Virginia Offshore Wind Technology Advancement Project (VOWTAP)

Commonwealth of Virginia Department of Mines, Minerals and Energy (DMME)

BUREAU OF OCEAN ENERGY MANAGEMENT (BOEM)

NEPA Scoping Meeting

Virginia Beach, Virginia April 3, 2014

Casey Reeves, Project Coordinator BOEM Office of Renewable Energy Programs





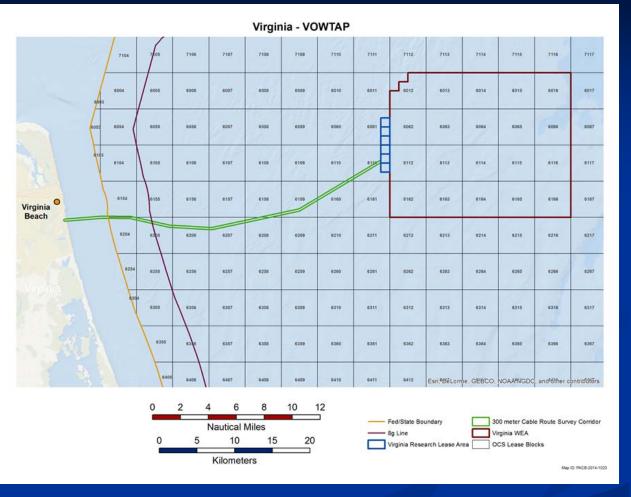
- <u>BACKGROUND</u>
- <u>PROJECT</u>
- NEXT STEPS





BACKGROUND

- The Commonwealth of Virginia, Department of Mines Mineral and Energy (DMME) in collaboration with the VOWTAP consortium submitted a research lease application to BOEM on February 8, 2013.
- The objective of DMME is to obtain a lease under 30 CFR 585.238 for siting up to two sixmegawatt (MW) turbines, a 34.5 kV or 69 kV subsea export cable and metocean monitoring equipment in 2,135 acres.
- The data obtained under this lease will be publicly available and support the future production of renewable energy within Virginia's Wind Energy Area (WEA).





BACKGROUND

- BOEM published a Determination of No Competitive Interest August 29, 2013.
- The Determination cleared the way for BOEM to process the application for a research lease for resource assessment and renewable energy technology testing.
- A Research Activities Plan (RAP) was submitted providing the basis of information to conduct the EA February 2014 and is available for review.



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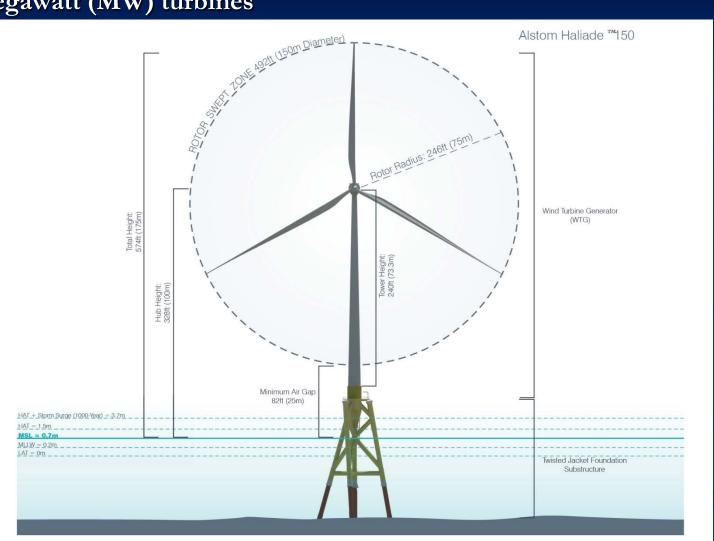
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| newable Energy ograms | | Home Renewable Energy Programs | | | | | |
| | | Research Activities Plan | | | | | |
| Offshore Renewable Energy Guide | | | | | | | |
| State Activities | | VOWTAP Research Activities Plan Appendix A Agency Correspondence | | | | | |
| | | Appendix A Agency Correspondence Appendix B CVA Nomination (Confidential – Not for public distribution) | | | | | |
| California and Washington | | Appendix C Dominion Annual Report Form 10-K | | | | | |
| Delaware | | Appendix D-1 Typical Construction | | | | | |
| Florida | | Appendix D-2 Preliminary Engineering Drawings Appendix E Metocean Report | | | | | |
| Georgia | | • Appendix F Marine Site Characterization Survey Report | | | | | |
| Hawaii | | Appendix G Sediment Transport Analysis | | | | | |
| Maine | | • Appendix H Jurisdictional Wetland Delineation Report | | | | | |
| | | Appendix I Air Emissions Calculations and Methodology | | | | | |
| Maryland | | Appendix J Benthic Survey Report | | | | | |
| Massachusetts | | • Appendix K Magnetic Fields from Submarine Cables | | | | | |
| New Jersey | | Appendix L Interim Avian Survey Report | | | | | |
| New York | | Appendix M-1 In-Air Acoustic Assessments Appendix M-2 Hadewater Noise Medaling Percent | | | | | |
| North Carolina | | Appendix M-2 Underwater Noise Modeling Report Appendix N Marine Archeological Resources Assessment (Confidential – Not for public distribution) | | | | | |
| | | Appendix N manne Archeological Resources Assessment (confidential – Not for public distribution) Appendix O Terrestrial Archaeological Survey (Confidential – Not for public distribution) | | | | | |
| Oregon Rhode Island | | Appendix P Historic Properties Assessment | | | | | |
| | | Appendix Q Visual Impact Assessment | | | | | |
| South Carolina | | Appendix R Navigational Risk Assessment | | | | | |
| Virginia | | Appendix S Safety Management System Requirements | | | | | |
| | | Appendix T | Aviation Risk Assessme | nt | | | |





VOWTAP PROJECT

Two six-megawatt (MW) turbines





VOWTAP PROJECT

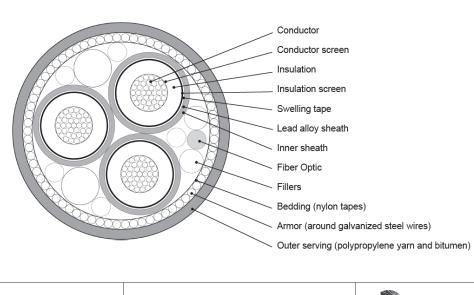
Turbine Foundations





VOWTAP PROJECT

• 27 nautical miles of (110mm or 4.3 inches) 34.5kv or 69kv submarine transmission cable.





Typical 34.5-kV Submarine Transmission Cable

TETRA TECH





BOEM's Next Steps

- Conduct Scoping
- National Environmental Policy Act Environmental Assessment for Research Activities Plan.

