

Atlantic Link Cable  
December 6, 2017

Prepared for:  
Northeast Regional Ocean Council (NROC)  
[www.northeastoceandata.org](http://www.northeastoceandata.org)

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## 1. INTRODUCTION

Atlantic Link has a goal of delivering clean, reliable, carbon-free electricity from land-based wind farms and hydro facilities in Atlantic Canada through a secure, subsea transmission cable. The transmission line will extend from Coleson Cove, south of Saint John, New Brunswick, underwater to Plymouth, Massachusetts where it will connect to use electricity infrastructure that currently connects the grid to Pilgrim nuclear station. That plant is scheduled to retire in 2019. This ~375-mile, 1,000 MW subsea high voltage direct current (HVDC) interconnection will deliver 5.69 terawatt hours (TWh) of clean energy annually, directly to Massachusetts, for a delivered price that remains fixed for 20 years. Atlantic Link's supply mix is over 70% wind energy from yet to be constructed wind farms in New Brunswick and Nova Scotia. The balance is hydro, supplied by Nalcor Energy and NB Power. The project has been proposed in response to the Massachusetts Clean Energy RFP (<https://macleanenergy.com>), under which the state's electric utilities have called for approximately 9.45 terawatt hours (TWh) of wind and/or hydro energy.

Link to summary PDF:

<https://www.atlanticlink.com/files/documents/Atlantic-Link-Fact-Sheet-October-2017.pdf>

Project website:

<https://www.atlanticlink.com/the-project/>

## 2. PURPOSE

To represent the location of renewable energy projects in the northeastern U.S. in support of coastal and ocean use planning.

### 3. SOURCES AND AUTHORITIES

- Shapefile provided by VHB
- Clean Power Northeast Development, a subsidiary of Emera Inc.
- Atlantic Link Fact Sheet (<https://www.atlanticlink.com/files/documents/Atlantic-Link-Fact-Sheet-October-2017.pdf>)
- Atlantic Link Project Website (<https://www.atlanticlink.com/the-project/>)
- Draft Supplemental Environmental Assessment for the University of Maine's Deepwater Offshore Floating Wind Turbine Testing and Demonstration Project – U.S. Department of Energy (January 2013)  
<http://energy.gov/sites/prod/files/EA-1792-S1-DSEA-2013.pdf>

### 4. DATABASE DESIGN AND CONTENT

Native storage format: ArcGIS File Geodatabase – simple feature class

Feature Types: Polyline

Data Dictionary:

Line	Name	Definition	Type	Size
1	OBJECTID	Uniquely identifies a feature	OBJECTID	*
2	Shape	Geometric representation of the feature	geometry	*
3	Id	Unique Numeric Identifier	Long	*
4	Length	Segment Length	Double	*
5	Note	Text information on route identity	Text	50

Feature Class Name: AtlanticLinkCable

Total Number of Unique Features: 2

Dataset Status: Complete

### 5. SPATIAL REPRESENTATION

Geometry Type: vector polyline

Reference System: GCS North American 1983

Horizontal Datum: North American Datum 1983

Ellipsoid: Geodetic Reference System 1980

XY Resolution: 1000000000.0000001

Tolerance: 0.0000000089831528411952117

Geographic extent: 45.152, -70.647

ISO 19115 Topic Category: environment, oceans, energy

Place Names: Place Names:

Atlantic, Bay of Fundy, Cape Cod Bay, Coleson Cove, Gulf of Maine, Massachusetts Bay, New Brunswick, Plymouth, Saint John

Recommended Cartographic Properties:

(Using ArcGIS ArcMap nomenclature)

Preferred Route: Simple Line Symbol: Style: Solid, Width: 2, Color: 0-0-31, color model: HSV

Alternative Route: Simple Line Symbol: Style: Solid, Width: 2, Color: 20-50-96, color model: HSV

Scale range for optimal visualization: 1,000,000 to 4,000,000

## 6. DATA PROCESSING

Processing environment: ArcGIS 10.1 SP1, Windows 7 Professional, Intel Core i5 CPU

	Process Steps Description
1	Project provided shapefile from NAD_1983_StatePlane_Massachusetts_Mainland_FIPS_2001_Feet coordinate system to GCS_North_American_1983 coordinate system.

## 7. QUALITY PROCESS

Attribute Accuracy: Descriptive information was acquired from authoritative sources.

Logical Consistency: Line features are topologically consistent.

Completeness: This data is complete based on information from the developer team.

Positional Accuracy: Accurate based on source material

Timeliness: Up to date as of November 2017

Use restrictions: Not for Navigation.

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