

Lisa Turner

From: Gary Dorfman <gsdorfman.homeoffice@cox.net>
Sent: Wednesday, December 15, 2021 1:22 PM
To: jwillis@crmc.ri.gov
Cc: Lisa Turner
Subject: CRMC File Number 2021-07-005 and 2021-07-010; DEM File Number WQC-21-135 and DP-21-187
Attachments: Dorfman Comments Revolution Wind CRMC and DEM applications.docx

Dear Mr. Willis,

Attached to this email are my comments on the above referenced applications. Please acknowledge timely receipt.

I will follow up with hard copy sent by USPS and postmarked prior to close of business on December 15, 2021.

I am grateful for the opportunity to provide written comment. Should there be an open hearing on these applications, I request to provide oral testimony.

Of course, I am more than willing to speak with you and/or members of your staff regarding my comments.

Thank you in advance for the courtesy of a response to my comments once you and/or your staff have had the opportunity to review them.

Sincerely,

Gary S. Dorfman
401-225-7012

December 15, 2021
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Terrence Gray, Acting Director
Rhode Island Department of Environmental Management
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Sent by email with hard copy to follow

re: CRMC File Number 2021-07-005, 2021-07-010
RIDEM File Number WQC-21-135, DP-21-187

Dear Mr. Willis, Mr. Gray, and Mr. Gagnon:

I sincerely appreciate the opportunity to submit written comment on the above referenced applications to the Rhode Island Coastal Resources Management Council (CRMC) and the Rhode Island Department of Environmental Management (DEM). **I believe that the above referenced applications, the publicly available Construction and Operations Plan (COP) together with its appendices, the information provided on the applicant's website, and the information provided on the BOEM website when reviewed as a whole are insufficient and incomplete. Therefore, I am requesting that your two agencies neither approve nor reject the applications at this time; but instead require that the applicant provide additional information for review by concerned members of the public as well as your two agencies. Furthermore, I am requesting that only after such information is made available, together with sufficient time for review, another period for written public comment should be required followed by an open meeting for oral testimony. Should such an open meeting for oral testimony be scheduled, I am requesting to be heard at that time. Should a continuance to provide additional information with subsequent public comment and testimony not be an option available to your two agencies, then these applications should be rejected.**

By way of background, I admittedly am not an expert in matters related to the technical details of wind-generated electrical power, the electrical grid more generally, or submarine power export cables. It is likely that many of the commenters on these applications are similarly not expert in these matters.

However, I am a resident of Narragansett, RI, living on and actively using the West Passage who will be directly and indirectly impacted by the proposal. I am also a person concerned with the long-term viability of the Narragansett Bay, Rhode Island Sound, and our other precious, irreplaceable natural resources. To be absolutely clear, I am not generally opposed to the use of federal and state lands and coastal waters for commercial purposes. In fact, I believe such commercial use of natural resources should be encouraged and implemented. However, doing so demands a robust plan that is fully transparent and that makes sense to the average citizen who, like me, may not be expert in the underlying engineering, construction, and operational technical details. In my opinion, one of the contributory factors to the debates and dissension surrounding private commercial use of public natural resources is an initial failure to reach such a common understanding among the applicant, the reviewing agencies, and the general public affected by the venture.

I am a physician-scientist who has performed basic and clinical research at several notable academic medical centers including Yale University School of Medicine, Brown University Medical School, and Weill Cornell Medicine. I have also been an Acting Branch Chief within the National Cancer Institute of the National Institutes of Health and have served on numerous research application and clinical trials review panels. I also have been and currently am an NIH-funded investigator. And, I also have previously served and currently serve on several Boards of Directors and Medical Advisory Boards for medical device and drug companies and have also participated in application reviews for investment banks and venture capital funds submitted by commercial entities in order to secure investment funding. Finally, I have acted in an advisory capacity during Food and Drug Agency (FDA) reviews of devices as submitted by commercial entities in order to achieve regulatory clearance or approval. Therefore, I believe that I do have expertise in the writing and review of proposals sufficient to understand whether or not such applications are complete and sensible; without regard as to whether or not such applications are directly within my field of knowledge and expertise. To follow are several specific supporting reasons that have led me to my conclusion and requested outcome.

1. First, there are multiple areas within the COP and its appendices that are woefully incomplete. For example, of the 46 appendices provided through the BOEM project website, 24 (over 52%) are marked as "CONFIDENTIAL" and there are no links to review the contents. And many of the appendices that are made available are boilerplate filings that contain little detail about the project and its impact on abutters and users of the Rhode Island Sound and the West Passage of Narragansett Bay. I understand the need for maintaining trade secrets and strategic planning as confidential in the course of business. However, when a commercial entity seeks to utilize public resources that are the property of the citizens of the country and the state, such confidentiality rights should no longer apply. Transparency should simply be a cost inherent in the use of resources within the public trust. Federal and state agencies are not the owners of these resources. Instead, they are the stewards and trustees on behalf of the public. For numerous reasons, it is important for the public to be fully informed; if for no other reasons that to create trust among participants and to provide a metric for future performance as compared with statements in the application. The appendices that are not available for review should be made available to enable public comment prior to consideration for approval.

2. Another example of lack of transparency is within section 2.2.1.2 Transmission and Interconnection Facility Location Alternatives and Table 2.2.1.1 on pages 44-49 of the COP. In this section, the applicant enumerates several alternative routes for siting the two submarine cables necessary to transmit the power generated by the off-shore wind farm to an onshore facility. The applicant does not provide any supporting data for the superficial and vague constraints associated with the enumerated alternatives. While impediments such as unfavorable geology, competing uses of the waterways, and already existing

cables are mentioned, there are no data as to what percentage of the alternative routes are thusly affected; what mitigation strategies might be used to overcome those impediments; and specifically, how those fully mitigated alternatives would compare to their chosen route. The enumerated alternatives are simply discarded out of hand.

Furthermore, the applicant provides no analysis of impediments to the use of the West Passage of Narragansett Bay. It is simply stated that this is the preferred route, seemingly without any impediments to its use as none are mentioned even in passing. Yet, within the CRMC-DEM Joint application, it is stated that about 10% of the proposed submarine route within State waters will require ancillary mechanisms for cable burial based on impediments to achieve that ideal submarine cable burial specifications. Surely, there must be some reason such ancillary measures are necessary. Furthermore, West Passage is one of the most heavily utilized recreational bodies of water within the entire state. There are also many commercial users of this body of water. The access right of the other users, commercial and recreational, is a mandatory consideration to be discussed and justified. There is no such discussion and justification. The application in this section is basically presented as a “trust me,” list of conclusions without any supporting data whatsoever. Resubmission should include a comparison among all alternatives with supporting data; not unsupported assertions without substantiation.

3. Furthermore, there are at least three potential alternative cable routes to mainland onshore transfer facility locations that are not mentioned at all. Two of the closest major land masses to the proposed wind farm are Martha’s Vineyard and Block Island. Publicly available written guidance advises employing the shortest submarine power export cable route possible mandates, at the very least, that these two sites be considered. Furthermore, the guidance states that whenever possible submarine power export cables should be run within an existing corridor to facilitate maintenance (see OSPAR Guidance for Best Environmental Practice (BEP) in Cable Laying and Operation; Agreement 2012-2; Source OSPAR 12/22/1, Annex 14; and Cable Spacing Guidance BOEM, 12/14). There are existing submarine power cables connecting each of Martha’s Vineyard and Block Island with the mainland. Additionally, a third potential route for the submarine export cables is related to the already approved South Fork Wind project with power export cables to be run between the wind farm and two landfall locations on the south fork of Long Island, NY.

First, I believe that Martha’s Vineyard already has four power cables between the mainland onshore transfer station and the island – albeit I believe that one of them is currently not functional and in need of replacement / repair. Why isn’t there consideration of submarine power export cables from the wind farm to the Vineyard (potentially supplying power to residents of the Vineyard) with subsequent routing to the mainland onshore facility currently in place, with or without enhancement of that mainland onshore facility? Perhaps as part of such an alternative, the one existing power cable in need of replacement / repair could be managed at the same time as running any additional submarine power cables necessary within a safe proximity to the existing four cables.

Second, Block Island already has a power export cable from an existing wind farm to an onshore transmission facility located on the island. There are already cable(s) between Block Island and the mainland. There is already a pending repair / revision of the power cable to the mainland as it departs from the island. Why isn’t there consideration of a submarine power export cables from the Revolution Wind wind farm to Block Island, potentially achieving landfall at the same location as the power export cable from the existing wind farm with subsequent routing to the mainland onshore facility currently in place, with or without enhancement of that mainland onshore facility? Perhaps as part of such an

alternative, the existing power cable in need of revision could be managed at the same time as running any additional submarine power cables necessary within a safe proximity to the existing cable.

Third, the already approved South Fork Wind project is geographically nearby to the proposed Revolution Wind wind farm site. There will be submarine export cables running from the South Fork Wind farm to the south fork of Long Island, NY. There are already submarine power cables between Long Island, NY and Connecticut that cross the Long Island Sound. The two submarine power export cables for the Revolution Wind project could be laid within the cable corridor for the South Fork Wind project and thence power could be transferred across Long Island Sound to Connecticut using existing cables. Admittedly, this third option employs a longer export cable route than either the Martha's Vineyard or Block Island alternatives; but it does co-locate the Revolution Wind export cables with those of the South Fork wind farm within a single construction and maintenance corridor.

As I stated at the outset, I am not an expert in the technical details related to power generation and submarine cables; but, I cannot understand why these three alternatives are not even mentioned in the COP or application; even if only to be discarded on the basis of data that must be provided in the documentation. I concede that these alternatives might not be viable; but the lack of consideration within the application should be remedied upon resubmission.

And there is no discussion at all of potential alternate submarine power export cable routes that might make landfall at some closer site that does not currently have a transfer facility in place. The applicant could construct such a facility after acquiring the necessary property and permits. Why isn't such a potential even considered? Presuming the application as submitted is truthful, the applicant is willing to consider alternative sites other than Quonset Point for the mainland transfer station. The resubmission should include an exhaustive consideration of mainland transfer station locations based on achieving the shortest possible submarine route to include new construction of a transfer facility as necessary.

4. Section 3.5.2 is woefully incomplete. The applicant is requesting a 500-meter-wide Right of Way (ROW) easement along the entire path of the submarine power export cables within Rhode Island Sound and West Passage. Note that West Passage at the location of Dutch Island is less than 1480 meters across shoreline to shoreline; hence, the requested ROW easement will encompass well over one-third of the navigable width. While the idealized routine maintenance frequencies are provided in Table 3.5.2-1, the applicant states that these are "only provided to support the analysis of the COP and are subject to change based on the final design specifications and manufacturer's requirements." There is no mention of the duration of each maintenance event at all. That is simply ridiculous. The applicant should perform the necessary planning to provide the actual, not some idealized, maintenance plan including frequency and duration of each maintenance activity as well as when such activities would occur (daylight, nighttime, seasonality, etc.). There should be specifications as to which of the stated maintenance activities will occur in conjunction with one another so as to minimize disruption to use of the Bay and to shoreline residents. Furthermore, there is no description of what uses of the Bay will be prohibited within the ROW easement and whether such prohibited uses of the Bay will be year-round or only during times when the applicant is performing maintenance. There should also be guarantees regarding noise levels and other intrusions related to such activities. And there should be guarantees related to avoiding interference with ongoing important uses of the Bay within and nearby to the requested ROW easement.

The applicant further states that "detailed information regarding the actual maintenance activities will be forthcoming and included in the FDR/FIR to be reviewed by the CVA and submitted to BOEM prior to

construction.” That is an inadequate proposal for review. Any such documents must also be submitted to the RIDEM and CRMC and provided for public comment as the maintenance plan involves Rhode Island rather than Federal waters. And furthermore, the actual plan should be provided prior to the applications’ public review and comment period and prior to any approval of these applications, not merely prior to the onset of construction as currently stated. It will be too late to accommodate valid objections when such final plans are eventually submitted. The time for submission, review, and comment is now.

5. Within the same section, the applicant states that additional Bathymetry surveys may be needed on an ad hoc basis after major storm events (page 117) and then states “(i.e., greater than 10-year event).” What data did the applicant use to define a “greater than 10-year event?” The frequency and severity of major storms is increasing at an accelerated pace (see 2010-2019: A landmark decade of billion-dollar weather and climate disasters; Adam Smith; 1/8/20, updated 10/3/2021; NOAA.climate.gov). Even when corrected for inflation, major events are now occurring more frequently. This is even more so true for somewhat lesser storms that cause significant damage along West Passage on a fairly routine basis. Did the applicant use contemporary and local data for storm frequency and severity that would necessitate survey of the submarine cable? Again, there is nothing in the application to allow the reviewer to know. Furthermore, there is no information provided regarding the response necessary should the survey (or some other data-source such as a power transmission outage) demonstrate that repair / maintenance is necessary. When would such ad hoc surveys and interventions occur? Would these occur emergently around the time of discovery; or would such interventions be scheduled along with the next routine maintenance? How would users of the Bay and shoreline residents be impacted by such interventions should they require emergent management? What rights would the applicant have to prohibit uses of the Bay within the ROW easement under such emergent conditions? And what rights would existing users have to enforce the least intrusive scheduling by the applicant? Again, none of this is even discussed within the application or COP. The cited Table merely states “as needed.” Grossly inadequate.

6. The applicant further states within this section of the COP that non-routine maintenance activities would require application for and approval of such interventions. But, in reality, the review and approval agencies will be subject to “sunk cost bias” during such reviews. The likely outcome would be either approvals or modifications to the applications for proposed non-routine interventions. In my opinion, it will be highly unlikely that the reviewing agencies would reject such applications and instead request that the applicant cease and desist from all wind farm-related activities and remove the entire installation. Once this wind farm with its proposed cable route are approved, there will be no turning back. So, in my opinion, it is critically important to have all the facts for review prior to initial approval. I request that the applicant be required to provide boundary simulations (best-case and worst-case scenarios) for surveys, remediation interventions, etc. regarding frequency, duration, impact on use of the Bay, noise levels, and workplans (including seasonality, time of day, impact on the Bay itself, etc.). There should be clear definition of a process that guarantees input from all users of the Bay and Rhode Island Sound during such application reviews. And this must be provided for public review and comment prior to consideration of the application; not at some future date unspecified. The idealized proposed plan that does not include a full and complete description of ad hoc, non-routine activities is inadequate as provided – even the applicant basically states that the maintenance proposal is a placeholder for a more definitive plan to be provided prior to the start of construction.

7. As mentioned earlier in my comments, I would like to briefly discuss the proposed distribution of the electrical energy from the Revolution Wind installation as described in the application, the COP, and on

the applicant's website. Note that the location of the lease is nearby to the Rhode Island-Massachusetts border; not at all close to the intended distribution geography that includes not only Rhode Island, but Connecticut. While the location of the lease relative to the customer distribution geography may not be part of the evaluation of this application, it does impact the cable routing presuming that a mainland onshore transfer facility should be nearby to the intended distribution geography. I'm not suggesting that the applicant should attempt a lease area (on land or offshore) closer to the Rhode Island-Connecticut border, although that is certainly something that the applicant might consider if it has not already. But, I am suggesting that a customer distribution plan that is not consistent with the lease location and therefore leads to a longer than required submarine power cable route is a problem of the applicant's own making. And there is no reason that the residents of Rhode Island should incur any risk, no matter how minimal, based on the business plan of the applicant.

Previously referenced guidance for submarine power cable routes states clearly that the shortest possible route should be employed, taking into consideration natural and manmade impediments (geology, crossing cables, etc.). There is no mention in the guidance that a longer than required route should be employed simply because the site of generation is geographically separated from mainland transfer facility location based on the preference of the applicant. This latter completely inappropriate cause for a lengthy submarine power cable route could simply be addressed by either providing electrical service to a geographically closer customer base, or by siting the wind farm (whether on land or offshore) closer to the intended distribution geography. And, as the applicant previously considered alternative sites for landfall of the submarine power cables (again presuming that the application is truthful), additional alternative sites for the mainland transfer facility that minimize the length of the submarine power cable route should be explored and chosen rather than the Quonset Point location that mandates a longer than necessary route through the heavily utilized waters of the West Passage.

In fact, as stated earlier, all of the cable route alternatives proposed are predicated on the use of an existing mainland onshore transfer facility, with or without revision of that facility. There is not even mention of constructing a new facility that might result in a shorter cable run that does not impinge on a heavily utilized body of water. While I understand the applicant's desire to minimize project costs; there is no price that should be placed on the potential harm, no matter how unlikely, that could come to our Bay. Hence, I strongly request that the applicant be asked to reconsider the siting of the mainland onshore transfer facility, even if that should require acquisition of land and new construction, so as to shorten the submarine power cable run and to relocate it to a more favorable body of water.

9. The CRMC and the applicant have already agreed to a continuance for application file number 2021-06-029 for federal consistency certification until December 21, 2022. The continuance is to allow the provision of additional information to enable a comprehensive review of the proposal by the agency. The period of public written comment and potentially for an open hearing at which testimony may be provided for these two applications also should be delayed until a later date when the additional information requested by CRMC is also made available to the public. In addition, the information requested by this commenter and others could also be provided during that continuance. It is premature to close the period for public comment prior to the availability of full and complete applications with supporting materials.

An additional issue that should be addressed transparently by the CRMC, DEM, and BOEM prior to the review and potential approval of this application relates to the more general matter of the offshore energy leases, including this lease among several others, that occupy 907,728 acres within Rhode Island Sound and the neighboring waters (about 54% of all the continental shelf offshore energy leases for the

entire United States (see Outer Continental Shelf Renewable Energy Leases Map Book, March 2019, BOEM). Is there a cohesive plan for the submarine export cable routes for all of these approved and yet to be approved wind farms? How many of these export cables will be routed using this same proposed corridor through the West Passage of Narragansett Bay to Quonset Point? If there are more than the two being requested by this applicant anticipated in the future, the frequency and duration of construction and maintenance activities in total must be considered with regard to impact on other uses of Rhode Island Sound and West Passage. If there will be no additional power export cables using this corridor, that should be clearly stated by the agencies. Furthermore, if there are other anticipated submarine export cable routes for these other wind farms (such as the Vineyard Sound proposal using Covell's Beach in Barnstable, MA), then these other routes should be considered by the Revolution Wind application for co-location of its submarine power export cables. As noted previously, over one-third of the width of West Passage is requested as a ROW easement by the applicant. The other options I previously proposed for consideration and numerous others would have less impact on competing uses as they are less constrained by the local geography. And, if there is no cohesive plan for the submarine power export cable routes for all of the approved and anticipated wind farms in the lease areas, then there should be a moratorium on all applications until such time that a comprehensive and holistic implementation plan for the entire designated lease areas is made available for public review and comment. It is completely inappropriate for natural resources within the public trust to be "managed" without an overarching plan that has been thoroughly vetted, not only by relevant agencies and jurisdictions, but also by the public who are the "beneficial owners." I am a strong believer in the use of natural resources held in the public trust for private commercial purposes. However, such use demands a holistic management plan that has consensus buy-in from all stakeholders. If there is such a plan, the applicant should provide reference to it to ensure compliance.

Finally, it is curious to note that less than two decades ago, then Connecticut Attorney General Blumenthal vigorously opposed the Cross-Sound Cable Company's proposal to place a 24-mile submarine cable between New Haven, CT and Long Island based on its negative environmental impact, the risk of damage to the cable (as a recent cross-sound submarine cable had been damaged by a ship's anchor during a storm), and the need to consider all of the commercial and recreational users of the Sound adjacent to Connecticut. Attorney General Blumenthal's opposition extended to include potential legal action against the Federal government. A Connecticut legislator even required investigation into the Federal review and approval process based on suspicion of improprieties. However, today Senator Blumenthal is fully in favor of this project that will use American made equipment for placement of the submarine power cable, will create jobs, will bring funds to improve the New London port, and will provide Green energy to his constituents. Well of course he would be supportive! Rhode Island and Rhode Islanders are assuming 100% of the environmental risk and inconvenience associated with this project and the impact of the ongoing surveys and maintenance of the submarine power cables. Yet, Connecticut and her citizens, without any risk at all, will enjoy nearly 50% of the energy produced and 66% of the funds invested in infrastructure improvements (\$77.5M for New London port improvements as compared with \$40M for Quonset Point and Port of Providence improvements according to the applicant's website). There is no amount of funding that should justify risk beyond the minimum amount acceptable. However, in this case, the proposal is clearly disproportionate.

This commenter believes that the documents provided for review do NOT justify the proposed submarine power export cable route. There are insufficient data provided to enable a full and complete review at this time. Unless and until it is demonstrated by actual data that the proposed cable route is completely unavoidable and that there are no other viable alternatives, the application should not be

approved. And lack of viable alternatives should not be based on the applicant's unwillingness or inability to cover the costs of such alternatives. Furthermore, there are insufficient descriptions of the ongoing maintenance activities and there are no supporting data regarding ad hoc emergency maintenance activities. It is mandatory that the abutters and other users of West Passage are able to review and comment on the actual detailed plan for routine and ad hoc use of the ROW easement prior to consideration of approval.

As stated at the outset, I am generally in favor of the use of natural resources within the public trust for commercial purposes. That is why I am requesting a continuance to allow the applicant to provide the data and documentation lacking in their current COP and application. Furthermore, the applicant should be directed to expand the search for viable alternatives to the proposed submarine power export cable route prior to submitting a revised application. Finally, the promissory portions of the COP and application must be completed and reviewed prior to consideration for approval. However, if the CRMC and the DEM do not have the option to enforce a continuance with resubmission, a new public comment period, and an open hearing for oral testimony, then with regret I strongly request that this application should be denied.

I am certain that a reviewer more expert and knowledgeable than I might find additional issues that demand revision prior to review. However, those issues that I have noted are sufficient to require the applicant's response and a new public comment / testimony period. I am more than willing to discuss any of the points that I have raised with either or both CRMC and DEM. I would appreciate a response to the issues I have raised. And again, I most sincerely appreciate the opportunity to submit written comments on the application. Additionally, should there be a public hearing, I request to be able to provide oral testimony.

Sincerely,

Gary S. Dorfman

cc: Lisa Turner, CRMC (by email only)