

## Empire Wind Project (EW1 and EW2)

### How did BOEM assess visual impacts to scenic resources and viewers of the Empire Wind Project?

- 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.

