Attachment I

Draft Piping Plover and Least Tern Protection Plan

Piping Plover and Least Tern Protection Plan New England Wind 2 Connector Landfall Site, Barnstable, MA NHESP File No.: 17-37398

Introduction

Commonwealth Wind, LLC ("the Proponent") has prepared this Piping Plover and Least Tern Protection Plan (PP<PP) to respond to Massachusetts Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program (NHESP) correspondence dated November 30, 2022 related to the New England Wind 2 Connector (NE Wind 2 Connector). Specifically, NHESP made it known that Dowses Beach, located in Barnstable MA, is Priority Habitat for state-listed species and that it provides important nesting habitat for both the Piping Plover and Least Tern.

NHESP's comment letter on the NE Wind 2 Connector Environmental Notification Form (ENF) included the following statement:

"... The cable landing location associated with Commonwealth Wind/NEW2 Connector is proposed at Dowses Beach, Barnstable. Dowses Beach is nesting habitat for both Piping Plover and Least Tern. Thus, at this time and without site specific details regarding construction and restoration timelines, temporary impacts, etc., the Division cannot assess whether the Piping Plover Protection Plan would be adequate and sufficient to avoid both temporary and permanent impacts to state-listed plovers and terns as well as their habitats."

This Draft PP<PP has been developed to avoid noise-related impacts to nesting Piping Plovers and Least Terns from temporary horizontal directional drilling (HDD) activities within the existing paved parking lot at the landfall site.

I. Commencement of Work

Although the Proponent is developing a construction schedule that anticipates commencing construction activities at the landfall site during the Fall, several months prior to the early Spring arrival of nesting Piping Plovers and Least Terns, it is possible that construction activities at the landfall site could extend into the Piping Plover and Least Tern nesting seasons.

It is extremely unlikely that the Proponent would initiate construction at the landfall site *after* April 1. However, if for some currently unforeseen reason it is necessary to initiate or re-initiate after a work stoppage of over 48 hours between April 1 and May 1, the Proponent will implement the following measures to avoid disturbing any nesting Piping Plovers or Least Terns in the vicinity of the parking lot where construction activity will occur. No construction activities will be performed at the landfall site after May 1 and extending through the end of the nesting season (August 31).

A. Notifications

The Proponent will notify NHESP, the Bureau of Ocean Energy Management (BOEM), and the U.S. Fish and Wildlife Service (collectively referred to as the "agencies") if the need to initiate activities after April 1 arises, with the notification including the reason for the delayed start, the anticipated duration of the work, and any other information requested by the agencies.

B. Monitoring by Credentialed Biologist

Piping Plover and Least Tern monitoring as described in this plan will be carried out only by qualified biologists from an accredited organization or an individual who has at least one year of previous experience at an accredited organization conducting shorebird monitoring for Piping Plovers and Least Terns.

C. Pre-Mobilization Piping Plover and Least Tern Survey

The Proponent will employ a shorebird monitor to perform a pre-mobilization survey of the beach and dune areas adjacent to the paved parking lot at the landfall site. The purpose of this survey will be to ascertain the presence or absence of any nesting Piping Plovers or Least Terns within the designated monitoring area as shown on Figure 1. For the purpose of performing the survey, the monitoring area will include the beaches and dunes that face both Nantucket Sound and East Bay.

If there are no Piping Plover or Least Tern nests, scrapes, or territorial pairs identified within the monitoring area, the shorebird monitor will document the findings, report to the agencies and the Proponent, and the Proponent will be cleared to mobilize into the area within 48 hours with no further monitoring activities required. However, if any Piping Plover or Least Tern nests, scrapes, or territorial pairs are observed within the designated monitoring area, the shorebird monitor will record their locations and will report back to the agencies and the Proponent, and the Proponent the shorebird monitoring as outlined below.

D. Shorebird Monitoring Plan

Monitoring, if necessary, will be consistent with the procedures established under the Massachusetts NHESP's "Guidelines for Managing Recreational Use of Beaches to Protect Piping Plovers, Terns, and their Habitats in Massachusetts" for use of roads and parking lots in areas where unfledged chicks are present.¹ Daily monitoring will be conducted from the time construction equipment is mobilized to the landfall site parking lot extending through the construction phase, including equipment demobilization.

¹ Massachusetts Division of Fisheries & Wildlife, Natural Heritage and Endangered Species Program, "Guidelines for Managing Recreational Use of Beaches to Protect Piping Plovers, Terns, and their Habitats in Massachusetts", 1993, page 8.

Under this protocol, the monitoring intensity will increase with increasing proximity of nests relative to the work zone. If plovers or terns are less than 200 yards from the construction activity, then a qualified monitor must be present to observe if nesting birds are disturbed from the activity (for example observing an increase in vocalizations, adults repeatedly leaving the nest, or adults staying off the nest for more than a few minutes). If all nesting activity remains more than 100 yards from the construction activity, the nest will be monitored once per day at dawn (before 0600 hours) prior to the onset of work during appropriate weather conditions. Territorial activity or nests occurring within 50 to 100 yards of the construction activity will be monitored twice per day at dawn prior to the onset of work and dusk (before 0600 hours and after 1900 hours) during appropriate weather conditions. Note that no mobilization of construction equipment to the landfall site parking lot will be allowed if any Piping Plover or Least Tern nests are observed within 50 yards of a pre-determined work zone for the specific construction activity, unless specifically permitted by NHESP.

If the qualified shorebird monitor observes that state-listed birds are disturbed by the initiation (or re-initiation) of work, or by construction activities, then all work shall cease until such time as the birds move away from the area (beyond 200 yards) or after consultation with the agencies.

E. Training of Construction Personnel

This PP<PP will be incorporated into the construction management plan that is being prepared for the HDD activities within the paved parking lot at the landfall site, so it can be understood in advance and implemented by site personnel should it be necessary to mobilize for construction after April 1 or if ongoing construction activities at the landfall site are halted for over 48 hours between April 1 and May 1.

II. Work Stoppage for over 48 Hours and Resumption

If construction activities are paused for over 48 hours between April 1 and May 1, then work will not resume until a shorebird monitor inspects the area to ascertain the presence or absence of any Piping Plover or Least Tern nests within the monitoring area shown on Figure 1. If any nests are observed within the monitoring area, the Proponent will comply with the procedures described above for initiation of construction activities after April 1.

III. Delineation of Work Area to Prevent Encroachment onto Coastal Beach

At the landfall site, the HDD construction activities will be located entirely within the paved parking lot. The HDD work area will be secured within a fenced and gated perimeter. If construction equipment access (see section IV) on Dowses Beach is required for any reason during the shorebird nesting season, then in advance of construction equipment access, notification and proposed monitoring procedures to be undertaken by the shorebird monitor must be provided to the agencies.

IV. Dewatering

It is anticipated that construction activities within the paved parking lot at the landfall site will require some excavations that will extend below the groundwater level. Consequently, it will be necessary to temporarily lower the water table adjacent to these excavations so construction activities can be completed "in the dry". The excavations and the entire dewatering apparatus will be located on paved surfaces and any water generated from the dewatering operations will be filtered prior to discharge within the identified workspace.

An appropriately sized infiltration bed will be established at the discharge point, but it is anticipated that some of the filtered water may overflow onto the parking lot pavement. In that instance, to minimize the potential for beach scour, a small amount of crushed stone may be placed along the edge of the parking lot at those discrete locations where the filtered water leaves the paved surface. The Proponent shall ensure that all dewatering will be conducted in accordance with all applicable regulatory requirements.

V. HDD Design and Breakout Prevention

The likelihood of needing physical access to the coastal beach or the risk of impacts to the beach itself are both very low. The HDD design has been informed by site-specific geotechnical data to minimize the risk of a surficial release of drilling mud. These investigations have enabled the Project to understand the containment capacity of the soils at the drill entry point, and to establish maximum drilling pressures to prevent a breakout on the beach. To further reduce the potential for a breakout on the beach, drilling will be conducted within an entry casing for the first 100-150 feet of the HDD, at which point the drill head will be approximately 20 feet below the grade of the beach.

Furthermore, the Project will use a drilling fluid composed of bentonite clay or mud. This benign, natural material will pose little to no threat to water quality or ecological resources in the rare instance of seepage around the HDD operations.

Effective construction management during HDD operations will further minimize the alreadyremote potential for beach or seafloor disturbance through drilling fluid seepage (i.e., frac-out). Drilling fluid seepage can occur when pressurization of the drill hole exceeds the containment capacity of the overburden soil material, but by providing adequate depth of cover for the HDD installation, the risk of seepage can be substantially reduced. Nonetheless, the Proponent will adhere to the operational standards discussed below to minimize the chances of drilling fluid seepage.

In the contingency planning for the HDD, prevention of drilling fluid seepage has been and will continue to be a primary consideration in designing the trajectory of the installation. As such, the HDD drill hole will likely descend from the HDD pit location to a depth of approximately 50 feet below the seafloor before rising toward the exit hole on the seafloor where installation will

transition to cable burial. As the pilot hole approaches the targeted exit hole location, the contractor will minimize the amount of drilling fluid near the head to minimize the potential for a release of drilling mud as the drill head reaches the surface of the seafloor.

The geometry of the drill hole profile can also affect the potential for drilling fluid seepage. In a profile that makes compound or tight-radii turns, down-hole pressures can build, thus increasing the potential for drilling fluid seepage. The proposed drilling profile, with its smooth and gradual vertical curves, will avoid this potential effect. In addition, horizontal curvature of the HDD route will minimize the potential for pressure buildup caused by drill hole geometry.

In the unlikely event that a disturbance of the coastal beach occurs between April 1 and May 1 associated with the HDD, the Proponent will immediately mobilize a shorebird monitor to survey the site in advance of any equipment access on the beach and will ensure that no remedial actions on the beach interfere with nesting Piping Plovers, Least Terns, or their chicks. The monitor will remain on-site until the equipment involved in the remedial operations on the beach has returned to the work limits within the landfall site parking lot.

VI. Reporting

If monitoring is required (because construction activities begin after April 1, or if there is a work stoppage of over 48 hours between April 1 and May 1), the shorebird monitor will prepare daily field reports that will be provided to the Proponent and the agencies on a weekly basis until Piping Plover or Least Tern chicks from any of the nests being monitored have fledged. In addition to reporting on the status and location of the nest and brood relative to the work zone, the report will provide other pertinent details such as weather, wind direction and velocity, evidence of predators, etc. Photographs will be included to provide a visual record of any unusual observations. Following demobilization of construction equipment from the landfall site parking lot, a summary report describing the monitoring effort will also be prepared and provided to the Proponent and the agencies.

VII. Modifications to Plan

Any changes to the PP<PP must be requested in writing at least two weeks prior to the anticipated implementation of said changes for review and written approval by the NHESP.



New England Wind 2 Connector Project

