²⁶⁴

Under French law, price criteria must comprise more than half of the weight of the evaluation criteria, but non-price criteria may be included in the tender so long as it is non-discriminatory. The list of potential non-price criteria contained in the in the Energy Code include environmental protection performance, innovative nature of the project, impacts on the environment of the conditions to manufacture the raw materials, the share of capital in the project by local communities and capital offered to local communities, developing local supply chains supporting offshore wind, and recycling.²⁶⁵ If France opts for an unsubsidized auction format it could avoid the EU’s 30% cap on the use of non-price criteria.²⁶⁶ The recent 1 GW Normandy auction was conducted under these rules and allotted twenty five out of a total ninety five points for non-price criteria which included environmental monitoring, supporting a biodiversity fund, recycling plans, community investment/community funding, and plans meeting the capacity using fewest turbines.²⁶⁷

French law lists potential non-price criteria that can be used in tenders including environmental protection performance, innovative nature of the project, and impacts on the environment of the conditions to manufacture the raw materials.



Germany

Germany's offshore wind ambition has grown significantly over the last decade as it moves towards achieving climate neutrality by 2045. Targets for 30GW of offshore wind by 2030 and 70GW by 2045, represent a significant step up from the current installed capacity of 8 GW.²⁶⁸ The offshore wind procurement process is governed by the Offshore Wind Energy Act (WindSeeG), originally passed in 2017. The stated purpose of WindSeeG is to expand the use of wind energy at sea, in the interest of climate and environmental protection, and to consider nature conservation, shipping and offshore connecting lines.²⁶⁹ Recently, Germany changed its procurement of wind energy to accelerate procurement processes and to address concerns over growing environmental impacts.²⁷⁰ In 2022, the German Bundestag amended WindSeeG to change the structure of auctions to allow for the use of non-price criteria and to include new qualitative criteria. As Germany moves away from CFDs to a system that allows for zero or negative bidding by developers, it is expanding the use of non-price criteria.

How qualitative factors will be used to assess bids depends on the location of the project. Offshore wind tenders will be split between pre-examined areas and non-centrally pre-examined areas. In January 2023, the Federal Maritime and Hydrographic Agency of Germany published an area development plan that defined areas in the country's exclusive economic zone of the North Sea and Baltic Seas where up to 36.5 GW of capacity could be built. The area development plan contains the parameters of the tendering process, the process for commissioning projects, and the required grid connections.²⁷¹ At the same time, a strategic environmental assessment was published that identified, detailed, and evaluated the potential marine environment impacts of implementing the plan.²⁷² For pre-examined areas, the German government has collected key environmental data such as marine environment conditions, benthic conditions, and wind and oceanographic conditions.²⁷³ Non-centrally pre-examined areas have not undergone this data collection and thus the responsibility would fall on bidders to collect this information.²⁷⁴ At present, only auction areas pre-examined by the government will incorporate non-price criteria into auction solicitations and non-centrally pre-examined lease areas will be awarded solely on the price of the bid.

In March 2023, the government issued a tender for 1,800 MW of capacity in a pre-examined area that contained price and qualitative criteria. Under German law, up to

Germany only uses non-price criteria in areas where the government has collected key baseline environmental data.

60 points can be awarded for the price of the bid and up to 40 points can be awarded for qualitative factors. The criteria used in this tender are a mix of environmental and climate protections, energy produced, and labor force development commitments. Each of the following criteria are valued at up to 10 points: (1) the contribution to the decarbonization of the expansion of offshore wind energy; (2) the volume of supply of energy generated on the advertised area; (3) foundation technologies used and associated noise pollution and sealing of the seabed, and (4) contributions to securing skilled workers.²⁷⁵



Belgium

Belgium swings above its weight in procuring offshore wind and has recently shifted its auction format to increase its use of non-price criteria. Despite only controlling 0.5% of the North Sea, Belgium has installed more than 2 GW of offshore wind and is moving to add another 3.15 to 3.5 GW by 2030.²⁷⁶ The environmental impacts of developing offshore wind farms in a limited space have led the country to develop non-price criteria that advance environmental protection and net positive goals.

Belgium's offshore wind activities must comply with country's Marine Spatial Plan. The Marine Spatial Plan (MSP), updated in 2020, coordinates different activities in the country's sea areas to ensure achievement of environmental and economic objectives.²⁷⁷ Among the environmental objectives is compliance with the conservation objectives of EU's Natura 2000 Objective. The Natura 2000 Objective requires member states to identify and protect sites necessary to ensure the long-term survival of the continent's most valuable and threatened species and habitats.²⁷⁸

In 2021 the federal government announced plans to competitively procure between 3.15 and 3.5 GW of offshore wind. The Princess Elisabeth Zone tender process will use non-price criteria to assess bids.²⁷⁹ The permit auction will take place in three phases, with the first tender likely to be published in 2024.²⁸⁰ In January 2022, a public consultation on tender criteria was conducted to gather comments on the proposed auction structure, which will be finalized when the tender is published. The proposed structure varies depending on the location of the project and the auction format. Belgium's preliminary plans included both zero bid auctions and 2-sided CFDs as options for future tender design.²⁸¹ As show in the chart below, both tender designs can incorporate non-price criteria in the evaluation of bids for lease areas within the Nature 2000 zone of the Belgian North Sea. However, the zero-bid format can exceed the 30% limit on non-price criteria because it does not offer a direct subsidy. Moreover, zero bids receive no points for price.

FIGURE 1.1 Preliminary Scoring System

	2-Sided CFD Outside of Nature 2000	Zero Bid Outside of Nature 2000	2-Sided CFD Inside of Nature 2000	Zero Bid Inside of Nature 2000
Strike Price	70 points	0 points	70 points	0 points
Energy Production	0 points	0 points	5 points	17 points
Citizen Participation	10 points	33 points	10 points	33 points
Local Benefits	5 points	17 points	5 points	17 points
Sustainability and Multi-use	5 points	17 points	5 points	17 points
Nature Impact	0 points	0 points	5 points	17 points
Innovation and System Integration	10 points	33 points	0 points	0 points

Nature impact is only considered for projects within the lease area. Under the nature impact category, developers could receive extra points by presenting a nature preservation plan that demonstrates how the project will have a positive impact on the ecosystem and diversity. Several ways that projects can meet this requirement include:

- Using innovative ways of nature inclusive design;
- Increasing biodiversity and showing a gain in habitat;
- Using ecologically valuable types of gravel and creating new gravel beds;
- Cooperating with non-profit organizations and nature institutes; and
- Employing an ecosystem approach based on physical and biological environments for provisioning, regulating or cultural services.²⁸²

Belgium is creating a tender system that values projects that have a nature inclusive design and create habitat gains in protected nature zones.

An underwater photograph showing a large school of small fish swimming in the water. In the foreground, there is a large, dark fish, possibly a cod, swimming towards the left. The water is clear and blue, with some seaweed visible on the right side. The image is split diagonally, with the top-left portion being dark and the bottom-right portion being lighter and showing more detail of the fish and seaweed.

CONCLUSION

WORDS MATTER. The rules governing how offshore wind is leased and procured determine whether the project will only mitigate environmental impacts or perhaps also protect and enhance ecological function and biodiversity.

In every state surveyed in this report there is a focus on mitigating the impacts of constructing and operating offshore wind projects. In every solicitation reviewed, there is language directly or indirectly discussing the compensation mitigation hierarchy (avoid, minimize, and mitigate). If compensatory mitigation is the only approach to managing environment impacts, a solicitation process will not create an environment where prospective bidders are rewarded for investments in that contribute to net positive outcomes in the marine environment.

States are beginning to think more broadly about the inclusion of net positive non-price criteria. Every state is already using non-price criteria and weighing policy objectives alongside economic goals. Every state has a requirement to collect and share key baseline environmental conditions data. Some states, but not all, enable a net benefits analysis when assessing proposals that could be used to facilitate net positive non-price criteria.

Greater clarity in the goals and purposes of the solicitation process is needed as well as more attention as to whether the agencies and commissions managing the solicitation process have the necessary authority and capacity for qualitative evaluations. In many states, agencies and commissions are confined to examining a narrow range of listed factors and only seeking to mitigate negative environmental impacts. In other states, agencies and commissions have discretion to add evaluation factors as deemed necessary. Changing to a system that encourages net positive investments will require state legislatures to update laws to add new requirements and governors' offices to clarify policy goals.

European countries that use net-positive non-price criteria share similarities that could be transferred to U.S. state solicitation processes. Many European countries incentivize net positive investments by including specific categories in their tender application requirements that reward investment in the ecology of marine environments, nature inclusive designs, or environmental protection performance. Net positive non-price criteria are allocated specific point values that direct bidders on how to invest capital. The scoring criteria are published in advance of the tender so that every party is aware of how they can maximize their potential score. Some countries, like the Netherlands, use independent expert panels to develop the criteria and score the criteria which allows for an objective, comparative analysis of different proposals.

The massive build out of offshore wind in the United States is an opportunity to change our energy system and what it does for us. We can get more than just electricity, but only if the processes that buy the power, lease the areas, and permit the construction are designed, constructed, and operated to capture potential economic, environmental, social, and cultural benefits. Net positive non-price criteria can unlock the potential of the clean energy transition by refocusing our regulatory systems on achieving what is possible.

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