The Value of Outreach

Key Crossing Reliability Initiative
Key to Success

- Identifying key stakeholders
- Establishing Relationships
- Telling Our Story; Outreach
- Listening to concerns
- Engaging with stakeholders
- Being Responsive
- Addressing concerns/questions
- Incorporating feedback into design
- Keeping stakeholders informed throughout the process
Large Multi Year Projects; Doing it a little different

- Strategy for outreach must be multi faceted
- Multi year projects are challenging to keep key stakeholders engaged and informed
- Various tools of engagement/education
  - Fact Sheet/sheets
  - Open houses
  - Stakeholder meetings
  - Renderings of before/after
  - Website
  - Social Media
  - Video
  - Outreach PowerPoint/decks
BGE Outreach: Project Success

- Educate the public on the project
- Provide a forum to receive feedback
- Evaluate any potential concerns with the alternatives being presented
- Refine alternatives and re-engage stakeholders
Outreach Strategies

- Keep Local and State Elected and Appointed Officials updated throughout the project
- Attend meetings with key community organizations to provide project information
- Work with agencies to understand and satisfy permitting requirements; share project information and solicit feedback; incorporate changes
- Meet with large business customers such as Port Covington and Tradepoint Atlantic
- Coordinate meetings with Environmental Interest Groups
PROJECT BACKGROUND

www.bge.com/keycrossing
In the early 1970’s, BGE put into service two 230kV transmission circuit segments that run under the Patapsco River adjacent to the Key Bridge.

The segments are composed of high voltage cables that run from Hawkins Point to Sollers Point inside of steel pipes pressurized with mineral oil.

The cables are exhibiting symptoms of degradation and approaching the end of their useful service life.

The system was installed in cooperation with Baltimore City’s installation of a water main and a BGE gas main.
Project Background – 230kV Transmission Ring

The existing cables are a critical link in the networked electrical system and failure could result in operational restrictions.
Underground Cable Replacement Option

BGE studied replacing the existing transmission cables underground. This option:

- **Significant environmental impacts** within the Chesapeake Bay Critical Area and Patapsco River
- **Impacts waterway activities** including Port of Baltimore commercial and recreational traffic
- No visual impact to the waterway
- Will have the **highest cost impact** for BGE ratepayers
- Meets operational requirements
- Would have the **least opportunity for job creation** in Maryland and domestically
- Highest impact to **current and future shipping channel**
BGE proposes replacing the existing cables with overhead transmission lines. This solution:

- **Minimizes temporary and permanent impacts** to the Patapsco River/Chesapeake Bay Critical Area
- **Limited disruption to waterway activities** including Port of Baltimore/commercial and recreational
- Visual impact to the waterway
- Will have the **lowest cost impact** for BGE ratepayers
- Meets operational requirements
- Has the greatest **potential for local and domestic job creation**
- Uses **proven technology** for the foundations, towers, conductors & collision protection structures
Overhead Transmission Line: Route

Tower 1
Tower 2
Tower 3
Tower 4
Tower 5
Tower 6
Tower 7
Tower 8
Overhead Transmission Line:
Overhead Transmission Line: Tower Spacing
Monopole

- Smaller footprint in river
- Least environmentally impactful
- Elevation range 165’ to 397’

194’-3” X 141’-3”
Overhead Transmission Line

Monopole Concept Rendering
Overhead Transmission Line

Monopole Concept Rendering
Overhead Transmission Line

Monopole Concept Rendering
Overhead Transmission Line

Monopole Concept Rendering
Construction Planning

- Based upon the marine nature of the proposed construction work BGE has engaged Cianbro for constructability analysis
  - Recognized leader in complex civil infrastructure projects specializing in marine fixed structures, pile driving and deep foundations
  - Recognized leader in the electrical transmission & distribution, electrical substation, and wind and solar industries
  - Operates in more than 40 states (including MD), maintains corporate offices in Pittsfield Maine, and maintains a local presence in Curtis Bay

- Objectives of the constructability analysis include:
  - Definition / validation of construction means and methods
    - Construction sequencing and activity durations
    - Equipment requirements – vehicles, cranes, barges, etc.
    - Validation of construction material estimates
    - Validation of construction assumptions applied to permitting efforts
Innovative Overhead Opportunities

Towers 3 & 4 Structures – Preliminary 65% Design

Monopole Tower 4 Collision Protection Structure – Preliminary 65% Design
Innovative Overhead Opportunities

- BGE is exploring **innovative** ideas to mitigate the impacts of an overhead solution including:
  - Collision protection structures around foundations
  - Approaches to avian issues
  - Tidal wetland mitigation
  - Creating oyster habitat

- **Strategic Stakeholder Partnerships**
  - State Agencies (MDTA, MPA, MHT)
  - Environmental Groups
  - Local Jurisdictions
  - Environmental Regulators
  - Community Groups
Project Timeline

A variety of different concepts were evaluated.

Applications for environmental & utility permits were filed in late 2018.

Construction expected to take about two years once all the permits are received.

Stakeholder Outreach Program established to inform & seek input from external stakeholders.

Permitting process.

Completion of detailed engineering & design for monopoles, foundations & vessel collision protection structures.

New lines put in-service.

Previously used infrastructure decommissioned.

key crossing reliability initiative
Environmental Regulatory Process

BGE must assess the environmental impacts of constructing this line including:

- Evaluating the existing conditions of the river bottom
- Investigating soil conditions at proposed transmission tower locations
- Reviewing natural resources, protected species, and habitats
- Identifying hazardous and environmentally sensitive materials
- Identifying historical and cultural resources

Final design and construction requires BGE to secure the following regulatory approvals:

- Joint Permit Application (JPA)
- Certificate of Public Convenience & Necessity (CPCN)
- Tidal Wetland License
- Chesapeake Bay Critical Area Compliance
- Baltimore City & County Environmental Compliance
Environmental Regulatory Process Update Summary

- Early identification of stakeholders and coordination with regulatory agencies
- Participated in over 50 meetings with project stakeholders over 3-year period
- Ongoing coordination with regulatory agencies has helped with the project development and streamlined permit application efforts
- All necessary permit applications have been filed with regulators
# Environmental Regulatory Process Permit Update

<table>
<thead>
<tr>
<th>Permits Required</th>
<th>Status</th>
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<tbody>
<tr>
<td>Federal Aviation Administration (FAA) Permit - Determination of no hazard</td>
<td>Received initial determination letters w/ instruction for towers 1-7. Resubmit within one year of construction. No unexpected requirements</td>
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<tr>
<td>Chesapeake Bay Critical Area Commission</td>
<td>Approved August 2019</td>
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<tr>
<td>MDE Nontidal Wetlands Authorization - Peige Wetland Bank Mitigation</td>
<td>Under review; Expected Fall 2019</td>
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<tr>
<td>Maryland Historic Trust</td>
<td>Recommended “Finding of No Adverse Impact” – 08/2019</td>
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<tr>
<td>MD Board of Public Works - Tidal Wetland License</td>
<td>Awaiting recommendation from MDE Tidal; Expected Fall 2019</td>
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<tr>
<td>US Army Corps of Engineers Authorization - Chestnut Hill Cove Mitigation Permit - Section 408 Permit - Public Hearing</td>
<td>Submitted August 2019 Under review Held 07.2019; No outstanding issues identified</td>
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<tr>
<td>Baltimore County Grading Permit</td>
<td>Submitted August 2019</td>
</tr>
<tr>
<td>Baltimore City - Building Permit - Erosion &amp; Sediment Control &amp; SWM Plans</td>
<td>Submitted August 2019</td>
</tr>
<tr>
<td>MD Port Administration Construction Permit</td>
<td>Submitted August 2019; No impact expected</td>
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Outreach Coordination Meetings (to date)

- AA County DPW Director – May 2017; October 2018
- Baltimore City DPW – June 2016; January 2017; November 2018
- Baltimore City Elected Officials – May 2017; October 2018
- Baltimore City Planning - CHAP – July 2017; November 2018
- Baltimore County Public Works – January 2017; May 2019
- Baltimore County Elected Officials – May 2017; October 2018; March/April 2019
- Baybrook Alliance – September 2017; February 2019
- Locust Point Civic Association – January 2018; November 2018
- MD Transportation Authority – January 2018; October 2018
- U.S. Fish and Wildlife – January 2018; April 2019
- Canton Community Association – February 2018
- Baltimore City Community Council – March 2018
- Blue Water Baltimore – April 2018; October 2018
- Chesapeake Bay Foundation – April 2018; October 2018
- Audubon Society – May 2018
- Department of Natural Resources (JE) – May 2018; September 2018; May 2019
Outreach Coordination Meetings (continued)

- Maryland Port Administration (MPA) – April 2015; June 2016; January 2018
- PPRP (w/ ACOE, NOAA, MHT, MDE) – August 2015; September 2016; February 2017; November 2017; September 2018; February 2019
- Maryland Board of Public Works (BPW) – April 2016
- Maryland Department of the Environment (MDE) – April 2016; September 2018
- Environmental Agency Summit – June 2016
- National Park Service – June 2016; October 2018; March 2019
- Fort McHenry – June 2016; January 2018; October 2018; March 2019
- Maryland Historic Trust – September 2016; October 2018; May 2019
- Harbor Pilots – September 2016; December 2017
- Governor’s Office – June 2017
- JE – May 2017; November 2017; September 2018
- Baltimore City Planning – Env. Review – July 2017
- Army Core of Engineers – April 2016; September 2018
- Anne Arundel (AA) County State & Local Elected Officials – May 2017; October 2018
- AA Local Community Council – December 2017
- AA County Public Works – January 2017; October 2018
Outreach Coordination Meetings (continued)

- Chestnut Hill Cove Community Association; February 2019
- Turner Station Community Association Open House; March 2019
- PPRP/MDE/CORE Site Visit; March 2019
- National Park Conservation Association; March 2019
- Oyster Recovery Partnership; April 2019
- National Marine Fishery; May 2019
- PSC Engineer Staff Tour; May 2019
- Baltimore County State Elected Officials District 6; May 2019
- Chesapeake Bay Foundation; June 2019
- Marine Trade Association Baltimore County; June 2019
- Baltimore City State Elected Officials District 46; June 2019
- Blue Water Baltimore; June 2019
- PPRP/OPC/PSC Meeting; July 2019
Upcoming Outreach Efforts

- Continue to work with agencies throughout permit process; JPA/CPCN
- Continue listening to stakeholders and work with them
- Circling back with stakeholders previously met with to update on the project
- CPCN Public Hearings September 2019
- Outreach to new/expanded stakeholders
- www.bge.com/keycrossing
Questions?

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