Seascape, Landscape, and Visual Impact (SLVIA) Methodology

The SLVIA has two parts: seascape and landscape impact assessment (SLIA) and visual impact assessment (VIA). SLIA analyzes and evaluates impacts on both the physical elements and features that make up a landscape or seascape and the aesthetic, perceptual, and experiential aspects of the landscape or seascape that make it distinctive. VIA analyzes and evaluates the impacts on people of adding the proposed development to views from selected viewpoints.

What We Measure to Determine Impact

- A conservative 40-mile radius around the turbine layout defines the theoretical limit of Project visibility.
- Scenic resources and Key Observation Points (KOPs) within the study area were identified.
- A GIS-based viewshed analysis was used to assess potential visibility using surface models that account for topography, vegetation, buildings, and earth curvature.
- Wind turbines were determined to be visible if the model indicates that the line of sight is unobstructed.
- Model results were verified through field investigation and photographic documentation of existing conditions at KOPs.
- Visual simulations were developed to illustrate the appearance of the proposed turbine array from KOPs.
- Wind farm distance, earth curvature visibility, field of view, contrast, scale, and prominence of the proposed turbine array were assessed from each KOP (Key Observation Points).
- Impacts to scenic resources’ seascape, open ocean, and landscape character units were assessed.
- Impacts on viewer experience from each KOP were assessed.
- Visual impacts were assessed for the action alternatives alone and in combination with other planned offshore wind projects that would be visible from KOPs.