

**Initial Recommended Licensing Conditions**

**PSC Case No. 9600**

**Baltimore Gas and Electric Company (BGE) - Key Crossing Reliability Initiative Transmission Line Project in Baltimore, Maryland**

1. Applicable Laws and Regulations - Construction and operation of the transmission line shall be undertaken in accordance with this certificate and shall comply with all applicable local, State, and federal laws and regulations, including but not limited to the following:
  - a. Tidal Wetlands – COMAR 26.23 et seq. applies to activities conducted in State and private tidal wetlands
  - b. Nontidal Wetlands – COMAR 26.23.01 applies to activities conducted in nontidal wetlands and wetland buffer.
  - c. Waterway Construction – COMAR 26.17.04 applies to regulations governing construction activities in nontidal waters and floodplains.
  - d. Water Quality and Water Pollution Control – COMAR 26.08.01 through COMAR 26.08.04 applies to discharges to surface water and maintenance of surface water quality.
  - e. Erosion and Sediment Control – COMAR 26.17.01 applies to the preparation, submittal, review, approval, and enforcement of erosion and sediment control plans.
  - f. Forest Conservation – Maryland's Forest Conservation Act, Md. Code, Section 5-1601 et seq. of the Natural Resources Article.
  - g. Threatened and Endangered Species – COMAR 08.03.08 applies to actions affecting threatened or endangered species on State or private lands.
  - h. Critical Area Commission for the Chesapeake and Atlantic Coastal Bays – COMAR 27.02.04 applies to major development on private lands resulting from State actions, and COMAR 27.02.05 applies to major development on state lands resulting from State actions.
  - i. Particulate Matter from Materials Handling and Construction - COMAR 26.11.06.03D, applies to airborne particulate matter such that a person may not cause or permit any material to be handled, transported, or stored, or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.

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- i. Nuisance - COMAR 26.11.06.08, applies to the creation of nuisance or air pollution such that an installation or premises may not be operated or maintained in such a manner that a nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be construed as authorizing or permitting the creation of, or maintenance of, a nuisance or air pollution.
  - j. Odors - COMAR 26.11.06.09, applies to the discharge of air pollution such that a person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that a nuisance or air pollution is created.
  - k. Noise - COMAR 26.02.03, applies to noise regulations whereby BGE shall construct and operate the proposed Project in such a way that it complies with the Maryland noise regulations in and with relevant Anne Arundel County, Baltimore County and Baltimore City noise ordinances.
2. CPCN Expiration - Construction of the BGE Key Crossing transmission Project must commence within three (3) years of receiving the Certificate of Public Convenience and Necessity (CPCN) from the Public Service Commission (PSC) and must be completed for operation by December 31, 2022. If conditions warrant an extension of this schedule, BGE must notify the PSC and the Power Plant Research Program (PPRP) and explain the reason for the requested extension, which notification shall be entered in the PSC Docket for the case. At that time, PPRP will determine if the Project requires additional review and whether the licensing conditions should be updated to current standards and practices. Notwithstanding any such extension, this CPCN shall expire if the BGE Project is not constructed and operational within five (5) years of the CPCN issuance date.
3. Project Design - BGE shall maintain the following minimum operational clearances: 1,500' horizontal, 215' vertical, and 60' depth where it crosses the main shipping channel. BGE shall maintain minimum landside aerial clearances of overhead wires: 40' high between tower 1 and existing towers 1165 and 2756 (former substation area), and 15' high between towers 1165 and 1164 and 2756 and 2755 (over Dock Road).
4. Project As-Built Engineering Details - BGE shall provide PPRP and the PSC Engineering Staff with the following as-built details in accordance with COMAR 20.79.04.02A:

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- a. Engineering and construction plans of the linear facilities, including right-of-way (ROW) width, length and total acreage of the ROW;
- b. Transmission line structure and foundation types, dimensions, locations, and depths;
- c. Transmission line conductor configuration; and
- d. Nominal length of spans between transmission line structures.

Where the above-listed as-built details are identical to those submitted with the CPCN application, BGE shall provide a statement to this effect and not resubmit the information. In addition, BGE shall provide engineering and construction plans for all new access roads and those modifications to existing access roads for which a construction drawing is required for permitting, as well as the final plans for roadway reclamation, if any, following construction of the proposed Project.

5. Sediment and Erosion Control - BGE shall employ erosion and sediment control best management practices (BMPs) presented in the Maryland Department of the Environment (MDE) document titled, *2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control*, and as otherwise may be approved or required by Baltimore and Anne Arundel Counties and Baltimore City. All terrestrial portions of the ROW disturbed during construction shall be stabilized as soon as practicable after the cessation of construction activities within that portion of the ROW, followed by seed application, except in actively cultivated lands, in accordance with the above cited document. In no instance shall non-native species be seeded or otherwise planted.
6. ROW Management - BGE shall advise the PSC and PPRP that copies of contract specifications for clearing, construction, and rehabilitation of the rights-of-ways are available within thirty (30) days of preparing them, but prior to the beginning of construction. BGE shall provide the same advisement to the PSC and PPRP for contract specifications for pile-driving, tower-construction, conductor stringing, and other Project activities in the Patapsco River.
7. Wetlands and Waterways - BGE shall apply to MDE for all required permits for construction in wetlands, waterways, or floodplains. To support each such permit application, BGE shall assess and quantify, if

possible, all impacts (temporary or permanent) to the following resources prior to any construction activities:

- a. Streams and their 100-year floodplains, and
  - b. Non-tidal wetlands and their regulated buffers, and
  - c. Tidal wetlands and their buffers.
8. BGE shall not start construction in any State Tidal Wetland until the Board of Public Works has issued a tidal wetlands license in accordance with Section 16-202, Environment Article, the Annotated Code of Maryland. See also COMAR 23.02.04.
9. Vegetation Management - BGE shall implement the conditions set forth below in all terrestrial portions of the Project. BGE shall manage the ROW vegetation by employing the measures specified in paragraphs (a) through (c) below, utilizing the wire zone/border zone definitions and management approaches specified in Best Management Practices: Integrated Vegetation Management (IVM) for Utility Rights-of-Way (R. Miller, International Society of Arboriculture, Second Edition, 2014). As defined by DNR, the border zone on each side of the ROW begins at the outer edge of the ROW and ends roughly 10 feet from the outermost conductor(s), while the wire zone is the section of the ROW directly under the wires and extending outward roughly 10 feet on each side of the outermost conductor. The resulting vegetation clearances shall be compliant with applicable North American Electric Reliability Corporation (NERC) and Federal Energy Regulatory Commission (FERC) rules, guidance, policies, procedures, and/or regulations.
- a. Post-construction, BGE, subject to local grass height ordinances, shall not mow areas within the ROW maintained as grasses and forbs during the breeding season for ground nesting birds from May through August of each year. If mowing is necessary outside of the May through August breeding season, the mowed height will be no less than 10 inches in the border zone and no less than 6 inches in the wire zone, with the exception of areas under special management for invasive species control. Vegetation within the border zone will be maintained as a low-growing plant community dominated by small native trees and woody shrubs.
  - b. Herbicide applications employed to establish and maintain IVM shall be performed in accordance with industry best practices and incorporated into the plans to accomplish the desired habitat, as

described in Licensing Conditions 7(a) and 7(b) above, while allowing for adequate access by BGE.

- c. All wetlands, and stream and wetland buffers (as defined by MDE), shall be maintained through IVM protocols that minimize mechanical mowing and are designed to obtain a sustainable vegetation community of maximum height and density consistent with NESC transmission line safety standards. A "riparian corridor" vegetation management regime shall be employed at stream crossings and shall extend in an upland direction no less than 25 feet beyond the top of the stream bank or 25 feet beyond the boundary of the mapped 100-year floodplain, whichever is greater. In these areas, the wire zone shall be treated as border zone for vegetation management purposes. If BGE requires a mowed access track through any wetland or stream or wetland buffer, all mowing shall be restricted as described in Licensing Condition 7(a) above.
10. Wildlife Protection - BGE shall minimize construction disturbance to all disturbance-sensitive species that may be present in or adjacent to the Project corridor, including but not limited to the use of fencing or other markers (e.g. buoys to exclude water traffic) around known habitat areas, restricting construction activities during breeding or growing seasons, and implementing a third-party environmental monitoring program during construction activities.
- a. Required Approvals - BGE shall obtain all required DNR, MDE, and NMFS approvals for wildlife protection prior to the start of Project construction. BGE shall notify and consult with the DNR WHS to determine appropriate actions if any additional Federal- or State-listed rare, threatened, or endangered species are encountered during planning, construction, or maintenance of this facility.
  - b. Instream Construction - Instream construction shall be suspended at or near Towers 3, 4, and 5 from February 15 through June 15. In addition, instream construction shall be suspended at Towers 5 and 6 from November 15 through March 1. During construction, DNR's recommended protective measures for fish and other aquatic wildlife shall be followed to the maximum extent practicable, including but not limited to the use of turbidity curtains, ramp-up construction initiation to allow animals to avoid impact, and the maximum

possible use of a vibratory hammer to limit noise impacts on sensitive species.

- c. Above Water Construction - During construction of the proposed Project, no construction activities at or above the waterline shall take place in DNR-designated Waterfowl Concentration Areas at or near Towers 5 and 6 during the migratory period for waterfowl from November 15 through March 1. If BGE determines during construction that there is good cause to modify or waive this restriction at Tower 5, it shall apply to DNR for a waiver as described in subparagraph (g) below.
- d. NMFS Consultation - BGE shall coordinate with NMFS to determine if additional restriction periods are required to protect sea turtles and/or marine mammals.
- e. Sediment Sampling - BGE shall implement a sampling program for assessing the macroinvertebrate community (using Chesapeake Bay Program protocols) and the megabenthos (using a beam trawl) in the Patapsco River construction corridor, excluding the shipping channel, prior to and one year after construction. The sampling design should include the detail necessary to assess benthic community condition in shallow waters near the footprint of towers. Samples should be collected in spring, summer, and fall in each sample year. A sampling plan shall be submitted to PPRP for review and comment at least 60 days prior to the scheduled start of sampling. A report on the results of the initial sampling event shall be submitted to PPRP at least 30 days prior to the start of construction. An updated final report shall be provided after completion of the second sampling event and shall be filed in the PSC docket for the case.
- f. Avian Protection - During operation of the proposed Project the Applicant will implement the following avian protection measures:
  - i. Use industry accepted isolation standards between energized and/or grounded structures, conductors, hardware, or equipment that could be bridged by birds to complete a circuit. APLIC (2006 and 2012) recommend 94 inches for horizontal spacing and 74 inches for vertical spacing for a standard 230-kV transmission line.

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- ii. To limit the potential for collisions, the proposed Project will have phase conductors with a diameter greater than 1.41 inches and shield wires greater than 0.56 inches to increase the visibility of the wires (APLIC 2006 and 2012). Aerial marker spheres in an alternating color sequence will also be installed every 200 feet to reduce risk of collision.
- iii. If the new transmission towers are used for nesting purposes by ospreys or other birds of prey, the possible removal of those nests would be managed in accordance with the applicable federal regulations as outlined in BGE's Avian Management Program Guidelines (BGE, 2014).
- g. Waiver Requests - Any request for waivers from the above restrictions shall be requested of and approved by the cognizant state or federal agency, with copies of the request and approval provided to PPRP and filed in the PSC docket for the case.

11. Chesapeake Bay Critical Area

- a. Construction and operation of the Project shall comply with all applicable local and State requirements for disturbances to the Critical Area per Code of Maryland Regulations or COMAR 27.02.04 and COMAR 27.02.05.
- b. Prior to the start of construction, BGE shall meet the following requirements:
  - i. Provide final Critical Area impact values and mitigation measures to Critical Area Commission staff for review and approval in conformance with Baltimore City's Critical Area Program, Baltimore County's Critical Area Program, and per COMAR 27.02.05 for any impacts to lands owned by the Maryland Port Administration;
  - ii. Provide final mitigation plans, including copies of all necessary planting plans and Buffer Management Plans, demonstrating compliance with the approved impact values and mitigation requirements;
  - iii. Provide copies to Critical Area Commission staff of authorizations or approvals by the Board of Public Works for

tidal wetlands, by the Maryland Department of the Environment for nontidal wetlands, and by Baltimore City for erosion and sediment control and stormwater management;

- iv. Implement all recommendations provided by the Department of Natural Resources Wildlife and Heritage Service and comply with Time of Year restrictions in order to ensure species protection;
  - v. Implement all recommendations provided by the Maryland Historic Trust regarding impacts to historic properties and structures; and
- c. BGE shall submit any proposal to use the banked impervious surface reduction of 2.02 acres at the Hawkins Point and 1.64 acres at Sollers Point to meet stormwater management requirements to Commission staff for review and approval.
12. Invasive Species - For a period of 5 years subsequent to the completion of construction, BGE shall monitor all terrestrial areas of the Project ROW once yearly during the June - September growing season to identify any individuals or populations of non-native invasive species. BGE will attempt to control any such species through mowing or the use of EPA-approved herbicides and pesticides as needed. BGE will provide a yearly report to PPRP containing the locations of the invasive species populations, as well as the methods used to control them. BGE will also note the presence of any new invasive species on the Project site.
13. Pollinator Habitat - BGE shall use native flowering plants to establish and maintain long-term pollinator habitats where possible on the terrestrial portions of the proposed Project site. If the fostering of pollinator habitat is deemed feasible, BGE shall develop a Pollinator Habitat Plan that sets forth details of the pollinator habitat and includes the following:
- a. Maps of designated pollinator habitat areas on the Project site;
  - b. Lists and descriptions of all intended target native plant species for the pollinator areas;
  - c. Methods for planting the pollinator areas;



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- d. All management methods for the pollinator areas, including elimination of non-native invasive species, mowing, herbicides, and other pertinent criteria;
  - e. Projected success goals for the pollinator habitats, including expected percent survival statistics of all planted species during a period of five years after installation, and contingency planting for areas of nonestablishment; and
  - f. BGE shall submit the Pollinator Habitat Plan to DNR for review at least 30 days before completion of Project construction.
14. Maryland Historical Trust - Prior to construction, BGE shall certify to the PSC and PPRP that it has addressed all Maryland Historical Trust (MHT) concerns and recommendations for the mitigation of Project impacts upon cultural and archaeological resources.
15. Visual Impacts on Fort McHenry - BGE shall apply pre-dulled, galvanized coatings to monopole structures prior to structure erection.
16. Underwater Archeological Resources - If avoidance of identified underwater archeological resources during construction is not possible, BGE will conduct further underwater investigations, in consultation with the MHT and the United States Army Corps of Engineers, to identify and evaluate potentially affected underwater resources.
17. Archeological Discoveries - In the event that construction reveals unforeseen archeological sites, BGE, in consultation with and as approved by the MHT and cooperating federal agencies, shall develop and implement a plan for avoidance and protection, data recovery, or destruction without recovery of such relics or sites.
18. Oversize/Overweight Loads - BGE shall comply with all permit requirements for transport of oversize or overweight loads on State and local roads and obtain appropriate approvals as necessary.
19. Traffic Management- BGE shall mitigate disruptions to commuter and school traffic to the extent practicable by scheduling the transport of materials and equipment to staging areas and construction sites during non-peak hours.

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20. U.S. Coast Guard Notification - During construction, BGE shall regularly communicate all construction activities to the U.S. Coast Guard for publication in its weekly "Local Notice to Mariners".
21. FAA Compliance - Prior to construction, BGE shall certify to PPRP and PSC that proposed lighting of structures and marking on shield wires satisfies FAA obstruction standards.
22. Regulatory Compliance - As part of the recommended license conditions for the proposed transmission line, BGE shall design, construct, and operate the Project in a manner that complies with all applicable County and State noise regulations.
23. EMF - Within three months of energizing the transmission line, BGE shall submit to PPRP and PSC, the actual electromagnetic field (EMF) values measured at the foot of the towers and at the bridge, while transmission line is operating under typical loading conditions. In addition to the measurement data, BGE shall provide the following:
  - a. A site drawing with the measurement locations identified,
  - b. The MVA load on the transmission line at the location where the magnetic field measurement were taken,
  - c. The date, time and temperature, and
  - d. The manufacturer and model of the instrument used to measure the electrical field level.
24. Current Point of Contact - The Applicant or its legal successor shall specify a representative for Project matters, including compliance with the CPCN conditions ("Representative"). The Applicant or its legal successor shall file in the PSC docket for Case No. 9600 the representative's contact information, including the representative's name, title, email address and physical address. Any change in the representative or to the representative's contact information shall be filed in the PSC docket within 30 days.
25. Compliance - Upon the Representative's receipt of a written communication concerning noncompliance with the CPCN conditions, the Applicant or its legal successors shall address the matter and, within 45 days, shall file in the PSC docket for Case No. 9600 both the

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correspondence and a summary of how the Applicant or its legal successor has addressed, or is addressing, the matter.

26. Submission to PPRP - Informational copies of the required communications, reports or studies referenced in the preceding recommended license conditions shall be sent to PPRP by mail and e-mail at:

Director  
Power Plant Assessment Division  
Department of Natural Resources  
Tawes State Office Bldg., B-3  
580 Taylor Avenue  
Annapolis, Maryland 21401  
e-mail: pprp@maryland.gov