Right-of-Way Application Supplement

for the

Bureau of Ocean Energy Management

on the

Atlantic Wind Connection Project

May 1, 2013

Docket No. BOEM–2011–0023

Introduction

This Right-of-Way Application Supplement (Supplement) provides an update to the original application Atlantic Grid Holdings LLC (AGH) submitted to the Bureau of Ocean Energy Management (BOEM) for the Atlantic Wind Connection (AWC) project. This Supplement details the refinements to the project's configuration, design, and location since the original application was submitted, based on stakeholder feedback and further engineering. While AGH has made revisions to the project, the location, nature, character, and purpose of the Project remains the same: a high-voltage direct-current system that will connect offshore wind turbines in the Wind Energy Areas (WEAs) to the grid while strengthening the reliability and efficiency of the existing transmission infrastructure.

By way of background, on March 31, 2011, AGH submitted a right-of-way application (Application) to BOEM. The Application was an "unsolicited grant application" under 30 CFR Part 585. The information in the Application was based on desktop analysis and information gathered from initial stakeholder consultations conducted from October 2010 thru March 2011. After filing, we updated the Application with two supplements:

- On April 21, 2011, we added a route position list of the cable route centerline, and;
- On August 20, 2011, we made adjustments to the proposed route to minimize interference with sand and gravel borrow sites identified in consultation with managers of the sand and gravel program at BOEM.

BOEM published a notice of the Application on December 21, 2011, and after reviewing comments from stakeholders, BOEM made a Determination of No Competitive Interest (DNCI) in May of 2012.[1] Per BOEM regulations (30 CFR Part 585), AGH is required to submit a General Activities Plan (GAP) to BOEM within 60 days of the DNCI. BOEM granted AGH a departure from the regulations and provided for an extension for the GAP submission beyond 60 days.[2] Per the terms of the departure, AGH submitted an interim progress report on the project since receiving the DNCI via a memo submitted to BOEM on March 1, 2013.

[1] Notice of ROW Application: 76 Fed. Reg. 79206 (December 21, 2011) and Determination of No Competitive Interest : 77 Fed. Reg. 28620 (May 15, 2012).

[2] GAP Departure Request Approval Letter from Maureen A. Bornholdt to Atlantic Grid Holdings dated August 21, 2012.

Overview of Project Revisions

This section provides an overview of the project developments which have led to the changes that are detailed in this Supplement. In response to these developments the project has been refined and improved to better facilitate offshore wind energy development, to reduce the project's environmental impact, and to reduce the project cost. As described in more detail below, the overall footprint of the project has been reduced by nearly 50% (details in Table 1), and the number of lease blocks in which we express interest has been reduced from 300 to 157 (Table 1 and Appendix A). These changes reduce project impacts on the environment and minimize interference with offshore wind farm infrastructure.

In response to BOEM's notice of the Application more than 50 comments were received. AGH also conducted independent outreach to stakeholders and received their comments on the project. Many interested stakeholders made suggestions to improve the project's layout, configuration, and location, while reducing the environmental impacts. AGH reviewed and revised the project design to respond to the suggestions, recognizing that this would improve the project and pro-actively address the concerns of stakeholders that would otherwise be raised later in the permitting process, when changes are more difficult to make. In response to comments, AGH has updated the project configuration as shown in Figures 1 and 2. A summary, by category, of the stakeholder feedback is provided below.

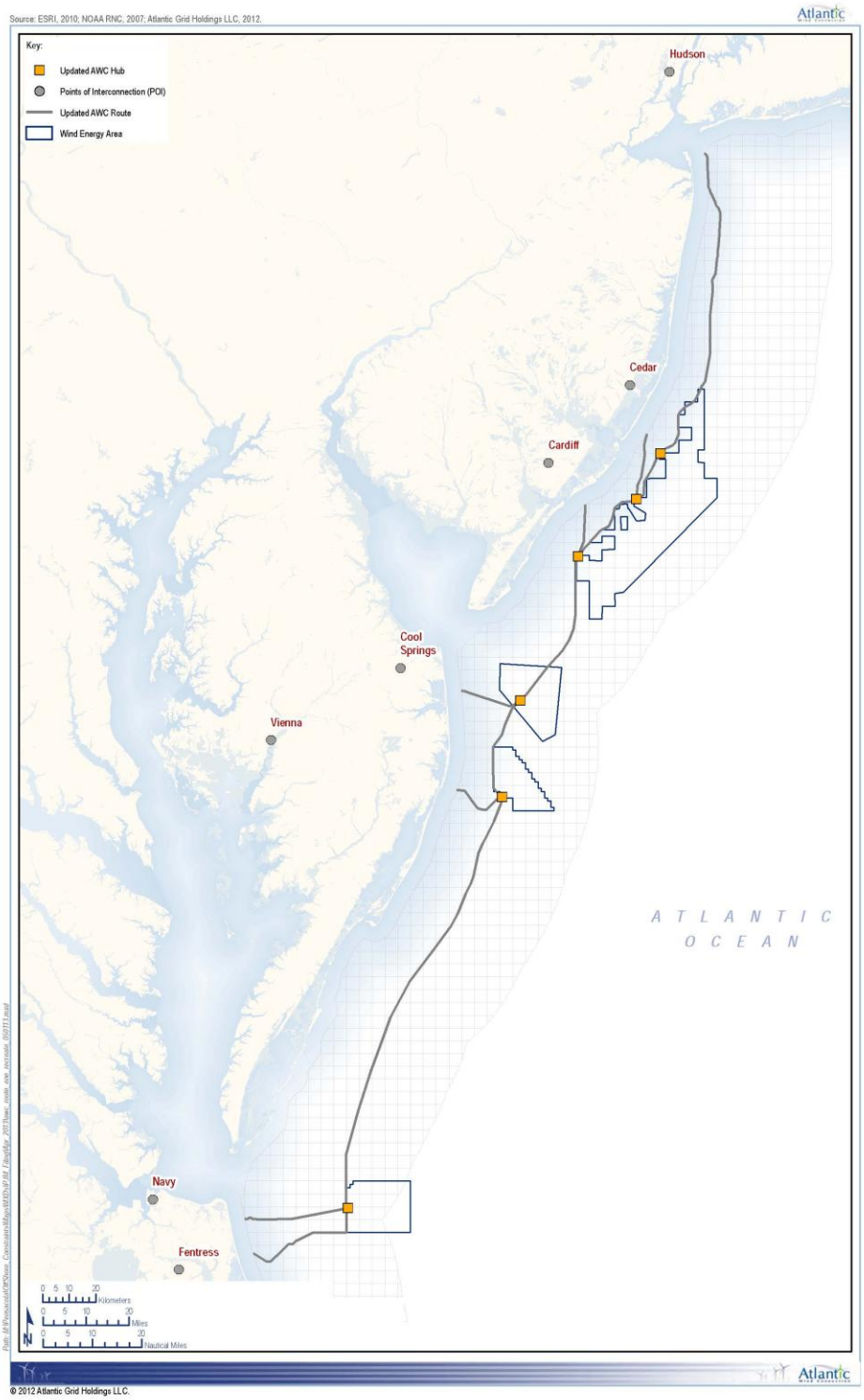

Figure 1. Updated Atlantic Wind Connection project configuration

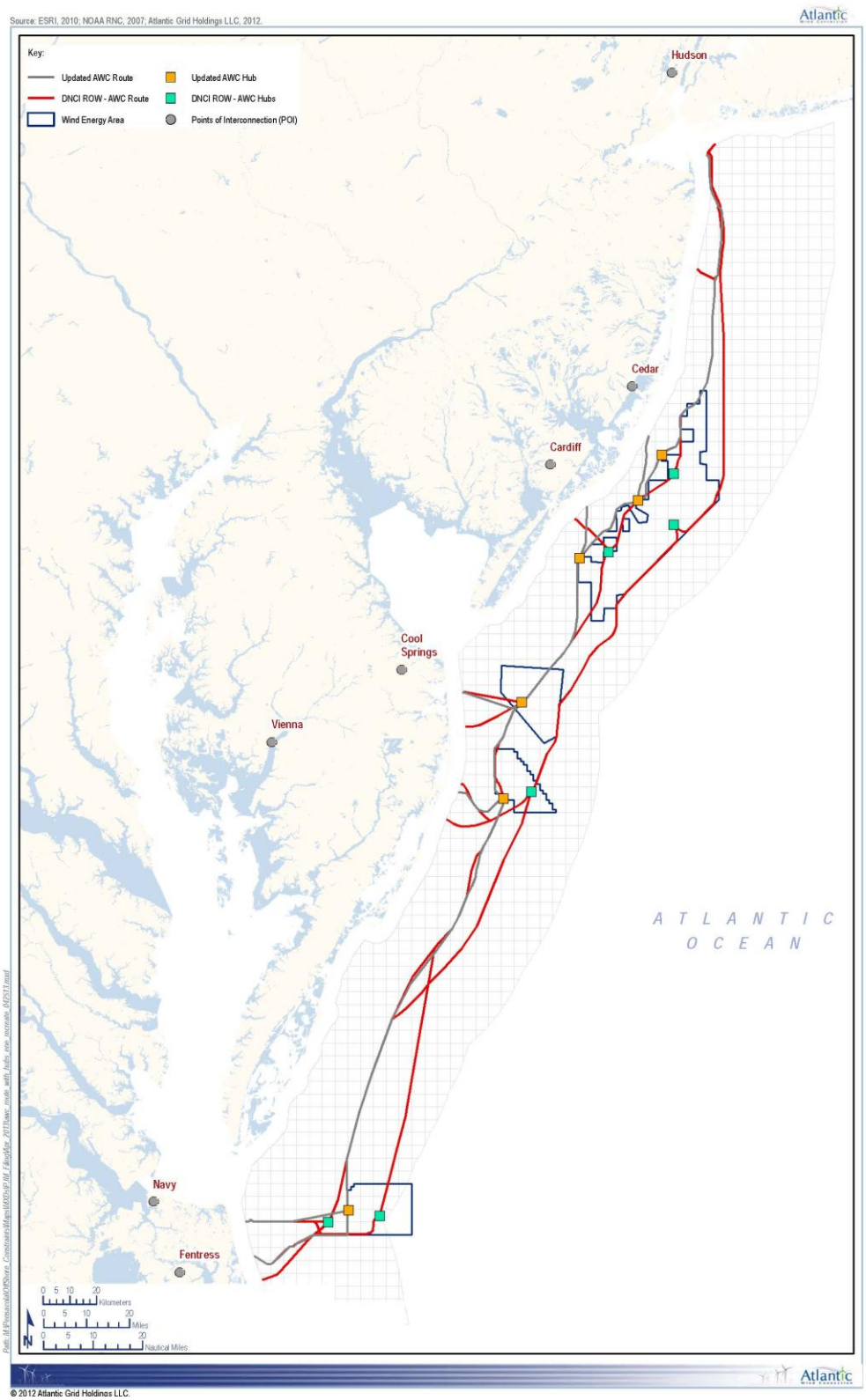

Figure 2. A comparison of the original and updated project configurations

Federal regulators and policy makers. Numerous federal agencies reviewed the Application and provided feedback, either formally to BOEM or informally to AGH. This input has been critical to the refinement of the line and offshore converter platform (i.e., "hub") locations. The USCG provided feedback to BOEM through the Virginia Task Force process regarding the size and location of the Virginia WEA. Based on that feedback, BOEM reduced the WEA by removing the blocks on the western portion of the area, including one lease block that originally included one AWC converter platform. Accordingly, the AWC Virginia converter platform has been relocated as reflected in this Supplement.

State regulators and policy makers. The AGH team has been in frequent contact with the regulators and policy makers in the states affected by the AWC project. The states have a significant interest in the growth of an offshore wind industry in the region and minimizing the cost of offshore wind for ratepayers. The states also are stakeholders at PJM and provide input on the expansion of the region's transmission grid for reliability, efficiency and public policy planning purposes.

As shown in Figure 1, AGH simplified the transmission network serving the New Jersey WEA into a 3,000 MW loop connecting southern, central and northern New Jersey with a single circuit. This responds to a number of issues in New Jersey. First, New Jersey law requires that offshore wind power funded with an OREC award should be delivered to New Jersey. Second, the New Jersey Board of Public Utilities has an interest in addressing generation ownership market power and transmission shortages in northern New Jersey and also an interest in addressing a generating capacity deficit that will be left when the Oyster Creek nuclear power plant in central coastal New Jersey goes offline in 2019. Finally, the Board and New Jersey's ratepayer advocate are focused providing utility service at the lowest cost to ratepayers. The simplification of the network serving the New Jersey WEA addresses all three of these issues.

Offshore wind developers. As we continued discussions with offshore wind developers and as they looked more closely at the AWC system, wind developers expressed concern that the AWC cable was running through – as opposed to around – the WEAs. The wind developers sought to minimize infringement of transmission cable on the WEAs because, in their view, avoiding and crossing transmission cables would impose additional risks and costs on wind farms such as transmission cables crossing the wind farm turbine collector cable systems. To respond to that concern, AGH relocated the cable to the outside edges of the WEAs, where possible. This is most evident in the New Jersey WEA, where the cable was moved to the far western boundary of the WEA.

Existing offshore telecommunication cable owners. Ten telecommunications cables are in operation and make their terminus at the coastline of central New Jersey. Therefore the telecommunications cable owners are an important stakeholder in the process of siting the AWC line in New Jersey. The AWC project team has reached out to all of the cable owners and has received the as-built specifications that detail the exact location of each of the cables. An important factor to the cable owners is that when a cable crossing is necessary, the cables cross at as close to a 90-degree angle as possible. The project configuration presented in this memo reflects changes to the AWC route needed to effect cable crossings at the appropriate angle.

Systems analysis. To determine the best locations to inject power into the terrestrial grid with an offshore backbone system such as the AWC, the project team performed numerous and extensive modeling exercises. These models simulate impacts the AWC project would have on the overall electrical transmission grid in the PJM region. Through this systems analysis process, the AWC team was able to refine an initial two-circuit system design into the current single circuit design. This improvement reduces the transmission corridor required on the OCS by over 50 percent (Table 1); reducing its environmental impact and cost. Other changes were made to the project configuration based on our systems analysis. For example, the current configuration is based on analysis indicating that the best point of interconnection for the power delivered from the Maryland WEA is the substation located in Vienna, Maryland and not the Piney Grove substation in Salisbury, Maryland as described in the original Application.

The need for continued flexibility. Adjustments to the project configuration have been made based on state energy policies, sound engineering, environmental considerations and input we received from the stakeholder groups, as described above. As we continue to learn about the conditions in the offshore environment, the onshore environment, and other important factors, we will need to make further modifications to best address the needs of the region's stakeholders. For example, many comments received from environmental groups on the AWC project were positive. They noted the benefits of reducing the overall impact of offshore wind by moving transmission lines to the far offshore marine environment where less biological sensitivity exists, rather than building more overland transmission, with associated right-of-way clearing, to accommodate the offshore wind energy. The environmental community provided data indicating where AGH may encounter biological hot spots during the offshore surveys. These data will be used during the offshore survey process to inform sampling locations on the route. Based on the results of our sampling, we may need to make additional changes to the route configuration. AGH continues to work closely with environmental groups to improve the project design.

Statistics on the updated route

Table 1 quantifies the changes in the route from the original Application based on the changes made as described above. AGH has made significant reductions in every area of the project's footprint, further reducing the project's environmental impact and development cost.

Original ROW Application	Supplemented ROW Application	Reduction	
Total Number of Lease Blocks (Converter Platforms + Transmission)		Number	Ratio
300	157 (34 new request + 123 previously requested; 182 removed from the request)	143	48%
Number of Lease Blocks for Converter Platforms		Number	Ratio
7	6 (5 new request + 1 previously requested)	1	14%
Project Total Circuit Miles (offshore + 3nm + onshore)		Miles	Ratio
790 (1271 km)	535 (861 km)	255	32%
ROW Circuit Miles including all the alternatives (offshore)		Miles	Ratio
818 (1316 km) 636 (1024 km) with preferred alternative	388 (624 km) 364 (586 km) with preferred alternative	430 272	53% 43%
Total Area of Interest mi2 (Lease Blocks Area)		Mi2	Ratio
2604 (6744 km2)	1359 (3520 km2)	1245	48%
Transmission Corridor mi2 (200 feet x ROW Circuit Miles)		Mi2	Ratio
31 (80 km2) 24 (62 km2) with preferred alternative	15 (38 km2) 14 (36 km2) with preferred alternative	16 10	52% 43%

Table 1. Statistics quantifying the updated route

OCS Blocks Requested

Based on this updated project configuration, the number of OCS lease blocks affected by the project has been reduced from 300 to 157. We supplement and revise our right-of-way grant request to apply to the 157 OCS blocks listed in Appendix A and to withdraw our request for other OCS blocks listed in the original Application. The list of OCS blocks also indicates the six OCS blocks where AWC converter platforms are proposed to be located. Appendix B is the route position list for the system.

The revised route is 255 miles shorter and impacts 143 fewer lease blocks, therefore significantly reducing the overall project footprint. These revisions based on stakeholder input should reduce the number of potential impacts identified in the GAP and, accordingly, these refinements should streamline the NEPA review process.

Updated project nomenclature and staging

New Jersey appears poised to develop a robust offshore wind industry due to the progressive nature of its financing mechanism known as the Offshore Renewable Energy Certificate, or OREC. Our project development schedule takes this into account and we outline below our current view on the project's phased development and the nomenclature associated with the phases.

Three geographically distinct phases of the project are outlined here: The AWC New Jersey Energy Link, the AWC Delmarva Energy Link, and the AWC Bay Link.

The AWC New Jersey Energy Link

The section of the AWC project north of the Delaware Bay is called the New Jersey Energy Link (NJEL). There are three distinct phases to the New Jersey Energy Link which ultimately comprise a 3,000 MW system that connects northern, central and southern NJ, with three converter platforms along the cable route (Figure 3). The first phase of the NJEL connects northern NJ to southern NJ; the second phase adds the NJ North Converter Platform; and the third phase adds the NJ Central Converter Platform and the link to central New Jersey.

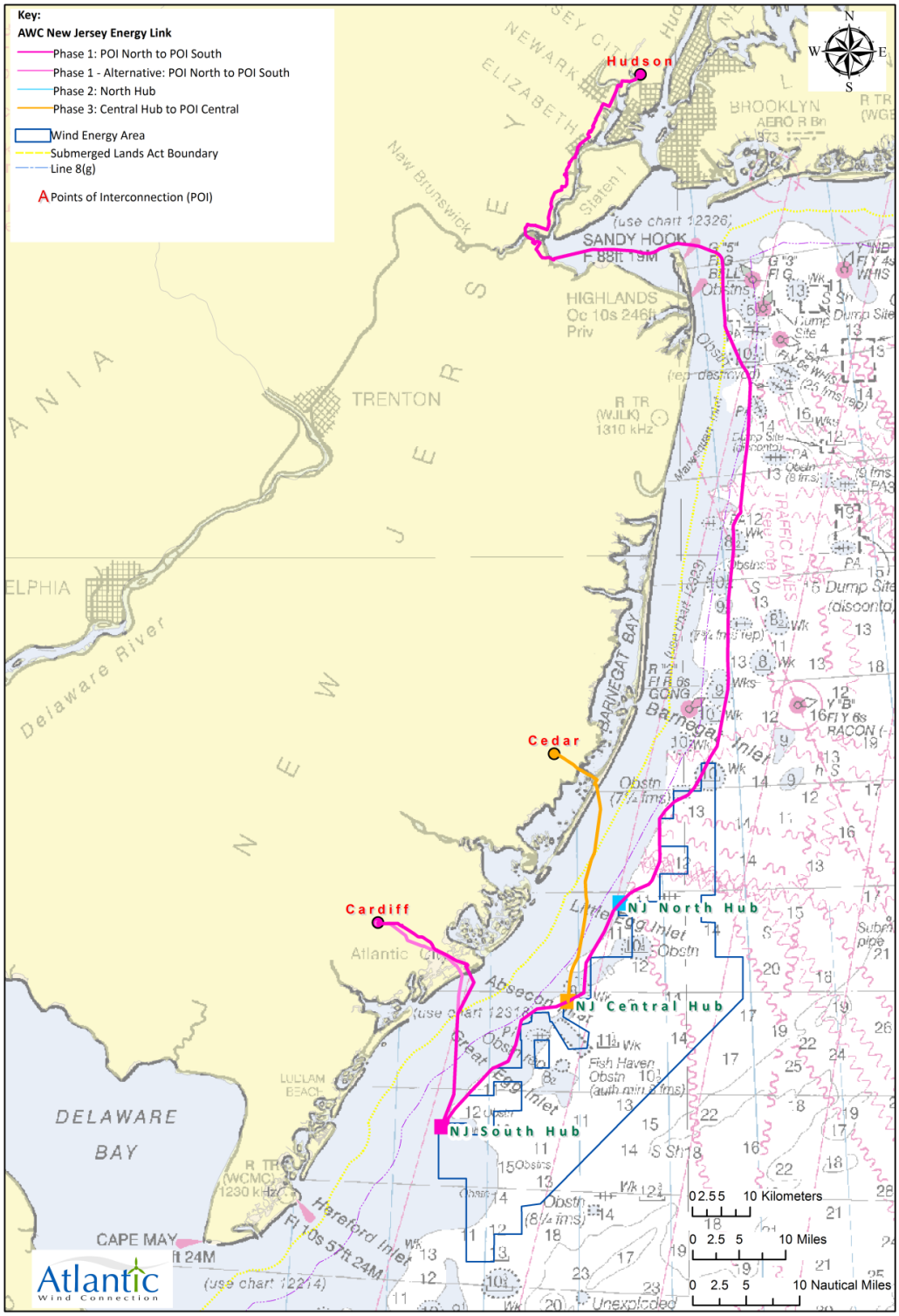

Figure 3. AWC New Jersey Energy Link

The AWC Delmarva Energy Link

The section of the AWC project south of the Delaware Bay is called the Delmarva Energy Link. There are two distinct phases to the AWC Delmarva Energy Link which ultimately comprise a 3,000 MW system that connects Delaware, Maryland, and Virginia, with three converter platforms along the cable route (Figure 4). The first phase of the Delmarva Energy Link connects Delaware to Maryland and has two converter platforms (DE and MD); and the second phase connects the first phase to Virginia and adds the VA Converter Platform. The Delmarva Energy Link improves electrical service to the Delmarva Peninsula by providing a strong connection between the southern Virginia mainland and the Peninsula.

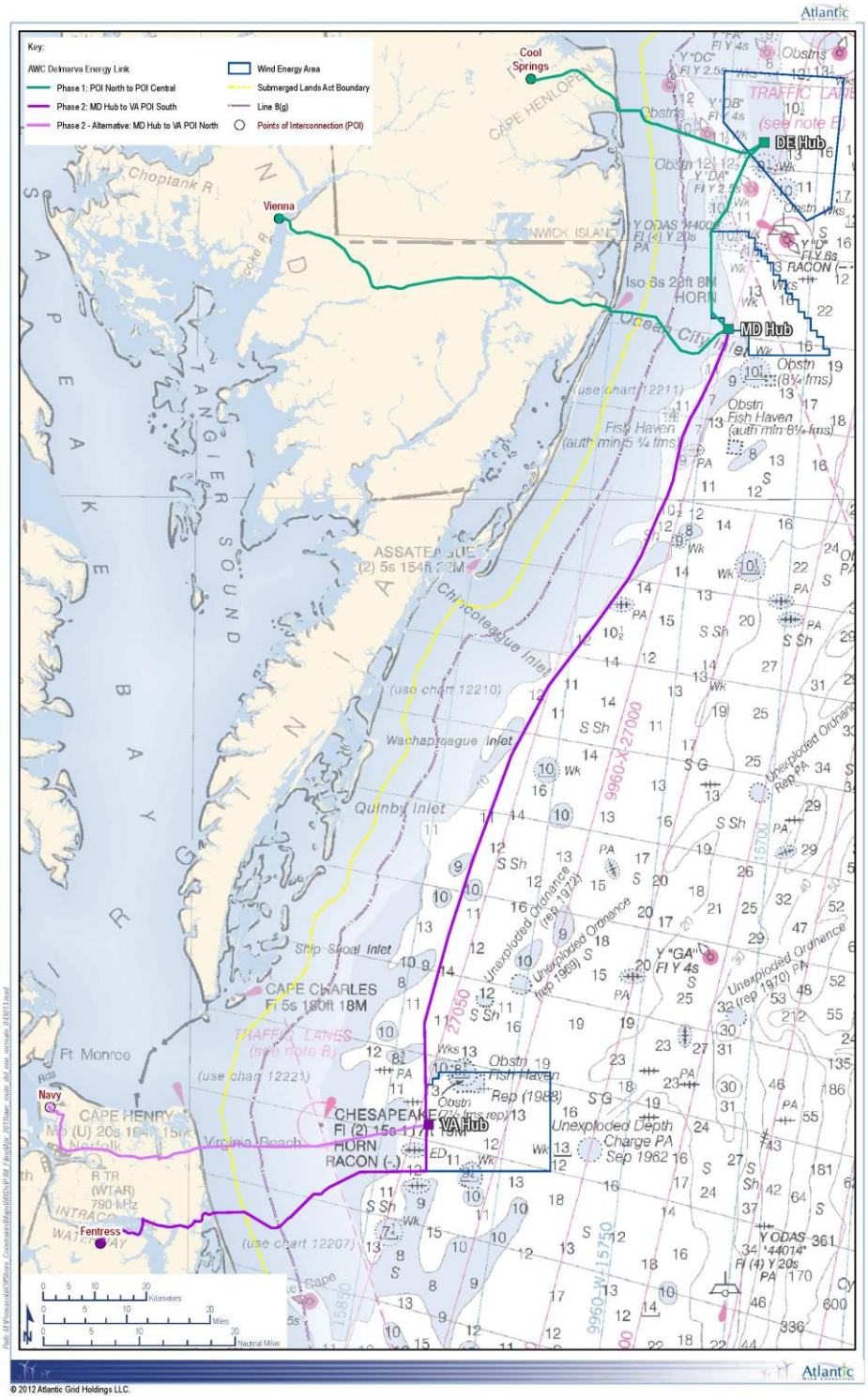

Figure 4. AWC Delmarva Energy Link

The AWC Bay Link

The last phase of the AWC system is a connection between the system's southern circuit, the Delmarva Energy Link, and the northern circuit, the New Jersey Energy Link. This connection across the Delaware Bay is called the AWC Bay Link. The Bay Link would create a continuous north-south offshore backbone with a 1,000 MW transfer capability. The connection provides additional grid reliability and redundancy for New Jersey, Delaware, Maryland, and Virginia, allows the region's grid to absorb the variability of offshore wind energy production, and permits efficient energy transactions throughout the mid-Atlantic region. The Bay Link would connect AWC's New Jersey South Converter Platform and the Delaware Converter Platform using approximately 38 miles of subsea cable. Like the other phases of the project that rely on state support in the PJM transmission planning process, AGH would not seek to build the Bay Link without the express support of the coastal states that would be connected.

Summary of overall stakeholder outreach

As noted above, AGH has conducted and will continue to engage in proactive stakeholder outreach with a view to improving our project design and building support for offshore wind and smart transmission planning in the mid-Atlantic region. The environmental community, offshore wind developers, local community leaders, state and federal regulators, and owners of existing offshore cables are some of the groups with whom we have been consistently engaged. Table 2 summarizes these interactions.

Table 2 Summary of Regulatory Stakeholders Outreach Efforts thru February 2013		
Agency/Organization	**Point(s) of Contact**	**Meeting Date(s)**
Bureau of Ocean Energy Management	Michael Bromwich and staff	Oct 2010 – current
Delmarva Peninsula Planning Association	Marianne Abdul	Oct 2010
Mid-Atlantic Fishery Management Council	Thomas Hoff	Oct 2010, Dec 2011
NJ Board of Public Utilities	Board president, Commissioners, and various staff	Oct 2010 through Feb 2013
United States Department of Defense	Dorothy Robyn, Jackie Pfannenstiel	Oct 2010; Jan, Feb, and Jul 2011; Feb 2013
United States Department of Energy	Cathy Zoi, Chris Hart and other staff	Oct, Nov 2010; Mar 2011
United States Army Corps of Engineers	James Haggerty, Larry Slavitter	Nov 2010; Jun 2011
Chesapeake Climate Action Network	Mike Tidwell	Dec 2010; Jan 2012
Dominion Power	Guy Chapman	Dec 2010
Federal Energy Regulatory Commission	Commissioners and staff	Dec 2010
Sierra Club, Virginia Chapter	Glen Besa	Dec 2010; Jan 2012
United States Coast Guard District 1	Ron Beck	Dec 2010; Mar, Nov 2011
Virginia Alternative & Renewable Energy Association	Ken Hutchinson	Dec 2010
Virginia Department of Mines, Minerals, and Energy	Steve Walz	Dec 2010
Virginia Economic Development Partnership	Jerry Giles	Dec 2010
Offshore Wind Development Coalition	Jim Lanard	Dec 2010 – current
Delaware Public Service Commission	Bruce Burcat	Jan 2011
National Resource Defense Council	Frances Beinecke, Brandi Colander	Jan, May 2011; Jan 2012
National Wildlife Federation	Curtis Fisher, Justin Allegro, Catherine Bowes	Jan, Feb, Apr 2011; Jan, May 2012
United States Environmental Protection Agency	Lisa Jackson, Lingard Knutson	Jan 2011
Blue-Green Alliance	David Foster	Feb 2011
Center for American Progress	Mike Conathan	Feb, Apr 2011
Delaware Department of Natural Resources and Environmental Control	Lee Ann Walling	Feb, Jun, Jul, and Aug 2011; Jan 2013
Maryland Energy Administration	Andrew Gohn	Feb 2011
New Jersey Business and Industry Association	Sara Bluhm	Feb 2011
NOAA Fisheries Services, Northeast Regional Office	Julie Crocker, Karen Greene, Michele Magliocca	Feb, Mar, Jun 2011
United States Coast Guard District 5, Waterways Management Section	John Walters	Feb, Oct 2011; Aug 2012

Table 2 Summary of Regulatory Stakeholders Outreach Efforts thru February 2013		
Agency/Organization	**Point(s) of Contact**	**Meeting Date(s)**
United Steelworkers	Leo Gerard	Feb 2011
Apex Wind	Tim Ryan	Feb 2011
National Oceanic and Atmospheric Administration	Sally Yozell, Lois Schiffer, Brian Smith	Mar, Jul 2011
New Jersey Department of Environmental Protection	Ruth Foster, Janet Stewart, Megan Brunatti	Mar, Jul, Sept, Oct 2011; Apr 2012
New York State Department of State, Coastal Resources Unit	Jeff Zappieri	Mar, Sep 2011; Jan 2013
United States Fish and Wildlife Service	Keith Hastie, Wendy Walsh and other staff	Mar 2011
The Nature Conservancy	Jay Odell, Gwynn Crichton, and other staff	Mar, Apr 2011; Jan, May, July 2012; Jan, Feb 2013
Ocean Conservancy	Sandra Whitehouse	Mar 2011
New Jersey Environmental Lobby	Anne Poole, Mike Pisauro	Mar 2011
American Bird Conservancy	Kelly Fuller	Apr 2011
OffshoreMW	Peter Giller, Erich Stephens	May 2011
Maryland Department of Natural Resources	Gwynne Schultz, Joe Abe	Jun 2011; Jan 2013
Mid-Atlantic Regional Council on the Oceans	Laura McKay, Jay Odell	Jun 2011
Virginia Department of Environmental Control	Rick Weeks	Jul 2011; Jan 2013
United States Navy	Catherine Creese, Jeff Hoel	Jul 2011
EDF Renewables (formerly enXco)	Doug Copeland	Aug 2011
New Jersey Pinelands Commission	Ernest Deman	Oct 2011
Jeb Berman	National Marine Sanctuaries Foundation	Oct 2011
NOAA, Office of Coastal Resource Management	David Kaiser	Dec 2011
Mid-Atlantic Regional Association for Coastal Ocean Observing Systems	Gerhard Kuska	Dec 2011
SeaPlan	Stephanie Moura	Jan 2012
Defenders of Wildlife	Julie Falkner	Jan 2012
Oceana	Nancy Sopko	Jan 2012
BlueGreen Alliance	Michael Williams	Jan 2012
Clean Energy States Alliance	Mark Sinclair	Jan 2012
Pew Foundation	Jennie Dean	Jan 2012
United South and Eastern Tribes	Michael Bolt	Feb 2012

Table 2 Summary of Regulatory Stakeholders Outreach Efforts thru February 2013		
Agency/Organization	**Point(s) of Contact**	**Meeting Date(s)**
New Jersey Geological Survey	Jane Uptegrove	Mar 2012
American Association of Port Authorities	Meredith Martino	Mar 2012
Monmouth University, Urban Coast Institute	Tony MacDonald	Apr 2012
Clean Ocean Action	Cindy Zipf	Apr 2012
Township of Woodbridge, NJ	Mayor John McCormac	May 2012
Jacques Cousteau National Estuarine Research Reserve	Melanie Redding	May 2012
Meadowlands Commission	Marcia Karrow	May 2012
City of Linden, NJ	Ron Stefanowicz	May 2012
New Jersey Department of Transportation	Walter McGrosky	May 2012
New Jersey Joint Permit Processing Team	Larry Slavitter	Jun 2012
Delaware Mariner's Advisory Committee	John Walters	Jun 2012
United States Fish and Wildlife Service (NJ)	Carlo Popolizio	Jul, Aug 2012
New Jersey Audubon Society	Eric Stiles	Jul 2012
South Jersey Ports Corporation	Marlin Peterson	Aug 2012
Assateague National and State Park	Bill Hulslander	Aug 2012
City of Ocean City, MD	Mayor Rick Meehan	Oct 2012
South Jersey Transportation Authority	Sam Donelson	Oct 2012
New Jersey Turnpike Authority	Ron Gravino	Dec 2012
Rowan University	Dr. Jess Everett	Jan 2013
USCG Harbor Operations, Energy Sub-Committee	Eric Johansson	Jan 2013
Public Service Electric and Gas (PSEG)	Ralph LaRossa	Jan 2013
Gateway National Park	Doug Adamo	Feb 2013
Electric Power Research Institute	Dr. Gabor Mezei	Feb 2013

Conclusion

AGH is focused on building an environmentally sound, reliable, efficient and cost-effective transmission system. To do so, we listen carefully to stakeholders, state policy makers, PJM transmission planners, and others. By necessity, we must respond with appropriate project modifications when presented with new information, changing policies, and new transmission planning rules. We look forward to continuing to work closely with BOEM and others to build a new U.S. offshore wind industry.

Appendix A. List of OCS Blocks Requested

Block Number	Protraction Number	Type	State
6370	NJ18-05	TRANSMISSION	Delaware
6422	NJ18-05	TRANSMISSION	Delaware
6770	NJ18-05	TRANSMISSION	Delaware
7072	NJ18-05	TRANSMISSION	Maryland
6029	NJ18-05	TRANSMISSION	New Jersey
6079	NJ18-05	TRANSMISSION	New Jersey
6535	NJ18-02	TRANSMISSION	New Jersey
6538	NJ18-02	TRANSMISSION	New Jersey
6585	NJ18-02	TRANSMISSION	New Jersey
6586	NJ18-02	TRANSMISSION	New Jersey
6635	NJ18-02	TRANSMISSION	New Jersey
6636	NJ18-02	CONVERTER PLATFORM & TRANSMISSION	New Jersey
6685	NJ18-02	TRANSMISSION	New Jersey
6686	NJ18-02	TRANSMISSION	New Jersey
6734	NJ18-02	TRANSMISSION	New Jersey
6783	NJ18-02	TRANSMISSION	New Jersey
6830	NJ18-02	TRANSMISSION	New Jersey
6832	NJ18-02	TRANSMISSION	New Jersey
6881	NJ18-02	TRANSMISSION	New Jersey
6882	NJ18-02	TRANSMISSION	New Jersey
6980	NJ18-02	TRANSMISSION	New Jersey
6990	NK18-11	TRANSMISSION	New Jersey
7029	NJ18-02	TRANSMISSION	New Jersey
7030	NJ18-02	CONVERTER PLATFORM & TRANSMISSION	New Jersey
7079	NJ18-02	TRANSMISSION	New Jersey
7129	NJ18-02	TRANSMISSION	New Jersey
6062	NJ18-11	TRANSMISSION	Virginia
6105	NJ18-11	TRANSMISSION	Virginia
6111	NJ18-11	TRANSMISSION	Virginia
6112	NJ18-11	CONVERTER PLATFORM & TRANSMISSION	Virginia
6210	NJ18-11	TRANSMISSION	Virginia
6211	NJ18-11	TRANSMISSION	Virginia
6254	NJ18-11	TRANSMISSION	Virginia
6255	NJ18-11	TRANSMISSION	Virginia

Previously Requested and Included in Current Request			
6228	NJ18-05	TRANSMISSION	Delaware
6229	NJ18-05	TRANSMISSION	Delaware
6277	NJ18-05	TRANSMISSION	Delaware
6278	NJ18-05	TRANSMISSION	Delaware
6326	NJ18-05	TRANSMISSION	Delaware
6327	NJ18-05	TRANSMISSION	Delaware
6371	NJ18-05	TRANSMISSION	Delaware
6372	NJ18-05	TRANSMISSION	Delaware
6376	NJ18-05	TRANSMISSION	Delaware
6423	NJ18-05	TRANSMISSION	Delaware
6424	NJ18-05	TRANSMISSION	Delaware
6425	NJ18-05	CONVERTER PLATFORM & TRANSMISSION	Delaware
6426	NJ18-05	TRANSMISSION	Delaware
6474	NJ18-05	TRANSMISSION	Delaware
6524	NJ18-05	TRANSMISSION	Delaware
6573	NJ18-05	TRANSMISSION	Delaware
6574	NJ18-05	TRANSMISSION	Delaware
6623	NJ18-05	TRANSMISSION	Delaware
6673	NJ18-05	TRANSMISSION	Maryland
6723	NJ18-05	TRANSMISSION	Maryland
6771	NJ18-05	TRANSMISSION	Maryland
6773	NJ18-05	TRANSMISSION	Maryland
6774	NJ18-05	CONVERTER PLATFORM & TRANSMISSION	Maryland
6821	NJ18-05	TRANSMISSION	Maryland
6822	NJ18-05	TRANSMISSION	Maryland
6823	NJ18-05	TRANSMISSION	Maryland
6824	NJ18-05	TRANSMISSION	Maryland
6873	NJ18-05	TRANSMISSION	Maryland
6922	NJ18-05	TRANSMISSION	Maryland
6923	NJ18-05	TRANSMISSION	Maryland
6972	NJ18-05	TRANSMISSION	Maryland
7022	NJ18-05	TRANSMISSION	Maryland
7071	NJ18-05	TRANSMISSION	Maryland
7121	NJ18-05	TRANSMISSION	Maryland
6040	NJ18-02	TRANSMISSION	New Jersey
6090	NJ18-02	TRANSMISSION	New Jersey
6129	NJ18-05	TRANSMISSION	New Jersey
6140	NJ18-02	TRANSMISSION	New Jersey
6179	NJ18-05	TRANSMISSION	New Jersey
6190	NJ18-02	TRANSMISSION	New Jersey

6240	NJ18-02	TRANSMISSION	New Jersey
6290	NJ18-02	TRANSMISSION	New Jersey
6339	NJ18-02	TRANSMISSION	New Jersey
6340	NJ18-02	TRANSMISSION	New Jersey
6389	NJ18-02	TRANSMISSION	New Jersey
6437	NJ18-02	TRANSMISSION	New Jersey
6438	NJ18-02	TRANSMISSION	New Jersey
6439	NJ18-02	TRANSMISSION	New Jersey
6487	NJ18-02	TRANSMISSION	New Jersey
6537	NJ18-02	TRANSMISSION	New Jersey
6587	NJ18-02	TRANSMISSION	New Jersey
6640	NK18-11	TRANSMISSION	New Jersey
6690	NK18-11	TRANSMISSION	New Jersey
6735	NJ18-02	TRANSMISSION	New Jersey
6740	NK18-11	TRANSMISSION	New Jersey
6751	NK18-12	TRANSMISSION	New Jersey
6784	NJ18-02	CONVERTER PLATFORM & TRANSMISSION	New Jersey
6785	NJ18-02	TRANSMISSION	New Jersey
6790	NK18-11	TRANSMISSION	New Jersey
6801	NK18-12	TRANSMISSION	New Jersey
6833	NJ18-02	TRANSMISSION	New Jersey
6851	NK18-12	TRANSMISSION	New Jersey
6880	NJ18-02	TRANSMISSION	New Jersey
6901	NK18-12	TRANSMISSION	New Jersey
6930	NJ18-02	TRANSMISSION	New Jersey
6931	NJ18-02	TRANSMISSION	New Jersey
6951	NK18-12	TRANSMISSION	New Jersey
6981	NJ18-02	TRANSMISSION	New Jersey
7040	NK18-11	TRANSMISSION	New Jersey
7090	NK18-11	TRANSMISSION	New Jersey
7140	NK18-11	TRANSMISSION	New Jersey
6590	NK18-11	TRANSMISSION	New York
6011	NJ18-11	TRANSMISSION	Virginia
6021	NJ18-08	TRANSMISSION	Virginia
6061	NJ18-11	TRANSMISSION	Virginia
6070	NJ18-08	TRANSMISSION	Virginia
6071	NJ18-08	TRANSMISSION	Virginia
6104	NJ18-11	TRANSMISSION	Virginia
6106	NJ18-11	TRANSMISSION	Virginia
6107	NJ18-11	TRANSMISSION	Virginia
6108	NJ18-11	TRANSMISSION	Virginia
6109	NJ18-11	TRANSMISSION	Virginia

6110	NJ18-11	TRANSMISSION	Virginia
6120	NJ18-08	TRANSMISSION	Virginia
6155	NJ18-11	TRANSMISSION	Virginia
6156	NJ18-11	TRANSMISSION	Virginia
6161	NJ18-11	TRANSMISSION	Virginia
6169	NJ18-08	TRANSMISSION	Virginia
6170	NJ18-08	TRANSMISSION	Virginia
6207	NJ18-11	TRANSMISSION	Virginia
6208	NJ18-11	TRANSMISSION	Virginia
6209	NJ18-11	TRANSMISSION	Virginia
6218	NJ18-08	TRANSMISSION	Virginia
6219	NJ18-08	TRANSMISSION	Virginia
6256	NJ18-11	TRANSMISSION	Virginia
6257	NJ18-11	TRANSMISSION	Virginia
6267	NJ18-08	TRANSMISSION	Virginia
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6317	NJ18-08	TRANSMISSION	Virginia
6366	NJ18-08	TRANSMISSION	Virginia
6367	NJ18-08	TRANSMISSION	Virginia
6416	NJ18-08	TRANSMISSION	Virginia
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6515	NJ18-08	TRANSMISSION	Virginia
6564	NJ18-08	TRANSMISSION	Virginia
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6713	NJ18-08	TRANSMISSION	Virginia
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6862	NJ18-08	TRANSMISSION	Virginia
6863	NJ18-08	TRANSMISSION	Virginia
6912	NJ18-08	TRANSMISSION	Virginia
6962	NJ18-08	TRANSMISSION	Virginia
7011	NJ18-08	TRANSMISSION	Virginia
7012	NJ18-08	TRANSMISSION	Virginia
7061	NJ18-08	TRANSMISSION	Virginia
7111	NJ18-08	TRANSMISSION	Virginia

Appendix B. Route Position List

New Jersey Energy Link – Phase 1: POI North to POI South

	Latitude (WGS 84)	Longitude (WGS 84)
3nm Limit (north)	40.470591	-73.9179222
1	40.467943	-73.917922
2	40.465946	-73.915064
3	40.463955	-73.913031
4	40.461335	-73.911009
5	40.457306	-73.910145
6	40.448141	-73.909002
7	40.431228	-73.909135
8	40.412805	-73.909280
9	40.394267	-73.908696
10	40.391969	-73.908491
11	40.383642	-73.907601
12	40.373778	-73.906470
13	40.364932	-73.905967
14	40.364360	-73.905941
15	40.361539	-73.905890
16	40.358603	-73.905882
17	40.356020	-73.905973
18	40.349596	-73.903449
19	40.341979	-73.899199
20	40.338074	-73.897020
21	40.323139	-73.888689
22	40.306174	-73.879231
23	40.298177	-73.874774
24	40.292890	-73.871133
25	40.283509	-73.862655
26	40.271055	-73.856929
27	40.261745	-73.855737
28	40.215491	-73.859390
29	40.208160	-73.859780
30	40.198123	-73.860314
31	40.193324	-73.860867
32	40.186747	-73.861625
33	40.178601	-73.862564
34	40.169278	-73.863638

35	40.163270	-73.864629
36	40.145451	-73.868124
37	40.119927	-73.871829
38	40.115135	-73.872523
39	40.114653	-73.872724
40	40.114243	-73.872816
41	40.114019	-73.872842
42	40.113746	-73.872746
43	40.113363	-73.872611
44	40.113249	-73.872590
45	40.113172	-73.872608
46	40.112921	-73.872664
47	40.112686	-73.872770
48	40.112389	-73.872921
49	40.102022	-73.874422
50	40.072195	-73.878969
51	40.065538	-73.878505
52	40.065012	-73.878591
53	40.064575	-73.878734
54	40.064157	-73.878903
55	40.063890	-73.879035
56	40.063452	-73.879268
57	40.062857	-73.879318
58	40.062719	-73.879370
59	40.062359	-73.879900
60	40.062201	-73.880189
61	40.061984	-73.880709
62	40.060193	-73.883072
63	40.059879	-73.883563
64	40.059775	-73.883711
65	40.059716	-73.883795
66	40.059582	-73.883856
67	40.059179	-73.883906
68	40.059100	-73.883916
69	40.059055	-73.883936
70	40.059021	-73.883966
71	40.058996	-73.884005
72	40.058946	-73.884079
73	40.058821	-73.884267

74	40.058525	-73.884746
75	40.058362	-73.885008
76	40.044792	-73.893679
77	40.044124	-73.893865
78	40.043214	-73.894117
79	40.041412	-73.894414
80	40.038140	-73.894092
81	40.030364	-73.894035
82	40.030085	-73.894033
83	40.029556	-73.893889
84	40.028887	-73.893718
85	40.028678	-73.893748
86	40.028353	-73.893816
87	40.027825	-73.894227
88	40.027478	-73.894311
89	40.027229	-73.894315
90	40.025960	-73.894002
91	40.025429	-73.893998
92	40.009070	-73.893876
93	39.927675	-73.905901
94	39.836467	-73.908798
95	39.805489	-73.907841
96	39.788203	-73.909199
97	39.699308	-73.932258
98	39.683153	-73.946119
99	39.650899	-73.966945
100	39.634826	-73.979454
101	39.623794	-73.992828
102	39.614012	-74.019348
103	39.599690	-74.038887
104	39.591702	-74.046322
105	39.589189	-74.048539
106	39.587055	-74.050600
107	39.549902	-74.051000
108	39.543018	-74.050598
109	39.538546	-74.050863
110	39.536539	-74.050655
111	39.534473	-74.050441
112	39.533765	-74.050368

113	39.533488	-74.050339
114	39.532812	-74.050145
115	39.532048	-74.049942
116	39.531638	-74.049960
117	39.531205	-74.050009
118	39.530364	-74.050351
119	39.529693	-74.050448
120	39.529176	-74.050422
121	39.527958	-74.050361
122	39.527674	-74.050382
123	39.526698	-74.050455
124	39.520250	-74.050935
125	39.491104	-74.066827
126	39.484983	-74.073668
127	39.482707	-74.080619
128	39.479049	-74.091784
129	39.475762	-74.101812
130	39.471082	-74.112180
131	39.443672	-74.145846
132	39.433841	-74.151298
133	39.411735	-74.163740
134	39.381625	-74.187447
135	39.363365	-74.201479
136	39.343353	-74.203549
137	39.316432	-74.206310
138	39.295402	-74.262293
139	39.292130	-74.300912
140	39.274701	-74.332513
141	39.260157	-74.337113
142	39.236608	-74.344472
143	39.210695	-74.359822
144	39.201488	-74.384517
145	39.199960	-74.390514
146	39.196664	-74.395423
147	39.196072	-74.396232
148	39.194857	-74.397583
149	39.191984	-74.401016
150	39.173767	-74.423109
151	39.162751	-74.436596

152	39.156848	-74.443604
153	39.136790	-74.467404
NJ So. Conv. Platform	39.109129	-74.493398
155	39.121642	-74.488480
156	39.159602	-74.469225
3nm Limit (south)	39.285175	-74.460430

New Jersey Energy Link – Phase 2: North Hub

		Latitude (WGS 84)	Longitude (WGS 84)
1	NJ North Converter Platform	39.456231	-74.131308

New Jersey Energy Link – Phase 3: Central Hub to POI Central

	Latitude (WGS 84)	Longitude (WGS 84)
NJ Central Conv. Platform	39.303232	-74.238515
1	39.334136	-74.234728
2	39.349674	-74.231021
3	39.359867	-74.226388
4	39.371104	-74.218401
5	39.380087	-74.215548
6	39.417223	-74.206280
7	39.434497	-74.202823
8	39.446423	-74.200965
9	39.452744	-74.199319
10	39.458384	-74.198565
11	39.466545	-74.200489
12	39.490642	-74.201508
3nm Limit (central)	39.524427	-74.189039

Bay Link

	Latitude (WGS 84)	Longitude (WGS 84)
NJ So. Conv. Platform	39.109129	-74.493398
1	39.101944	-74.500625

2	39.096139	-74.503366
3	38.918694	-74.505402
4	38.864564	-74.515335
5	38.827403	-74.532910
6	38.791640	-74.563693
7	38.773231	-74.582842
8	38.761378	-74.598156
9	38.732859	-74.631021
10	38.639290	-74.724302
DE Converter Platform	38.622569	-74.745674

Delmarva Energy Link – Phase 1: POI North to POI Central

	Latitude (WGS 84)	Longitude (WGS 84)
3nm Limit (north)	38.657922	-75.001734
1	38.655974	-74.996264
2	38.655116	-74.990863
3	38.654714	-74.983201
4	38.652195	-74.975757
5	38.607662	-74.808559
6	38.604765	-74.798008
7	38.604271	-74.789737
8	38.605358	-74.781923
9	38.608378	-74.775566
DE Conv. Platform	38.622569	-74.745674
11	38.616387	-74.753574
12	38.595312	-74.782083
13	38.562385	-74.801274
14	38.541465	-74.813181
15	38.506882	-74.827045
16	38.478154	-74.854109
17	38.474093	-74.857317
18	38.472430	-74.859015
19	38.470900	-74.860577
20	38.468558	-74.862751
21	38.465985	-74.863486
22	38.461537	-74.863855
23	38.452998	-74.863593
24	38.431256	-74.863634

25	38.370291	-74.863663
26	38.347672	-74.862671
27	38.326042	-74.862712
28	38.319464	-74.854948
29	38.311153	-74.844433
30	38.304377	-74.835303
MD Conv. Platform	38.296577	-74.825288
32	38.287176	-74.849028
33	38.254315	-74.891130
34	38.253135	-74.905043
35	38.258835	-74.931314
36	38.281077	-74.953431
37	38.317431	-74.985747
3nm Limit (south)	38.321173	-75.020421

Delmarva Energy Link – Phase 2: MD Hub to VA POI South

	Latitude (WGS 84)	Longitude (WGS 84)
MD Conv. Platform	38.296577	-74.825288
1	38.286229	-74.827364
2	38.274703	-74.830423
3	38.215217	-74.861204
4	38.165224	-74.891507
5	38.139313	-74.910244
6	38.106615	-74.928088
7	38.078822	-74.935489
8	38.059152	-74.941538
9	38.031136	-74.948344
10	38.002525	-74.961172
11	37.967449	-74.982500
12	37.900494	-75.017700
13	37.858977	-75.046453
14	37.781980	-75.116667
15	37.672037	-75.221618
16	37.550665	-75.302252
17	37.462393	-75.342718
18	37.368118	-75.385823
19	37.233507	-75.439086
20	37.081229	-75.489699

21	36.973231	-75.487060
22	36.917025	-75.486033
VA Conv. Platform	36.903900	-75.480100
24	36.886579	-75.484803
25	36.821676	-75.484393
26	36.819758	-75.628346
27	36.791275	-75.697349
28	36.789096	-75.700019
29	36.789086	-75.701700
30	36.784727	-75.707040
31	36.780368	-75.712379
32	36.780271	-75.728516
33	36.738843	-75.779198
34	36.738832	-75.780878
35	36.738014	-75.781878
36	36.738008	-75.782886
37	36.723557	-75.800544
38	36.720617	-75.809020
39	36.720544	-75.819564
3nm Limit (south)	36.748249	-75.877969

Delmarva Energy Link – Phase 2 Alternative: – MD Hub to VA POI North

	Latitude (WGS 84)	Longitude (WGS 84)
MD Conv. Platform	38.296577	-74.825288
1	38.286229	-74.827364
2	38.274703	-74.830423
3	38.215217	-74.861204
4	38.165224	-74.891507
5	38.139313	-74.910244
6	38.106615	-74.928088
7	38.078822	-74.935489
8	38.059152	-74.941538
9	38.031136	-74.948344
10	38.002525	-74.961172
11	37.967449	-74.982500
12	37.900494	-75.017700
13	37.858977	-75.046453
14	37.781980	-75.116667

15	37.672037	-75.221618
16	37.550665	-75.302252
17	37.462393	-75.342718
18	37.368118	-75.385823
19	37.233507	-75.439086
20	37.081229	-75.489699
21	36.973231	-75.487060
22	36.917025	-75.486033
VA Conv. Platform	36.903900	-75.480100
23	36.863993	-75.723506
24	36.864334	-75.777778
25	36.863216	-75.784728
26	36.863104	-75.801500
27	36.862692	-75.860371
28	36.863479	-75.862582
29	36.863358	-75.879072
30	36.865501	-75.881789
31	36.865494	-75.882799
32	36.867637	-75.885516
33	36.867622	-75.887535
34	36.868158	-75.888215
35	36.868110	-75.894609
36	36.867837	-75.894943
37	36.867826	-75.896289
38	36.863727	-75.901962
39	36.863637	-75.913741
3nm Limit (south)	36.863346	-75.914096