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Kathryn Cox-Arslan
Director, Transmission Commercial
National Grid

April 8, 2016

Nancy O. Dodge
Town Manager
Town of New Shoreham
PO Box 220
Block Island, RI 02807

Dear Ms. Dodge:

This letter follows the National Grid meeting on March 30, 2015 regarding the construction schedule for the sea2shore project. Due to many factors, detailed below, National Grid requires a work extension on Crescent Beach from May 15 through June 30, 2016. National Grid has undertaken a number of efforts, such as engineering, permitting, equipment changes and construction sequencing to improve our schedule and avoid such an extension, but horizontal directional drilling (HDD) construction delays at Scarborough State Beach in Narragansett require this expanded timeframe on Block Island for vital project milestone completion. We wish to petition formal approval by the New Shoreham Town Council no later than the scheduled Wednesday, April 20, 2016 meeting.

Background

National Grid and its contractors have been working diligently to advance the sea2shore project. As you are aware, we will install the cable from Narragansett to Crescent Beach and Deepwater Wind will install the cable from Crescent Beach to the Block Island Wind Farm (BIWF). In terms of current status, the HDD work at Crescent Beach for both cables is complete and the drill rig has been removed from the Island. We are on target for an April installation of the two transition manholes. The most critical step in the sea2shore project interconnectivity is to complete the HDD and related work at Scarborough State Beach in Narragansett. This work started in January 2016 per permit allowances and must be completed before we can begin the submarine cable installation from Narragansett to Block Island.

Our geotechnical surveying, conducted in advance of the Scarborough HDD work, found extensive areas of high compressive strength granite bedrock in the HDD alignment. Knowing this would be a serious challenge to our schedule, we obtained state agency permit modifications to shorten the drill distance by 750' and altered some of the equipment. We completed the pilot hole on February 28, but the geographic

composition combined with continual equipment failures and unfavorable weather conditions challenge completing the reaming process as originally planned to allow for an April/May submarine cable lay; we are currently 40 percent complete with reaming.

Regardless of the engineering and construction changes and the progress made to date, construction activities will push us beyond the May 15 easement date on Crescent Beach and requires an extension until the end of June.

Benefits of the Extension

The benefits to extending this construction window are that:

- it ensures we can appropriately and safely complete the installation of the cable from Narragansett to Crescent Beach without additional disturbances further into the summer season;
- we can fully restore before the peak beach season begins and can maintain beach access during the extended window; and,
- it allows us to implement and complete the project construction within the 2016 calendar year. If we cannot extend the window, we will likely be forced to defer laying the submarine cable from Narragansett to Block Island for an entire year. This, in turn, extends the construction impacts to the community and translates into delays for New Shoreham residents and businesses in receiving reduced cost, clean electricity and high-speed cable/internet fiber access.

Schedule

Below is the proposed schedule of project marine and beach –related construction activities from April through the requested construction extension on Block Island. These dates reflect the most conservative schedule. We are committed to working with the contractors to find ways to improve and advance these dates for earlier completion, but all activities are subject to unpredictable weather factors. The schedule, past the current May 15 easement, does not include work on Memorial Day weekend (Thursday, May 26 through Tuesday, May 30) or weekends in June. Much of the month of May will be minimal to no work at Crescent Beach due to the shift in the cable laying process and any equipment not in use will be removed to an offsite location. An identified and tentative temporary storage site is the BIPCo facility on Block Island; formal agreement/arrangement still to be finalized.

Activity	Location	Scheduled Start	Scheduled Finish
HDD	Scarborough Beach	January 2016 (actual start)	May 24, 2016
Submarine Cable Manhole Installation	Crescent Beach north parking lot	April 1, 2016	April 20, 2016
BIWF Export Cable Laying*	Offshore and Crescent Beach	April 21, 2016	May 2, 2016
BIWF Interarray Cable Laying*	Offshore (at BIWF)	May 5, 2016	May 22, 2016
BIWF Cofferdam Removal*	Crescent Beach	May 3, 2016	May 7, 2016
sea2shore Submarine Cable Laying	Narragansett to Crescent Beach	May 28, 2016 Starting at Narragansett	June 18, 2016 Arriving at Block Island
sea2shore Cofferdam Removal	Crescent Beach	June 19, 2016	June 23, 2016
sea2shore Submarine Cable Splicing and Grouting	Crescent Beach parking lot	June 19, 2016	June 24, 2016
Beach and Parking lot Restoration	Crescent Beach	June 19, 2016	June 25, 2016

*Items denote Deepwater Wind work. National Grid is not responsible for this, but it is included to give a full picture of current and upcoming work activities.

Extension Work Description

During the proposed extension period, there will be two weeks of intense work that will impact near or on Crescent Beach. Below is a detailed description of that work. An appendix is provided with a generic step-by-step submarine cable laying process with pictures, as well as a schematic showing submarine cable installation.

sea2shore Cable Landing at Crescent Beach

Schedule	Approx. June 15, 2016
Ocean Activity	The submarine cable laying barge, the “Big Max” (exemplary picture of vessel, Figure 1), a 250’ x 75’ deck barge outfitted with submarine cable storage and installation equipment, will arrive at Crescent Beach approximately 2500’ offshore and deploy a 4-point moor anchor pattern in alignment with the sea2shore cofferdam.
Ocean and Beach Activity	Once the vessel is in position, a pull-line will be taken from a winch truck parking in the Crescent Beach north parking lot (example vehicle, Figure 2) out to the vessel. The submarine cable will be pulled by the winch truck from the vessel and “floated” via a set of cable floats into the beach, thru the Cofferdam and into the manhole in the parking lot. Once the cable end is secured at the manhole in the parking lot, a smaller barge (50’ x 30’) (floating vessel example, Figure 3) with the cable burial jet plow will be positioned approximately 200’ off the beach and the cable burial jet plow will be deployed to bury the cable into the cofferdam. Once the cable is secure in the north parking lot manhole, the cable lay vessel will depart its position off Crescent Beach and transit to the Wind Farm area to begin inter-turbine cable lay operations (Deepwater Wind responsibility).

Figure 1. Exemplary Submarine Cable Installation Vessel

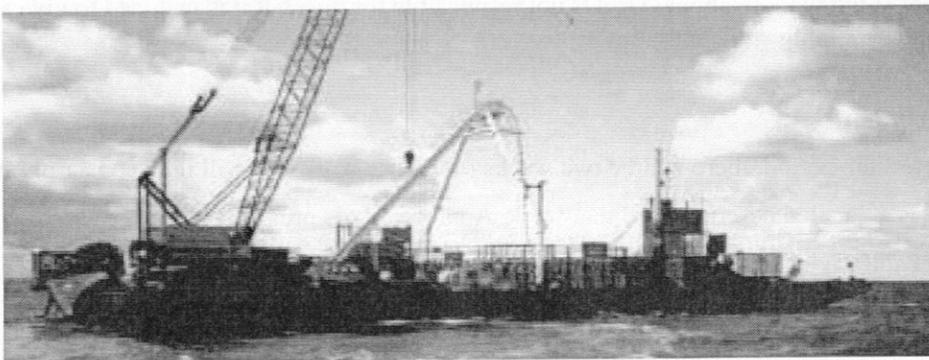
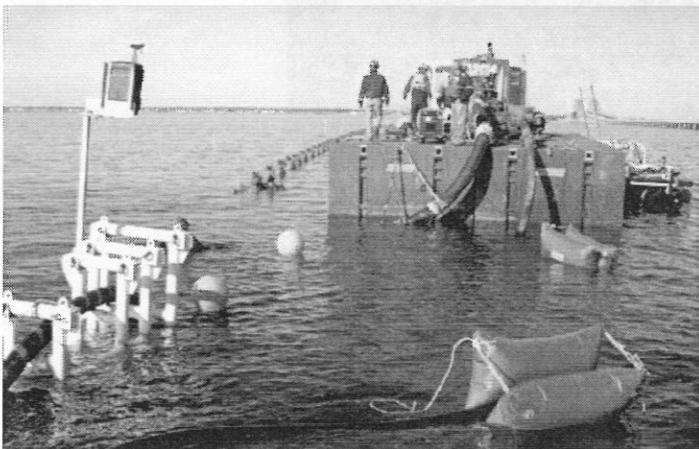


Figure 2. Example Winch Truck to be located in the north parking lot



Figure 3. Example Float Vessel



sea2shore Cofferdam Removal

Schedule	June 19 – June 23, 2016
Beach Activity	<p>Once cable to the manhole is complete, the cofferdam on Crescent beach (cofferdam picture, Figure 4) will be removed. The sheet piles will be removed with a mobile crane with vibratory hammer, excavator and loader (operation example, Figure 5). All of this equipment will be on the beach for removal activities. The removed cofferdam sheet piles will be loaded onto a trailer for removal off the island.</p> <p>Any equipment not in use during active construction will be stored offsite. An identified and tentative temporary storage site is the BIPCo facility on</p>

	Block Island; formal agreement/arrangement still to be finalized. Should any construction equipment not be required to complete activities during the extension, arrangements for complete removal from the Island will be explored.
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Figure 4. Cofferdam on Crescent Beach



Figure 5. Typical Cofferdam Removal Operation with Crane and Vibratory Hammer



sea2shore Submarine Cable Splicing and Grouting

Schedule	June 19 – June 24, 2016
Beach Parking Lot Activity	With both submarine cables laid into their respective manholes, the transition splices to the previously installed underground land cables will be completed. Just prior to the splicing operation, an electrical test will be conducted on the sea2shore submarine cable. The test will take approximately three hours to

	<p>complete, and during this period full safety precautions will be enforced with no access to the north parking lot.</p> <p>A grout mixture will also be injected into the HDD conduit. These operations will require a splicing truck in the north parking lot and most likely a splicing tent placed over the manhole to protect the splicing operations from the elements.</p> <p>A splicing crew of 2 technicians and 2 laborers will conduct the operations which should be completed in approximately 5 days.</p>
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Crescent Beach Restoration

Schedule	June 19 – June 25, 2016
Beach Activity	The stockpile of relocated sand excavated from the cofferdam site will be used to restore the cofferdam area and any low areas, depressions or excessive slopes to the original grades recorded during the mobilization survey. An excavator, loader and bulldozer will be utilized for this work. Note: the first effort of restoration will occur when the BIWF cofferdam is removed in early May.
Parking Lot Activity	All equipment, fencing and safety barriers will be removed. Both the north and south parking lots will be resurfaced.

Outreach and Possible Mitigation Strategies

National Grid is committed to educating and informing all residents, businesses and tourists of the construction activities, particularly during this extension timeframe. We are aware of the post-Memorial Day increase in activity on Block Island, and will work with the Town and stakeholders to ensure construction is of minimal to no disruption. The following details, but doesn't limit, both outreach and possible mitigation strategies during the extension timeframe. The mitigation strategies presented are for discussion and do not represent a final plan of execution. We commit to working with the Town to find the right balance of mitigation activities during the extension.

Outreach Activities:

- Weekly meetings with key town officials to provide updates on construction progress and activities.
- Weekly emailed construction updates – residents, businesses and tourists can sign up to receive.
- Regular project and town website updates.

- Construction notifications mailed to residents and businesses.
- Briefings with the Block Island Times.
- Advertisements with the Block Island Times.
- Briefing(s) with and information through the Block Island Chamber of Commerce and the Block Island Tourism Council.
- Static displays/informational placards at the worksite and in the beach pavilion that describe the construction work.
- Brochure or information materials for the Block Island Ferry and related transport ferries to Block Island, as well as the local hotels.
- Notifications and information session for the fisheries community.
- Notifications and coordination with the 2016 Block Island Race Week organizers, and any other key events during the May and June extension timeframe.
- Our existing project hotline, email address and website are available to share, collect and respond to information.

Possible Mitigation Strategies:

- Remove all equipment from beach area not required for immediate construction.
- Maintain Crescent Beach and pavilion access during the extension period.
- Provide 24/7 security and lighting around the sea2shore cofferdam on Crescent Beach and the northern parking lot to ensure continued public safety.
- Erect additional fencing around the parking lot and cofferdam.
- Wrap all fencing with visual displays of iconic Block Island images and include the project website and contact information.
- Offer shuttle services, contracted through a local taxi provider, to weekend Crescent beachgoers in lieu of parking options.
- Execute any traffic management options near Crescent Beach – this is not anticipated but will be planned for in the event it is needed.
- Execute night and weekend night work to advance the schedule. The noise from construction would be from equipment generators and likely would not exceed the ambient noise levels. Therefore, there would not be disruption to residents or visitors and may be a good option to minimize daytime beach interference.

We look forward to formally petitioning the New Shoreham Town Council this month for this request and welcome feedback and questions in the meantime. We are committed to working with the town and all key stakeholders to ensure this extended construction timeframe is of minimal to no impact on the residents, businesses and tourists of Block Island. Our project management teams and leadership remains engaged and focused on the successful completion of this project. Please do not hesitate to contact me if you would like to discuss further.

Thank you,



Kathryn Cox-Arslan
Director, Transmission Commercial Services

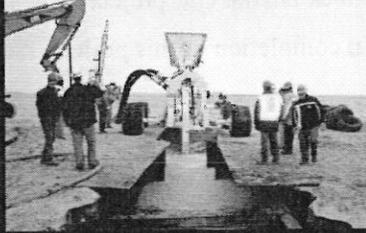
CC:

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Daniel Glenning	Director, Project Management	National Grid
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Submarine Cable Installation Process



Creation of temporary cofferdam (sheet pile supported excavation) to bring submarine cable ashore.



Submarine cable is fed through the plow, which will enter the water and travel along the seabed until making landfall on the opposite side of the water crossing.



As the plow travels along the seabed, it liquefies the soil ahead of the plow using water jets on the plow blade. The cable passes through the hollow plow blade and is buried approximately 6 feet below the seabed. The temporarily liquefied area almost immediately fills back in as the sediment naturally resettles.



The cable is fed through the plow from a vessel similar to the one pictured above.



Once the submarine cable is laid, it is then connected to an underground cable inside a manhole near the shore.

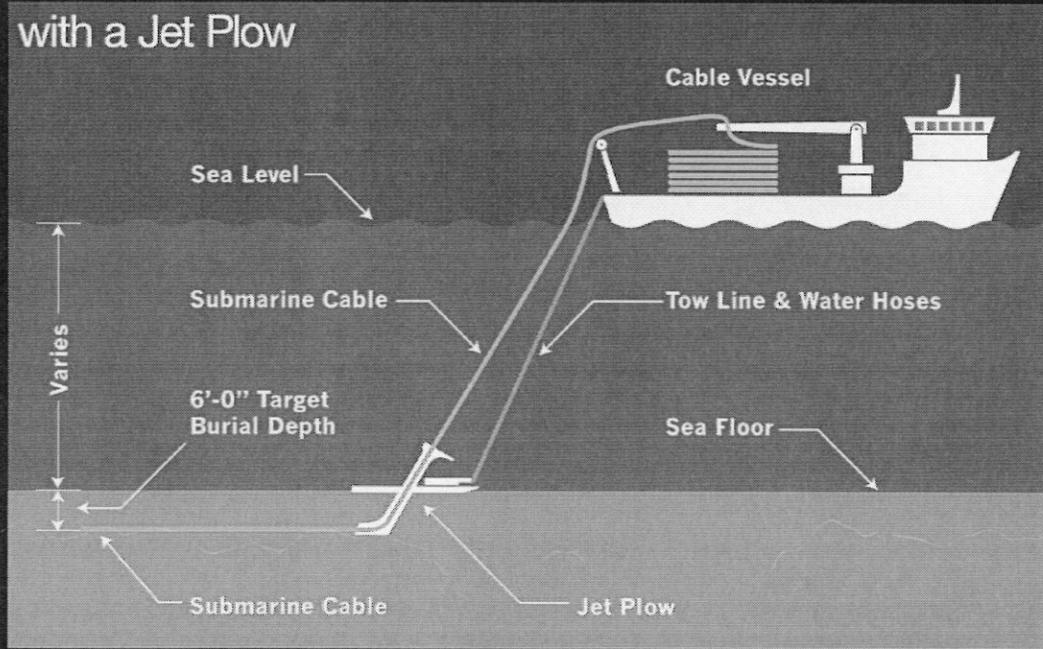


When the installation process is complete, the beach is restored back to its natural state with the new cable installed approximately 10 feet below the beach surface.

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Installing Submarine Cable

with a Jet Flow



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This image is for illustrative purposes only and does not represent exact details.

