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CAPE COD
COMMISSION

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**CAPE COD COMMISSION
DEVELOPMENT OF REGIONAL IMPACT (DRI) DECISION**

Date:	August 17, 2023
Project:	Cable 91 Replacement Project (CCC File No. 22025)
Project Applicant:	NSTAR Electric Company d/b/a Eversource Energy 247 Station Drive Westwood, MA 02090
Property Owner:	Town of Falmouth
Project Location:	395 Mill Road, Falmouth, MA 02540 Assessors ID 47 02 017 002A
Title Reference:	Certificate of Title No. 204025
Subcommittee:	Committee on Planning and Regulation

SUMMARY

Pursuant to a vote of the Commission at its meeting on August 17, 2023, the Cape Cod Commission ("Commission") hereby grants Development of Regional Impact ("DRI") approval, with Conditions, for the "Cable 91 Replacement Project," to replace an existing direct lay, submarine electricity distribution cable, from Falmouth to Tisbury, with a buried distribution cable for the purpose of updating aging grid-based infrastructure to reliably meet current electricity demands.

FINDINGS

The Cape Cod Commission hereby finds and determines as follows:

- F1. Components of the project located within Barnstable County include: a 4.44-mile +/- submarine cable, 2.62 miles +/- of which is to be in Barnstable County. At the Falmouth landfall site, the submarine cable will terminate in a new transition manhole to be installed in the gravel parking lot on Mill Road. An approximately 190-foot underground duct extension from the transition manhole will connect to a new duct

and manhole system in Mill Road (reviewed as a portion of the Martha's Vineyard Reliability Project.

- F2. A combination of Horizontal Directional Drill ("HDD") and hydroplow will be used to install the offshore cable, with the hydroplow construction technique used for the majority of the offshore route length.
- F3. Horizontal Directional Drill ("HDD") will be used at the landing sites to avoid impact to intertidal resources. The offshore cables will connect to the onshore cables at the landfall site.
- F4. The onshore cable portion of the Project will be contained within buried concrete duct bank.
- F5. Currently, grid-based electricity is delivered to Martha's Vineyard by four submarine cables. If a cable failure occurs during summer peak conditions, the Applicant must rent portable 2MW diesel units to augment the existing generation until the failed cable is repaired.
- F6. The Project is proposed to replace Cable 91, one of the submarine cables that currently delivers grid-based electricity to Martha's Vineyard. The existing Cable 91 has experienced eight faults since it was installed in 1986, with the most recent fault occurring in July 2021. The cable fault in July 2021 required multiple portable diesel generators to support the distribution system until the 91 Cable fault was repaired.
- F7. Due to the existing Cable 91 being a direct lay cable on the seafloor, it has been vulnerable to shifting with the currents and exposed to sediment abrasion which weakens the protective layers. Thus, this cable is expected to continue to fault in the future if not replaced.
- F8. As an electric company regulated by the Department of Public Utilities, Eversource Energy ("Applicant") has a responsibility to provide and maintain reliable electrical service throughout its service area. The Applicant proposes the Project to uphold its responsibility to meet the current and future electrical demand to maintain the reliability of the grid-based electrical service and to support the transition to a more electric-centric energy supply.

DRI Jurisdiction

- F9. The Project requires mandatory DRI review pursuant to Section 2(d)(i) of the Commission's Chapter A: Enabling Regulations Governing Review of Developments of Regional Impact ("Enabling Regulations"), revised November 2021, because the Project required the preparation of an Environmental Impact Report ("EIR") pursuant to the Massachusetts Environmental Policy Act, M.G.L. c. 30, §§ 61-62I ("MEPA").

Procedural History

- F10. The Project triggered review under MEPA because it would result in alteration of ½ or more acres of any other wetlands (Land Under Ocean ["LUO"]) and proposes dredging of 10,000 or more cubic yards of material. The Project required preparation of an EIR pursuant to 301 CMR 11.06(7)(b) because it is located within a Designated Geographic Area around an EJ population.
- F11. The Project received its certificate on its Single Environmental Impact Report ("SEIR") stating that the project properly and fully complies with MEPA on May 17, 2023.
- F12. A staff hearing officer opened the DRI hearing period procedurally on June 30, 2023. The Applicant submitted a DRI application for the Project to the Commission on May 30, 2023.
- F13. A substantive public hearing on the Project was opened by the Committee on Planning and Regulation on July 20, 2023.
- F14. The full Cape Cod Commission held a hearing on the Project at its meeting on August 17, 2023. It considered the recommendation of the Committee on Planning and Regulation, including the draft written DRI decision. At the hearing on August 17, 2023 the Commission voted to adopt the draft written DRI decision, and approve the Project, with the Conditions set out in said decision.

DRI Review Standards

- F15. Section 7(c)(viii) of the Commission's Enabling Regulations contains the standards to be met for DRI approval, which include, as applicable, consistency with the Cape Cod Regional Policy Plan ("RPP"), municipal development bylaws, District of Critical Planning Concern ("DCPC") implementing regulations and Commission-certified Local Comprehensive Plans ("LCP"). The Commission must also find that the probable benefit from the Project is greater than its probable detriment.
- F16. DRI review of the Project is subject to the 2018 Regional Policy Plan ("RPP"), as amended in March 2021, which is the version of the RPP in effect at the time of the Commission's first substantive public hearing on the Project. The Commission determines the Project's consistency with the Act and RPP by determining whether the Project is consistent with the Goals and Objectives in Section 6 of the 2018 RPP, as particular goals and objectives are deemed applicable and material to the Project.

Cape Cod Regional Policy Plan

Applicable and Material RPP Goals

- F17. The following RPP Goals are applicable, material, and regionally significant and are thus subject to RPP consistency review: Ocean Resources, Wetlands Resources, Capital Facilities and Infrastructure, and Energy.

Ocean Resources

- F18. The Ocean Resources Goal is to *protect, preserve, or restore the quality and natural values and functions of ocean resources*. The following Objectives are applicable and material to the Project:
- **OR1** – locate development away from sensitive resource areas and habitats;
 - **OR2** – preserve and protect ocean habitat and the species it supports; and
 - **OR3** – protect significant human use area and vistas.
- F19. All development projects in the Ocean must meet Ocean Resources Objectives OR1, OR2, and OR3. These Objectives and associated methods prioritize the protection of the ocean-based resources and uses that are present in the Project area. The cable installation is proposed in the following ocean resource areas: Priority Habitats for State-Protected Rare Species (PH 2158); Estimated Habitats for Rare Wildlife (EH 1366); hard/complex seafloor; and eelgrass.
- F20. Although the Project is proposed in ocean resource areas, the Applicant has made adjustments that serve to avoid or mitigate impacts to ocean resources.
- F21. The offshore cables are not located within designated prohibited areas for ocean species or exclusionary areas as identified in the Ocean Management Plan.
- F22. The offshore portion of the Project does extend through area mapped as core habitat for Least Tern, Common Tern, and Roseate Tern, which is also a federally listed species.
- F23. The Applicant submitted a Joint Wetlands Protection Act (“WPA”) and Massachusetts Endangered Species Act (“MESA”) Notice of Intent to Natural Heritage and Endangered Species Program (“NHESP”). Comments from NHESP indicate the state listed species present in the area are shore birds. Work over open water will not disturb nesting, and the limited size of the work area as compared to the expanse of feeding habitat is de minimus. Work at the landfall site in Falmouth, proximate to beach and dune, will observe TOY restrictions to avoid nesting time of year.
- F24. NHESP has determined that the project will not result in an adverse impact to the resource area habitats of state-listed wildlife species pursuant to the WPA and will not result in a prohibited Take pursuant to the MESA provided certain conditions, including the TOY restrictions, are followed. NHESP's conditions have been included in the Order of Conditions from the Falmouth Conservation Commission dated June 16, 2023.
- F25. To the extent the Wildlife and Plant Habitat Objective, WPH3 (to protect and preserve rare species habitat, vernal pools, 350-foot buffers to vernal pools) of the Wildlife and Plant Habitat Goal is applicable, material, and regionally significant, the NHESP comments and measures to avoid impacts to rare species also satisfy the method to meet Objective WPH3.

- F26. Although benthic habitat in the direct path of the hydroplow will be disturbed during cable installation, recolonization and recovery of these habitats is expected based on results from similar projects in the region and given the similarity of nearby habitat and species. In addition, micro-siting implemented during the pre-pass phase of construction will be used to attempt to avoid impassable complex substrates, such as those containing large boulders or dense gravel pavement.
- F27. HDD at the landfall site will avoid work on the beach or dune and is also proposed to avoid eelgrass off the Falmouth coastline.
- F28. The Applicant will mitigate construction noise by: ensuring that appropriate mufflers are installed and maintained on construction equipment; minimizing idling times; and using shielding or buffering distance to the extent practical. With these mitigation measures in place, noise from vessel traffic associated with the Project is likely to be similar to background vessel traffic noise.
- F29. The Project furthers substantial public purposes, consistent with Objective OR2. The main public benefit of the Project is an increase in the reliability of electrical service in the Applicant's service area.
- F30. The Project route, construction techniques, and the temporary nature of installation will minimize potential impacts to ocean habitat and species while still furthering a substantial public purpose.
- F31. The Project route was chosen because it has the lowest overall impacts to seafloor as compared to alternatives and because it is the shortest and most direct route between the landfall locations.
- F32. The Project construction window will be coordinated to minimize impacts to high-use activity areas. While construction and installation activities may temporarily affect navigation and/or fishing activities in the vicinity of cable installation vessels, these impacts are expected to be limited. Restrictions and construction windows will be determined in coordination with the U.S. Coast Guard.
- F33. Based on the Cumulative Impact Assessment for the Project, the incremental addition of this Project will not unduly degrade ocean resources or conflict with human uses.
- F34. A marine archeological resources assessment was conducted within Vineyard Sound and was submitted to the Massachusetts Historical Commission and Massachusetts Board of Underwater Archaeological Resources. No effects to known marine archaeological resources are anticipated.
- F35. The Applicant's route, design, and construction choices will serve to minimize impacts to ocean resources. Through offshore cable route selection, cable installation methods, TOY restrictions, and the use of HDD for the offshore-onshore transition, the Project locates development away from sensitive ocean resource

areas and habitats and preserves and protects ocean habitat and the species it supports, consistent with OR1 and OR2. The temporary nature of offshore export cable installation impacts serves to protect offshore human use areas, consistent with OR3.

Wetlands Resources

- F36. The Wetlands Resources Goal of the RPP is to *protect, preserve, or restore the quality and natural values and functions of inland and coastal wetlands and their buffers*. The following Objective is applicable and material to the Project:
- **WET1** – protect wetlands and their buffers from vegetation and grade changes.
- F37. The RPP allows for utility installation in wetlands and their buffers where the Applicant can show that there is a public benefit, there is no feasible alternative to alteration, and the impacts from the alteration are minimized and mitigated.
- F38. Work in the buffer zones to coastal beach and coastal dune will not affect vegetation or grades.
- F39. The Project is the water-dependent installation of utility lines, there will be no permanent impacts to wetland resource areas within the land-based portion of the Project, and temporary impacts within the limited wetland resource areas described above will be minimized with construction Best Management Practices and restored to existing conditions after construction.
- F40. The Project will facilitate several public benefits including improved electricity reliability and reduced emissions as the cable will replace the need for diesel generators on Martha's Vineyard. As a water-dependent project providing a connection between Falmouth and Martha's Vineyard, there is no feasible alternative to the cable location within Land Under the Ocean and the affected areas of Coastal Dune and Land Subject to Coastal Storm Flowage.

Capital Facilities & Infrastructure

- F41. The Capital Facilities & Infrastructure Goal of the RPP is to guide the development of capital facilities and infrastructure necessary to meet the region's needs while protecting regional resources. The following Objectives are applicable and material to the Project:
- **CAP1**—ensure capital facilities and infrastructure promote long-term sustainability and resiliency; and
 - **CAP2**—coordinate the siting of capital facilities and infrastructure to enhance the efficient provision of services and facilities that respond to the needs of the region.
- F42. The Project ensures long term sustainability as it locates infrastructure underground where it will not be subject to wind, ice, tree falls or other above ground hazards.

- F43. While portions of the project must inherently be located in flood prone areas, cables and splices are designed to be sealed from water intrusion. When properly installed according to industry standards, underground cable systems are not affected by flooding and weather events. Directional drilling will avoid any impacts to the natural beneficial functions of coastal resources.
- F44. For the offshore portion of the Project, the Project will replace a direct lay cable with a buried cable, making it more resilient and less prone to faults.
- F45. Consistent with Objective CAP2, the Project siting and construction is coordinated with other cable installations. The Project does not impact any existing land uses and utilizes infrastructure from the Martha's Vineyard Reliability Project (CCC File No. 22009) to connect the proposed cable to the substation in Falmouth. This reuse of existing developed land eliminates the need to further impact natural areas and any impacts to visual resources.

Energy

- F46. The Energy Goal of the of the RPP is to *provide an adequate, reliable, and diverse supply of energy to serve the communities and economies of Cape Cod*. The following Objective is applicable and material to the Project:
 - o **EN2**—increase resiliency of energy generation and delivery
- F47. The Project will further the reliability of the electric supply and increase the resiliency of existing infrastructure such that it will contribute to the Applicant's ability to meet current and future electricity needs.
- F48. The Project will serve as a replacement for the Applicant's "Cable 91" which was installed in 1986 by laying the cable directly on the ocean floor. The existing cable, which has experienced eight faults, is not a reliable source of electricity.
- F49. Currently, diesel generators are used when electricity supply cannot keep up with demand, or when there is a fault. Replacement is needed to reliably supply the peak demand for electricity during the summer months and to avoid the use of diesel generators.
- F50. By supporting redundant electricity distribution and transmission infrastructure the Project is proposed to improve the reliability of grid-based electricity, meet existing and projected load growth, and allow for better integration of distributed renewable power.

Other DRI Standards of Review

Consistency with applicable Municipal Development Bylaws

- F51. Under the Memorandum of Understanding (MOU) with the Town of Falmouth, the Applicant will seek all requisite approvals for the Project from the Town. The Town has agreed to coordinate with Eversource to facilitate a timely review of the required Eversource grant of location petitions, street opening permits, and all other Town

approvals that may be required for the Project. This MOU is the same MOU that was used for the Martha's Vineyard Reliability Project (CCC File No. 22009) and provides for mitigation of construction impacts including: traffic control, noise, dust, and limits on the time of year, and time of day, that construction is permitted.

- F52. The approvals required for the Project are: Falmouth Conservation Commission Massachusetts Wetlands Protection Act Order of Conditions/Falmouth Wetlands Protection Bylaw; and Grant of Location and Street Opening Permit.

DCPC Implementing Regulations

- F53. The offshore cable is located in an area that was designated as Cape Ocean Management Planning District of Critical Planning Concern ("DCPC"). There are no implementing regulations associated with the DCPC that apply to the Project.

Consistency with CCC-certified Falmouth LCP

- F54. The Project broadly supports sustaining economic viability and infrastructure while maintaining the resilience of the natural resources, consistent with Falmouth's Commission-certified Local Comprehensive Plan.

- F55. Supportive of the Town's goals for Economic Sustainability Policy to provide the necessary infrastructure to meet the needs of the local and regional economy, the Project supports economic sustainability by increasing reliability of energy delivery infrastructure. The Applicant established an MOU with the Town of Falmouth to provide these benefits. Further, consistent with the Town's LCP, the submarine electric distribution cable will improve reliability with increased grid-based electric service to meet current and future electricity demands and improve the ability to integrate dispersed renewable energy in support of the Town's Energy Policy to support the use of renewable energy sources.

- F56. Relative to the Town's Policies for Land Use and Historic Character, the Project proposes to utilize existing infrastructure to connect to substation in Falmouth. This coordination of siting and shared infrastructure eliminates the need to further impact natural areas and any impacts to visual resources. The cable route in Falmouth does not pass through any mapped historical areas.

Probable Project Benefits versus Probable Project Detriments

- F57. The probable benefits of the Project outweigh the probable detriments of the Project, from a regional perspective.

- F58. The probable benefits of the Project are that it will:
- improve the reliability of grid-based power;
 - allow for the retirement of the diesel generators on Martha's Vineyard; and
 - allow for the future elimination of fossil fuel use on the island as the Eversource grid incorporates a greater amount of renewable electricity;

- F59. The probable detriments of the Project are that it will result in:
- temporary elevation of turbidity associated with offshore cable installation.

CONCLUSION

Based on the Findings above and subject to the Conditions set out below, the Commission further determines, finds, and concludes that the Project is consistent with the 2018 Cape Cod Regional Policy Plan, applicable provisions from the Falmouth LCP, and applicable municipal development bylaws; the probable benefit of the Project is greater than the probable detriment; and the Commission hereby grants DRI approval for the Cable 91 Replacement Project (File No. 22025).

CONDITIONS

- C1. This Decision shall be final when the appeal period set out in Section 17 of the Cape Cod Commission Act has elapsed without appeal (or if such an appeal has been filed, when the appeal has been finally settled, dismissed, adjudicated, or otherwise disposed of in favor of the Applicant). Thereafter, this Decision shall be valid and in effect, and local development permits may be issued pursuant hereto for a period of seven years from the date of this Decision, or for such extended period as may be permitted by the Commission pursuant to the Enabling Regulations.
- C2. The Applicant shall obtain all required federal, state, and local permits, licenses, and approvals. The Project's consistency with required Municipal Development Bylaws shall be ratified and confirmed by the Applicant obtaining the required municipal development permits.
- C3. The Applicant shall provide or otherwise ensure that the Commission is copied on all state and local permits, licenses, and approvals, including without limitation MassDOT access permit submissions and approvals.
- C4. The Applicant shall continue to work with applicable state and federal agencies to finalize and implement TOY restrictions and BMPs to avoid, minimize, and/or mitigate impacts to ocean resources, species, and habitats, and ocean-dependent human uses.

SIGNATURE PAGE

Executed this 21st day of August 2023.

For the Cape Cod Commission by:



Harold Mitchell, Chair
Cape Cod Commission

COMMONWEALTH OF MASSACHUSETTS

Barnstable, ss

August __, 2023

Before me, the undersigned notary public, personally appeared Harold Mitchell, in his capacity as Chair of the Cape Cod Commission, whose name is signed on the preceding document, and such person acknowledged to me that he signed such document voluntarily for its stated purpose on behalf of the Cape Cod Commission. The identity of such person was proved to me through satisfactory evidence of identification, which was [] photographic identification with signature issued by a federal or state governmental agency, [] oath or affirmation of a credible witness, or [x] personal knowledge of the undersigned.



Notary Public: 8-28-26

My Commission expires:

