

8.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Should the proposed action be licensed and constructed, there would be some irreversible or irretrievable commitments of resources. Irreversible or irretrievable commitments are those that cannot be reversed, except perhaps in the extremely long-term. A commitment of resources involves the use or destruction of nonrenewable resources, as well as the effects that loss would have on future generations. If a species becomes extinct as a result of a proposed action, for example, that loss is permanent. If wetland is filled to build a parking lot, that habitat loss is irretrievable as long as the parking lot remains. Construction and operation of the proposed action involves the irreversible and irretrievable commitment of material resources, energy (though small), and biological resources.

Material resources used for the proposed action include building materials for new structures, cables, and other facilities. Construction would also require use of fossil fuels, a nonrenewable natural resource, by vessels transporting workers and materials to and from the site of the proposed action. Once purchased and installed, these materials would be consumed. Some components may be recycled upon decommissioning, but in the near term, these materials would not be available to others.

Construction and operation of the proposed action would result in an irreversible or irretrievable loss of some biological resources, including the irretrievable loss of approximately 11.4 acres (45,134 m²) of soft bottom habitat due to the ESP and monopiles (0.67 acres [2,727 m²]), scour mats (1.96 acres [7,946 m²]), and rock armor (8.75 acres [35,417 m²]). Vessel traffic, vehicle traffic, facility construction and monopile driving could permanently displace some fauna and flora species from favorable to unfavorable habitats. Displacement and habitat loss may result in the reduction of some local populations and become irretrievable habitat permanently maintained. However, for this proposed action the degree of displacement and amount of habitat loss should represent a transitory and negligible effect to the overall populations of species.

The presence of the monopiles and ESP would also result in a permanent loss of certain human uses of these immediate areas. For example, it would not be possible to navigate through a monopile or the ESP. However, these impacts are negligible as the size of the ESP is small relative to the area of Nantucket Sound, and the monopiles are spaced far apart from each other so that mariners would be able to safely navigate around them. Commercial fishing vessels towing mobile gear would have to avoid the monopiles and ESP, but as with general navigation, this loss of navigation space is negligible. Ultimately, after decommissioning, this restriction on use would be removed.

If required by the USCG during construction there could be temporarily but irretrievably lost area to the fishing industry due to the enforcement of the safety setbacks of small water sheet areas around the turbines under construction, the cable installation vessel, and construction vessels around the ESP. These safety areas are limited, however, and would only be enforced temporarily around the WTGs being constructed, the cable installation vessel, or the ESP under construction. In addition, given the abundance of other available area that can be fished, there should be no lost opportunity days or revenue. The creation of these safety areas around the WTGs, cable installation vessel and ESP during construction would also result in the irretrievable loss of recreation, but again this would be negligible because of the short duration and small fraction of the Horseshoe Shoal area that would be involved at any one time.