



ecology and environment, inc.

Offshore Electric Transmission Experience

E & E helps clients keep pace with increasing demand for offshore renewable energy through streamlined permitting approaches and environmental compliance strategies.

Stakeholders are increasingly looking to offshore sources of renewable energy to mitigate impacts associated with onshore projects. But the complexities of moving subsea transmission lines from concept to reality are great, timeframes are tight, and the stakes are high.

E & E has over 40 years of energy development experience and utilizes innovative GIS routing tools to help navigate the siting process and provide clients with the high-quality information and critical analysis they need to make smart decisions. We bring a comprehensive understanding of both the natural and regulatory environments to every project and help client develop successful subsea electric transmission projects.



SERVICES

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| <ul style="list-style-type: none"> • Routing Evaluations & Siting Lines • Regulatory Consultations & Strategy Development • BOEM Alternative Energy Applications | <ul style="list-style-type: none"> • Third-Party EISs • Thermal Plume Modeling • Air & Water Permits • Marine Benthic & Fishery Surveys • Avian & Bat Surveys | <ul style="list-style-type: none"> • Marine Mammal Protection Act Compliance • Impingement & Entrainment Studies • Coastal Zone Consistency Evaluations | <ul style="list-style-type: none"> • Risk & Safety Studies • Sediment Transport Modeling • Marine Vessel Traffic Studies • Stakeholder Engagement & Community Outreach |
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EXAMPLE PROJECTS

Atlantic Wind Connection Project, Offshore Virginia to New York. E & E is currently working with the Atlantic Wind Connection team on numerous studies and permits to facilitate the development of a 7,000-MW HVDC subsea transmission system in the Outer-Continental shelf making landfall in states along the mid-Atlantic seaboard intended to provide service for planned wind farms to be located off the coasts of Virginia, Delaware, Maryland, and New Jersey. E & E has already performed extensive desktop modeling and environmental analysis to identify the project ROW for the filing of a ROW Grant Application with the Bureau of Ocean Energy Management and Enforcement and facilitated stakeholder/agency consultation with more than 30 entities, including federal and state agencies affected by the project. We prepared siting methodologies and routing plans for shore landings and onshore facilities, researched regional permitting conditions for the four USACE districts crossed by the proposed project, prepared work plans for onshore and offshore surveys, coordinated with land agents, and are in the process of preparing the General Activities Plan (GAP) for the project, as well as drafting of all federal and state permit applications.



This map shows the proposed full extent of the Atlantic Wind Connection Transmission lines, including potential alternative routes and laterals.

Offshore Electric Transmission Experience (*Continued*)

Neptune RTS, New York and New Jersey. E & E conducted routing evaluations, completed environmental impact studies, and developed permit applications for New Jersey and New York converter station sites and an approximately 70-mile transmission line for Neptune RTS. The subsea, high-voltage direct-current electric cable transmission network connects Hempstead, Long Island to Sayreville, New Jersey with 600-MW of transmission capacity. We prepared an Article VII Application to the NYS Public Service Commission for a Certificate of Environmental Compatibility and Need for the Neptune RTS; for the New Jersey portion of the route, we prepared comparable environmental documentation. E & E was involved in all facets of the permitting process and worked with the applicant and its legal counsel to develop a permitting strategy, attended all meetings with regulatory agencies, helped negotiate final permit conditions, and provided expert testimony at permit hearings. E & E directed the team responsible for public involvement for the NY portion of the project by holding regular conference calls, developing fact sheets, and preparing meeting documentation records.

*“We are now well along the road to a successfully permitted project...I want to say a hearty **congratulations and thank you** to the entire team...It has been a long road with many twists and turns; but we’re proud of the results and they couldn’t be better timed. Our sincerest thanks for your efforts over the last couple of years.”*

—Charles Hewett, President and CEO, Neptune Regional Transmission System, LLC



The Strait of Juan de Fuca in Puget Sound and the Olympic Mountains

Juan de Fuca Submarine Electric Cable Transmission Line, Canada. For Sea Breeze E & E conducted the environmental studies, prepared federal, state and local permit applications and a preliminary draft EIS for the United States portion of a proposed 30-mile buried submarine electric transmission cable from Vancouver Island, B.C to Port Angeles, WA. We prepared the Clean Water Act Section 10/404 permit applications, state fish and wildlife permits, shoreline permits, coastal zone consistency evaluation, and local permit requirements including a noise variance application for conducting a horizontal directional drilling operation. Since the project required a federal action for Presidential Permit and Corps of Engineers 404 permit, a preliminary Draft EIS was submitted to the Bonneville Power Administration and the Department of Energy for their

review and publication of the draft and final EIS. E & E also prepared a biological assessment for submittal to the U.S. Fish and Wildlife Service and National Marine Fisheries Services. Key issues resolved with the NMFS included monitoring requirements, construction noise, cable temperature, exposure to potential electromagnetic fields and exposed cable.

BOEM NEPA Blanket Purchase Agreement. E & E was selected by the Bureau of Ocean Energy Management (BOEM) to develop environmental impact statements (EISs) and EAs on behalf of the agency for offshore alternative energy projects. E & E was chosen as one of four contractors through a competitive bid process. Once the NEPA process is initiated by BOEM, E & E will develop the EA or EIS under the direction of the agency, organize public hearings, and respond to public and cooperating agency comments. We will compile and evaluate environmental information and incorporate all necessary analyses of alternatives, mitigation measures, and cumulative impacts, as directed by the MMS. Examples of the actions that may be considered as relevant offshore alternative energy activities include, but are not limited to: alternative energy technological testing; site characterization; wind energy facility construction, operation, and decommissioning; wave energy facility construction, operation; and decommissioning; current energy facility construction, operation, and decommissioning; and alternate uses of oil and gas platforms and other structures on the OCS.

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