August 17, 2023



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Re: Consistency Review for Sunrise Wind

We strongly disagree with the Staff Recommendation for Concurrence regarding federal consistency review of the Sunrise Wind project. Such a concurrence would violate the enforceable policy of the Ocean SAMP and lead to irreversible long term exclusion and harm for Rhode Island's commercial fishing industry.

The reliance on ensuring that Orsted can meet its power purchase agreement with the state of New York- which it signed speculatively and prior to any federal or state review- is inappropriate. Conditions 2 and 3 clearly make Sunrise's "power purchase agreement obligations" the focal point of review and the only thing that cannot be overridden by the Council recommendation or decision. This is inappropriate. The Council is legally responsible for ensuring compliance with the Ocean SAMP, not to ensure that developer contracts are met.

While there are many flaws to the CRMC staff document, including Condition 5's research and monitoring plan which has already been declared scientifically useless by a peer reviewed publication conducted by NOAA Fisheries in July 2023, thereby violating the Ocean SAMP's Enforceable Policy §11.10.1(E) by creating long-term effects on NOAA Fisheries surveys, we will focus these comments on two of the Ocean SAMP's specific enforceable policies.

Glacial Moraines. Enforceable Policy 11.10.2(C)(3), Enforceable Policy 11.10.1(I). The Ocean SAMP Enforceable Policy 11.10.2(C)(3) states that "Glacial moraines are important habitat areas for a diversity of fish and other marine plants and animals because of their relative structural permanence and structural complexity. ... The Council also recognizes that because glacial moraines contain valuable habitats for fish and other marine life, they are also important to commercial and recreational fishermen." Enforceable Policy 11.10.1(I) states ""...finfish, shellfish, and crustacean species that are targeted by commercial and recreational fishermen rely on appropriate habitat at all stages of their life cycles. While all fish habitat is important, spawning and nursery areas are especially important in providing shelter for these species during the most vulnerable stages of their life cycles. The Council shall protect sensitive habitat areas ..."

Therefore, the enforceable policy of the Ocean SAMP states that the Council shall protect sensitive habitat areas, and the Ocean SAMP identifies glacial moraine, such as Cox's Ledge, as an important habitat area. As such, the Council is charged with protecting glacial moraine from habitat destruction and alteration such as from turbine placement. However, the CRMC staff recommendation Condition 3 states that Cox's Ledge is only to get the Ocean SAMP's mandated protection only as long as the developer can still meet its power purchase agreement with the state of New York. The Ocean SAMP

¹ See Methratta et al, "Offshore wind project-level monitoring on the Northeast U.S. continental shelf ecosystem: evaluating the potential to mitigate impacts to long term scientific surveys", Frontiers in Marine Science, July 6, 2023, attached.

is Rhode Island state regulation and is not contingent on the utility requirements of another state. The Ocean SAMP is legally binding on the state of Rhode Island and the Council has a legal duty to the state of Rhode Island to ensure its execution. The Ocean SAMP does not consider the legislative goals or the economic or other needs of other states. It was designed to protect Rhode Island from negative natural resource impacts originating from both in state or out of state activities- and particularly to protect Rhode Island natural resources and natural resource users from negative impacts originating from outside the state. It was for this purpose that Rhode Island initiated the federal consistency process for the RI/MA Wind Energy Area. If the CRMC is prepared to abdicate its duty and legal responsibility to the citizens and laws of the state of Rhode Island to ensure the competing and infinite interests of other states, then the Ocean SAMP might as well be erased from our state code of regulations. However, as of today, it is not. And as of today, the Council does not have the legal leeway to subject clear and enforceable policies of the Ocean SAMP to the state energy goals of the state of New York.

Notably, and as we detail in our federally submitted BOEM comments attached, in January 2023 Sunrise Wind was already deemed economically unfeasible as it is- Orsted has already calculated a 2.5 billion DKK impairment loss on the Sunrise Wind project, and before it is even built is discussing future divestment.² Considering the recent power purchase agreement terminations in Massachusetts by various wind developers, and the fact that Sunrise Wind recently filed with the New York State Public Service Commission to request the inclusion of retroactive price adjustments to its power purchase agreement- following a 2023 Capital Markets Day report showing that Orsted's current US offshore wind projects have an unacceptable financial condition regarding zero points basis spread on their weighted average cost of capital and a CEO statement that the developer may exit even awarded projects- having RI CRMC base its decisions on safeguarding project economics is ludicrous.³ RI CRMC's legal responsibilities involve compliance with state regulation such as the Ocean SAMP, not ensuring the financial viability of offshore wind power purchase agreements.

We additionally hereby incorporate all of our comments on the Sunrise Wind DEIS into this comment, including our comments on the Purpose and Need statement of the federal documents.

Long Term Fisheries Impacts. Enforceable Policy §11.10.1(E). The current Sunrise Wind proposal before the Council violates the Ocean SAMP's Enforceable Policy §11.10.1(E). That Enforceable Policy states: "The Council shall prohibit any other uses or activities that would result in significant long-term negative impacts Rhode Island's commercial or recreational fisheries. Long-term impacts are defined as those that affect more than one or two seasons."

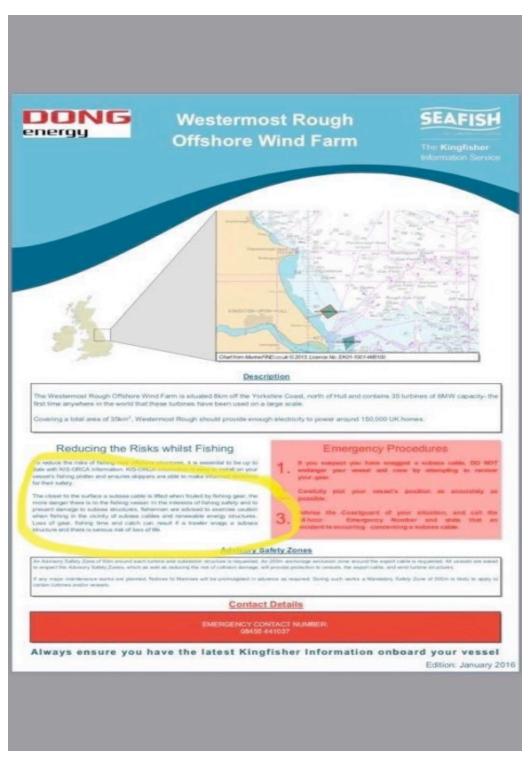
The project's subsea cables and underwater infrastructure will impact Seafreeze vessels for the entire operation of the project. In the U.K., the only European country which allows commercial fishing inside of wind farms, mobile gear fishing, such as that of Seafreeze vessels and many other RI commercial fishing vessels, does not occur where cables are present.⁴ This is due to potentially fatal interactions with the cables themselves. The below notice to U.K. fishermen from offshore wind developer DONG Energy (now Orsted) and the Kingfisher Information Service, a fisheries information

² See "Ørsted deems impairment of Sunrise Wind project a one-off", *EnergyWatch*, January 20, 2023, at https://energiwatch.dk/Energinyt/Energiselskaber/article14871710.ece.

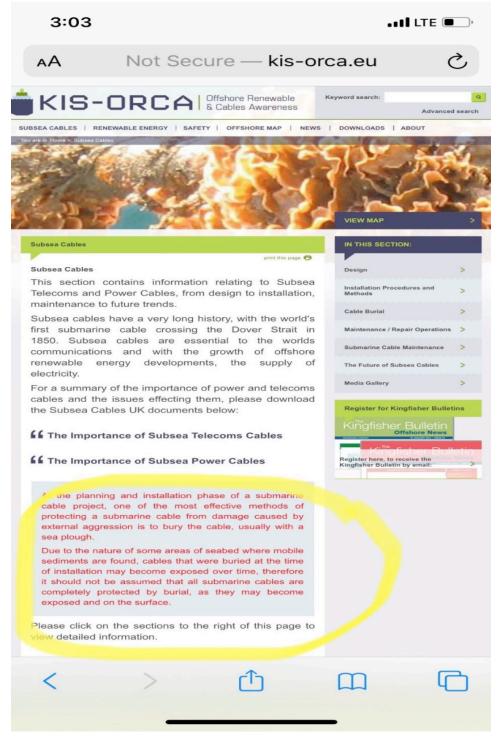
³ See Energy Musings, June 20, 2023 – Musings on the Energy Industry (energy-musings.com), June 20, 2023.

⁴ Gray et al., "Changes to fishing practices around the UK as a result of the development offshore wind farms-Phase 1 (Revised)", The Crown Estate, 2016, p. 29.

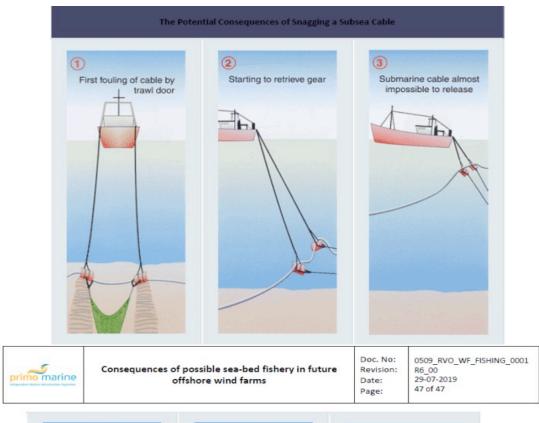
service providing fishermen the location of subsurface and subsea hazards around the U.K., reads, "The closer to the surface a subsea cable is lifted when fouled by fishing gear, the more damage there is to the fishing vessel. In the interests of fishing safety and to prevent damage to subsea structures fishermen are advised to exercise caution when fishing in the vicinity of subsea cables and renewable energy structures. Loss of gear, fishing time, and catch can result if a trawler snags a subsea structure and there is serious risk of loss of life."



The fact that this notice has been released by Orsted, the developer of the Sunrise Wind project, cannot go unnoticed. While CRMC staff and developers may assure the Council that the cable burial depth will preclude any hazards, this is also untrue and has not been borne out by analysis and experience elsewhere. Another Kingfisher Information Service notice, below, reads "Due to the nature of some areas of seabed where mobile sediments are found, cables that were buried at the time of installation may become exposed over time, therefore it should not be assumed that all submarine cables are completely protected by burial, as they may become exposed and on the surface."



We have attached as part of this comment a marine consultation document called "TRA-1 Consequences of possible sea-bed fishery in future offshore wind farms" from 2019 prepared by a Primo Marine/Independent Marine Infrastructure Expertise for the Netherlands Enterprise Agency, a government agency that is part of the Dutch Ministry of Affairs and Climate policy. (About the Netherlands Enterprise Agency | RVO.nl). The document looks at the impacts of fishing in a wind farm and provides the below graphics of the consequences of mobile bottom tending gear trawl vessels such as Seafreeze vessels of fishing in an offshore wind farm:



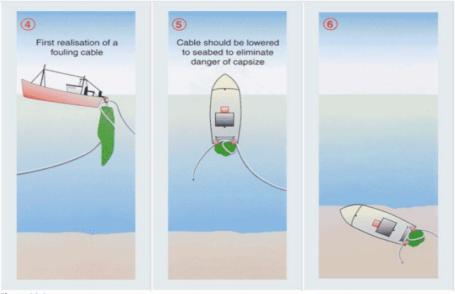
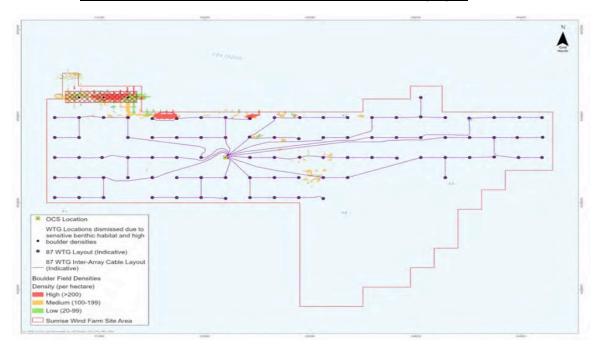


Figure 14-1

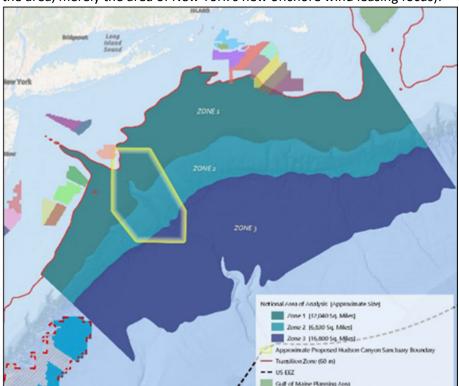
That document states that, "The most serious risk affecting fishermen when fishing in areas where submarine cables exist, is to snag their gear on a cable. Submarine cables are initially buried on installation, although may become exposed due to current and seabed erosion. It is best, therefore, to avoid fishing in such areas, if at all possible...A vessel and its crew could become in danger if a vessel attempts to lift a cable from the seabed...Due to the presence of so many submarine cables and surface structures in a windfarm area,...types of fishing such as trawling is unlikely to take place, especially from larger vessels. This is due to their restricted ability to maneuver, due to potential winds and currents and the penetrative nature of their gear, which would enhance the risk of snagging." Seafreeze owns and operates the largest commercial trawl vessels in the state of Rhode Island and will be unable to safely operate in the Sunrise Wind project. Therefore, our vessels will be permanently impacted by the Sunrise Wind project – well in excess of one or two fishing seasons- in violation of the enforceable policies of the RI Ocean SAMP.

Rhode Island's own Department of Environmental Management has conducted a report that found that "Very few fishermen do operate mobile gear within the six assessed UK windfarms, and only in cable-free corridors between turbines." We refer the Council to Figure 3 of the CRMC staff report, reproduced below. There are no cable free corridors within the Sunrise Wind project.



⁵ Primo Marine, "TRA-1 Consequences of possible seabed fishery in future offshore wind farms," 2019, p. 45-47. ⁶ See RI DEM, "Rhode Island Stakeholder Concerns Regarding the New York Wind Energy Area", July 22, 2016, p. 13, attached. Note the additional statements contained in the same paragraph: "NOAA Fisheries even notes that anecdotal evidence suggests that WEAs could prevent any highly mobile fishing gear (e.g. bottom and mid-water trawls) from fully utilizing the developed area. In the case of offshore wind farms in the UK, fishing activity within wind farm boundaries has been extremely limited because fishermen are fearful of gear becoming entangled by seabed obstacles (e.g. cables and rock armoring) and are wary of vessel breakdown and the consequent risk of turbine collision. Wind farm maintenance work has also proven to be problematic for fishermen, as maintenance generally requires temporary closures to fishing, and subsequently increases steaming distances to fishing grounds. Very few fishermen do operate mobile gear within the six assessed UK windfarms, and only in cable-free corridors between turbines." Emphasis ours.

Should the Council approve the Sunrise Wind project despite these facts, what it is essentially saying is not only that mobile gear fishermen should be required to literally risk their lives in order to accommodate the speculative power purchase agreements that Orsted signed with the state of New York but also that the interests of states outside Rhode Island override Rhode Island state regulation. We also note the CRMC staff recommendation states that displacement caused by the Sunrise Wind project is anticipated to force fishermen to find alternative fishing locations, or to exit the fishery permanently. Finding alternative fishing locations- particularly with the cumulative effect of over 2 million acres already leased for offshore wind development, with an intent by BOEM as well as other states to lease many more- is a naïve assumption. Fishing is the 7th most regulated industry in the United States, according to a George Mason University study- more regulated than oil and gas extraction or pharmaceutical manufacturing. ⁷ Simply relocating, in an industry that is heavily spatially regulated, may not be an option. The offshore wind industry suffers no such spatial restriction. Therefore, deference to actual fishing grounds should be given to the industry that cannot legally "adapt" as is suggested is the appropriate course of action. We demonstrate below a chart of New York's Master Plan 2.0 Deepwater edition of its state offshore wind leasing initiative. It is difficult to understand, should Rhode Island continue to defer to the interests of New York, where the federally permitted Rhode Island commercial fishing industry should plan to relocate (note: this chart does not contain spatial fishing regulations in the area, merely the area of New York's new offshore wind leasing focus): 8



One additional note that demonstrates lack of compliance with this enforceable policy is that of marine radar interference. The RI CRMC staff recommendation states that "Furthermore, an independent National Academy of Sciences report funded by BOEM and the offshore wind industry

⁷ See https://www.mercatus.org/research/data-visualizations/mclaughlin-sherouse-list-10-most-regulated-industries-2014.

⁸ See https://www.nyftwg.com/wp-content/uploads/2023/07/F-TWG-Office-Hours-3-Final.pdf.

indicates radar navigation risks but specifically fails to consider impacts to radar while working (i.e., commercial fishing) within an offshore wind array" and limits potential impacts to inclement weather. This is inaccurate. Seafreeze vessels also transit and fish in the Sunrise lease area at night. At night, accurate radar is necessary to any operation- transit or fishing- at night, as well as in inclement weather. Even if the cable issue did not exist, which it does, all fishing at night in the Sunrise area- which our vessels currently do- will be precluded due to the inability to safely navigate or "see". The NAS study referenced by CRMC states, "Marine Vessel Radar is a vital component of a mariner's toolbox that can help the mariner "see" in reduced visibility, in darkness...." That report also found that all classes of Marine Vessel Radar- including those that have been proposed by the developer concerning past projects as "mitigation" – will be impacted.

The National Academies of Sciences (NAS) study states that "WTGs cause radar returns that may appear as interference to MVR, including strong stationary returns from the wind turbine tower, the potential for a strong blade flash return for certain geometries and relative radar-vessel positions, and Doppler-spread clutter generated along the radial extent of the WTG blade, which could obfuscate the radar returns of smaller watercraft or stationary objects, such as buoys. Additionally, multipath reflection from an observer's own shipboard MVR (also known as "own vessel") platform is a significant challenge for returns from WTGs, leading to ambiguous detections and generating a potentially confusing picture for the operator. As presently deployed, WTGs reduce the effectiveness of both magnetron-based and Doppler-based MVR. While vessel operators can control the radar detection threshold—via changes to the receiver gain—to mitigate strong returns and manage the number of targets shown on the plan position indicator display, this will frequently lead to the unintended consequence of suppressing detections of small targets in and around wind farms, thereby affecting navigation decision-making and situational awareness. While the study committee carefully distinguishes performance between magnetron and solid-state classes of MVR, the corresponding general impact of WTG-induced degradation will be similar across radar height, radar range, vessel type and size, and other likely parameters. It is noteworthy that there are no published studies of WTG interference on Doppler-based solid-state radar used for marine navigation...WTG interference decreases the effectiveness of MVR mounted on all vessel classes, and the sizes of anticipated marine WTG farms across the U.S. OCS will exacerbate this situation. WTG interaction with MVRs at the scale of the proposed U.S. deployment will lead to unforeseen complications due to heightened effects of propagation, multipath, shadowing, and degraded Automatic Radar Plotting Aid performance. Maritime search and rescue (SAR) assets rely on MVR to search for smaller boats as their primary targets in the conduct of ordinary SAR operations. A loss of contact with smaller vessels due to the various forms of MVR interference could complicate MTS operations, and is therefore particularly consequential when conducting maritime surface SAR operations in and adjacent to an offshore wind farm."¹⁰ While all of these issues are of paramount concern and have life-threatening impacts on commercial fishermen and other Rhode Island mariners, the NAS study contained no immediate solutions, merely recommendations for future study/investigation. Such studies and investigations, but more importantly

Turbine Generator Impacts to Marine Vessel Radar. Washington, DC: The National Academies

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Press. https://doi.org/10.17226/26430, http://nap.edu/26430, p. 4-5.

⁹ National Academies of Sciences, Engineering, and Medicine. 2022. *Wind*

Press. https://doi.org/10.17226/26430, http://nap.edu/26430, p. 22.

¹⁰ National Academies of Sciences, Engineering, and Medicine. 2022. Wind

implementable solutions, will take more than one or two fishing seasons to complete and/or develop, in violation of the Ocean SAMP Enforceable Policy §11.10.1(E). Seafreeze has been requesting such analysis from the USCG, BOEM and others for many years now, to no avail. This is why our comments to the USCG were quoted by the NAS in its report.¹¹ The US has been investigating offshore wind related radar interference since at least 2013 in the marine environment,¹² but has yet to develop a solution. If in ten years there has been no solution developed, even after the federal interagency Wind Turbine Radar Interference Mitigation Working Group has been attempting since 2014 to develop such technology,¹³ there is little chance that any solution will be developed in less than one or two years. As it currently stands, there are none.

Unfortunately, we have been given only 3 workdays from the time of receiving staff recommendations until the Council meeting on August 22, and as such these comments are shorter and less detailed than they would otherwise be. However, they contain the information necessary to demonstrate that the Sunrise project is inconsistent with Rhode Island's Ocean SAMP enforceable policies, and as such we request that the Council disapprove any concurrence.

Sincerely,

Meghan Lapp

Fisheries Liaison, Seafreeze Shoreside and Seafreeze Ltd.

¹¹ See p. 15.

¹² See Ling et al., "Final Report DE-EE0005380 Assessment of Offshore Wind Farm Effects on Sea Surface, Subsurface and Airborne Electronic Systems", University of Texas at Austin, prepared for the United States Department of Energy, 2013.

¹³ See WINDExchange: Wind Turbine-Radar Interference Mitigation Working Group (energy.gov).