

Brandon Shores Retirement Mitigation FAQ

The information in these FAQs is derived primarily from BGE's application for a Certificate of Public Convenience and Necessity (CPCN), which was filed with the Maryland Public Service Commission (Maryland PSC) and has been publicly available since July 11, 2024. The CPCN Application and related materials are available on the Maryland PSC's website, under Case No. 9748, at the following link: <https://webpscxb.psc.state.md.us/DMS/case/9748>. Copies of the CPCN application have also been placed at the following public libraries: The Harford County Public Library at the Norrisville and Fallston branches; the Baltimore County Public Library at the North Point and Perry Hall branches; and the Anne Arundel County Public Library at the Riviera Beach branch. These FAQs also respond to questions and concerns raised in public comments submitted to the PSC as part of the CPCN public comment period.

About the Project

Q: Why is this project necessary?

A: Talen Energy, owner of the 1,282 MW Maryland-based coal-fired Brandon Shores Generating Station, announced their intention to retire the station. As a result of the planned retirement of Brandon Shores, [PJM Interconnection](#)—an independent, federally-regulated regional grid operator and planner—determined that transmission system upgrades are critical in order to maintain electric reliability for BGE customers, and customers throughout the mid-Atlantic region.

- The Brandon Shores Generating Station is a significant source of power for central Maryland.
- PJM determined that the retirement of this major power plant, without appropriate transmission upgrades, will result in serious violations of transmission reliability standards, putting millions of customers in Maryland and the mid-Atlantic region at an unacceptable risk of losing power.
- The transmission system upgrades required to maintain grid reliability involve a significant amount of work that must occur in a short time period.
- PJM directed BGE to construct transmission and substation projects that are needed to maintain the reliability of the grid upon the retirement of Brandon Shores, known as the Brandon Shores Retirement Mitigation Project. PJM also directed PECO, in southeastern Pennsylvania, and PEPCO in the area surrounding Washington D.C., to construct related transmission upgrades that are required to maintain the reliability of the transmission grid when the Brandon Shores power plant retires.

Q: What is the Brandon Shores Retirement Mitigation (BSRM) Project?

A: The BSRM Project involves the following PJM-required upgrades to BGE's transmission system in Harford, Baltimore, and Anne Arundel Counties:

- Constructing two new substations and associated overhead connections
- Expanding/rebuilding three existing substations and associated overhead connections
- Construction work on 39 miles of existing BGE overhead transmission line corridor, including:
 - Upgrading existing overhead transmission lines on about 2 miles of BGE right-of-way;
 - Constructing new overhead transmission lines on about 29 miles of BGE right-of-way next to existing overhead transmission lines, and
 - Reconductoring (i.e. replacing existing transmission wires with new transmission wires) on 8 miles of existing overhead transmission lines on BGE right-of-way.

Q: Why don't we keep the Brandon Shores Power Plant Operating until a Better Solution is Identified?

A: BGE does not own the Brandon Shores generating station, is not affiliated with the owner, and cannot control how or whether the plant is operated. Brandon Shores is owned by Talen Energy, an independent power producer, and Talen Energy has announced its intention to retire the generating station in June of 2025. PJM, a federally-regulated organization that is responsible for maintaining the reliability of the transmission grid, has determined that transmission systems upgrades are required to keep the transmission grid reliable and avoid unacceptable risks of potential power outages, and that these upgrades need to be in service before Brandon Shores can retire. PJM and Talen have reached an agreement to continue operation of the generating station until the necessary transmission upgrades are expected to be completed. This "reliability must run" (RMR) agreement involves additional costs that will be borne by customers in the region served by PJM, including BGE customers. These additional costs will cease after the necessary transmission upgrades are completed.

Q: Why doesn't Maryland add new generation to meet its electricity needs rather than build more transmission lines?

A: Maryland's General Assembly enacted laws about 25 years ago that deregulated the electric industry in Maryland, eventually resulting in power plants in Maryland being owned by private independent power producers that are not regulated in the same way as public utilities. In its most recent session, the Maryland General Assembly passed legislation that is intended to address resource adequacy issues facing Maryland. PJM, a federally-regulated transmission system operator, has determined that the need for transmission system enhancements, including the BSRM Project, is urgent. BGE has been directed to have the BSRM Project completed by the end of 2028. In order to meet that deadline, BGE needs to begin constructing the BSRM Project in early 2026.

Q: Does BGE need to acquire more land or property rights for this Project?

A: BGE's overhead transmission line work was designed to occur on BGE's existing rights-of-way (ROW). BGE either owns its existing rights of way in fee, or has easement agreements that allow BGE to construct the overhead transmission work required by PJM. BGE may need

to acquire some limited additional aerial rights amounting to approximately 3,500 square feet. BGE is also in the process of acquiring some additional land related to substation work, and is working to re-establishing its easement rights with a State agency on a small portion of the overall ROW for the Project.

Q: What's the Project timeline?

A: PJM's required in-service date for the Project is December 31, 2028. In order to meet this in-service date, BGE needs to begin construction in early 2026.

Q: What are the potential consequences if the BSRM Project is delayed or not approved?

A: PJM has determined that the retirement of Talen Energy's Brandon Shores Generating Station exposes millions of customers to unacceptable power outage risks unless appropriate transmission reinforcements are put into place. BGE's customers throughout its service territory, including in Harford, Baltimore, and Anne Arundel County, would be exposed to such unacceptable power outage risks. Talen Energy planned to retire Brandon Shores in June of 2025. However, PJM and Talen Energy have entered into a contract to continue to keep the power plant operational while the transmission reinforcements that are required to keep the grid reliable are completed. Under this contract, called a "reliability must run" contract, it will cost millions of dollars per month to keep the power plant operational. BGE estimates the monthly cost to be approximately \$12-\$13 million. Because of PJM's cost allocation rules, BGE customers will be responsible for over 70 percent of these monthly costs. These additional costs are expected to begin in June of 2025, and to remain in place until the necessary transmission upgrades are completed. Thus, if the necessary transmission upgrades are delayed beyond December 31, 2028, including the BSRM Project, BGE customers may be responsible for millions of dollars in additional RMR fees for each month of delay.

Q: Have there been any independent reviews of the proposed BSRM Project?

A: Yes. The BSRM Project has been reviewed by several independent federal, state and local agencies and organizations. Some reviews are completed, and some are ongoing.

- PJM is an independent, federally-regulated organization that is responsible for ensuring the reliability of the regional transmission grid, including the grid that services Maryland and other states. PJM has independently evaluated BGE's BSRM Project, and has concluded that BGE needs to construct the project in order to maintain grid reliability, and that it needs to be in service by December 31, 2028. PJM's materials related to the BSRM Project are available on PJM's website. <https://www.pjm.com/>
- The Maryland Power Plant Research Program (PPRP) coordinated a comprehensive independent review of the BSRM Project with various state agencies, called the Reviewing State Agencies. The Reviewing State agencies include various units of the Maryland Department of Natural Resources and Department of the Environment, as well as the Maryland Energy Administration, and Maryland's Departments of Agriculture, Commerce, Planning (including the Maryland Historical Trust), and Transportation. After over eight months of evaluation, PPRP and the Reviewing State Agencies have recommended that "the PSC approve the Brandon Shores Retirement Mitigation Project"

subject to certain initial recommended licensing conditions. PPRP and the Reviewing State Agencies may modify their initial recommendations before their review is complete. PPRP's review materials are available on the Maryland PSC website under Case No. 9748.

The Staff of the Maryland PSC (PSC Staff) has performed an independent review of the need for the BSRM Project, including its expected impacts on system reliability and stability, and economics. The PSC Staff is separate from the Commissioners themselves, who will ultimately rule on BGE's application for a CPCN for the BSRM Project. The PSC Staff has recommended that the PSC "grant a CPCN to BGE to construct the Brandon Shores Retirement Mitigation Project as described in its CPCN application." The PSC Staff's evaluation and recommendation is available on the Maryland PSC website under Case No. 9748.

Q: What public outreach has BGE done for the BSRM Project?

A: BGE has conducted extensive outreach to its customers, federal, state and local elected officials, agency personnel, community groups, and other stakeholders about the BSRM Project.

- BGE has conducted or participated in 20 different community meetings about the BSRM Project throughout Harford, Baltimore, and Anne Arundel Counties throughout 2024 and 2025. BGE has conducted both in-person and virtual community meetings in an effort to provide opportunities for full and robust community engagement.
- BGE has notified the public about the BSRM Project through multiple advertisements in the Baltimore Sun, numerous postings on BGE social media channels and on BGE's website, and through multiple direct mailings to customers.
- BGE created a dedicated website with extensive details about the BSRM Project, including the various types of work that is required to be constructed in various segments of the Project.
- BGE placed copies of its CPCN application and related materials for the BSRM Project in public libraries in Harford, Baltimore, and Anne Arundel Counties.
- Beginning in 2023, BGE met with several state and local elected officials about the BSRM Project, including County Executives for Harford, Baltimore, and Anne Arundel Counties or their designees.
- BGE has met several times with multiple regulatory agencies about the BSRM Project.
- BGE has contacted and informed the following organizations and officials about the BSRM Project:
 - Baltimore County Planning and Zoning
 - Baltimore County Department of Public Works
 - Baltimore County Department of Environmental Protection and Sustainability
 - Power Plant Research Program
 - Maryland Farm Bureau
 - Jarrettsville Community Advisory Board
 - Fallston Community Advisory Board
 - Forest Hill Community Advisory Board
 - Anne Arundel County Planning and Zoning

- Various state Delegates and Senators representing constituents in Harford, Baltimore and Anne Arundel Counties
- County Council members for Harford, Baltimore, and Anne Arundel Counties
- County Executives or designees for Harford, Baltimore, and Anne Arundel Counties

Q: Is the BSRM Project expected to negatively impact property values?

A: After an independent analysis of the BSRM Project, PPRP concluded with respect to land used for agricultural or recreational purposes, that most studies have indicated “little to no effect on sales price from transmission lines beyond the loss associated with ROW acreage.” With respect to residential and subdivision property values, PPRP concluded that research “shows little to no impact on property values over the long term.” Finally, PPRP notes that “in this case, the Project is occurring within existing ROW that is more than 65 years old in certain areas” and that “most development near the ROW has occurred since the line was originally constructed.” Consequently, PPRP “concluded property values will be minimally affected by the Project.” Likewise, BGE has evaluated this issue and is of the view that the BSRM Project, which involves construction of additional transmission infrastructure next to existing transmission infrastructure that has been in the ROW for many years, will likely have minimal, if any, impact on property values.

Q: What impacts will the BSRM Project have on the natural environment, including endangered and other wildlife species and habitat, wetlands, sediment and erosion, the Chesapeake Bay Critical Area, and other natural resource issues?

A: BGE has carefully designed the BSRM Project to minimize impacts to the natural environment, including endangered and other wildlife species and habitat, wetlands, sediment and erosion control issues, the Chesapeake Bay Critical Area, and a variety of other natural resources. The BSRM Project minimizes impacts to natural resources by making use of space in BGE’s existing rights of way that are already cleared and maintained because of transmission lines that are located in these rights of way. Utilizing existing ROW that are currently actively used for transmission infrastructure minimizes impacts to the natural environment that would be incurred if the BSRM Project were constructed on new ROW. That said, BGE will construct and operate the BSRM Project utilizing best practices to minimize impacts to natural resources in and within the vicinity of the existing ROW. BGE consulted with an experienced team of environmental experts to identify and evaluate the natural resources that exist in and within the vicinity of the existing ROW, and to assist with minimizing impacts to these natural resources, including but not limited to endangered species, wetlands, sediment and erosion control, the Chesapeake Bay Critical Area. An extensive Environmental Review Document, which contains detailed evaluation and analysis, was filed with BGE’s CPCN Application and is available on the Maryland PSC’s website under Case No. 9748. Additionally, the Power Plant Research Program and Reviewing State Agencies have performed a comprehensive and independent environmental review of the BSRM Project and to date have concluded that the Project plans can be constructed and operated in compliance with all applicable environmental regulations. The PPRP and Reviewing State Agency independent, detailed review is available on the Maryland PSC website under Case No. 9748.

Q: What impacts will the BSRM Project have on socioeconomic issues, such as agricultural, historic and cultural resources, views, aesthetics, traffic, parks, recreation and institutions?

A: BGE has designed the BSRM Project to utilize existing BGE ROW that are already actively used for overhead transmission purposes. Utilizing an existing transmission corridor that already hosts overhead transmission infrastructure minimizes socioeconomic impacts. Additionally, BGE will still be implementing avoidance and minimization best practices during construction and operation of the BSRM Project to minimize socioeconomic impacts even within the context of its currently utilized and developed overhead transmission corridors. BGE's CPCN Application materials provide comprehensive and detailed assessments and analysis of a wide variety of socioeconomic impacts and how potential impacts are being minimized by the way the BSRM Project has been designed. PPRP also provided a comprehensive and detailed independent review of the potential socioeconomic impacts associated with the Project, as well as a robust set of licensing conditions to ensure minimization of such impacts. These materials are available on the Maryland Public Service Commission website under Case No. 9748. Regarding agricultural impacts, BGE only anticipates temporary impacts to agricultural land uses due to construction activities, and will work with property owners to minimize temporary impacts to crops and livestock during construction. PPRP's independent analysis concurs. After consultation with Maryland's Historic Trust, it was determined that no adverse impacts to historic, archeological, or cultural resources are anticipated. BGE's CPCN application materials provide detailed assessments as to potential impacts to views, aesthetics, traffic, parks and recreation, and institutional resources. PPRP's independent review also assesses these potential impacts, and recommends a comprehensive set of licensing conditions that, in addition to the minimization and avoidance best practices that BGE has identified, will also minimize potential adverse impacts to socioeconomic resources.

Q: What is the estimated cost to construct the BSRM Project?

A: The cost to construct the BSRM Project is currently estimated at \$1.1 billion, which includes all overhead transmission and substation work required by PJM.

Q: How is the cost to construct the BSRM Project expected to impact BGE customers' bills?

A: The estimated bill impact for the typical BGE residential electric customer is estimated to be between \$2 and \$4 per month on average over the useful life of the Project.

- Customers will begin incurring these costs when the project is complete. The target completion date is December 2028.
- Customers will incur monthly costs to pay for the Reliability Must Run (RMR) agreement between Talen Energy and PJM to keep Brandon Shores operating, which is expected to begin in June of 2025 and remain until the required transmission upgrades are completed. After the required transmission upgrades are completed, including the BSRM Project, customers will no longer be required to pay for the RMR contract costs.

Q: Talen Energy planned to retire Brandon Shores in June of 2025, but the needed transmission work won't be complete until 2028. What's happening in the interim, and what does it mean for customers?

A: PJM has requested that Talen Energy keep Brandon Shores operating past Talen's intended June 2025 retirement date. In order to accomplish this, PJM and Talen Energy have negotiated a contract, called a Reliability Must Run (RMR) contract.

- BGE is not a party to the RMR contract and was not involved in negotiating the contractual terms or customer fees associated with keeping the Brandon Shores plant operational until the necessary transmission upgrades are complete.
- Talen Energy announced on Jan. 27, 2025, that it had reached an [RMR agreement](#) for Brandon Shores and H.A. Wagner Power Plants with PJM, the Maryland Public Service Commission, Sierra Club, and other parties. The agreement outlined terms by which Talen will operate its Brandon Shores and W.A. Wagner Power Plants until May 31, 2029. This agreement was approved by FERC in an order issued May 1, 2025.
- Utility customers, including but not limited to BGE customers, are responsible for paying for this temporary fee. It will be reflected in the Supply line of BGE customers' bills, and ultimately passed through to Talen Energy. BGE will not be entitled to any revenues from the RMR contract.
- BGE's current estimate is that a typical BGE residential electric customer may pay nearly \$6 per month in RMR charges starting in June 2025 and lasting until the end of the RMR contract in May of 2029, or until the necessary transmission system upgrades can be completed, whichever comes sooner.

Undergrounding and other Alternatives to the BSRM Project

As set forth in BGE's CPCN Application and related materials, which are available on the Maryland PSC website under Case No. 9748, BGE carefully and comprehensively evaluated multiple alternatives to the BSRM Project, including non-wire alternatives, such as batteries, and grid enhancing technologies, such as advanced conductors. BGE also carefully evaluated several route alternatives to the BSRM Project, including underground alternatives. Ultimately, BGE determined that the BSRM Project is the best way to keep the grid reliable in light of the planned retirement of the Brandon Shores power plant, after considering costs to all customers, time and feasibility of construction, and overall environmental and socioeconomic impacts.

Q: Is undergrounding a feasible alternative for the BSRM Project?

A: No. The overhead approach to the BSRM Project is optimal for several key reasons.

- Cost: Undergrounding transmission lines is 5x-10x more expensive than constructing overhead transmission lines.
- Footprint: For the Graceton to Batavia Segment, undergrounding transmission lines would require additional ROW beyond what is available on the existing rights of way

BGE is using for this project. That means BGE would likely have to acquire and impact acres of new land along the 29 miles of corridor where new lines will be built.

- Time: Undergrounding transmission lines would significantly extend the timeline for this project, costing all BGE customers millions of dollars more than projected to keep Brandon Shores Generating Station running past its planned retirement date. This cost would be layered on top of the potential order of magnitude increase in the overall cost of the project due to undergrounding.
- Maintenance: Underground transmission systems require more intrusive and more costly maintenance than overhead systems. Maintenance is also more disruptive; crews need to access every vault along the circuit to perform inspections and testing on regular intervals.
- Repairs: If any underground transmission equipment were to fail, it could take a week or more to locate the failure and make repairs, placing the system at risk for the duration of the repair work.
- [Less than 1%](#) of U.S. transmission lines are underground.
- BGE determined that the environmental impacts of undergrounding the line would be significantly more than constructing the overhead line.

Q: Why can't BGE do selective undergrounding of the BSRM Project?

A: Selective undergrounding introduces additional issues on top of the ones associated with undergrounding the entire route.

- The two end points of each undergrounded section would require a property of *at least* one acre to install a transition station to convert each line from overhead to underground.
- This presents challenges with space, but also unnecessarily increases the complexity of system protection.

Q: Transmission lines are being installed underground in other parts of the country. Why can't that happen here?

A: No two transmission projects are the same.

- For example, the [350-mile SOO Green underground transmission project](#) in the Midwest is high voltage direct current (HVDC), which is a different type of electric current than the high voltage alternating current (HVAC) on BGE's system, as well as other utilities' systems throughout the surrounding region. HVDC systems make sense for long point-to-point routes, but do not make sense for shorter circuits with tapped loads like those associated with the BSRM Project. The conversion of AC to DC and back again causes electrical losses which make HVDC systems uneconomical at shorter distances.
- HVDC lines would require large conversion stations—an additional cost on top of the significantly higher cost of undergrounding in general. Additionally, BGE's substation properties involved with the BSRM projects do not have the space available to accommodate these large converter stations, meaning BGE would need to acquire additional properties from adjacent landowners.

Q: Were other alternatives – like battery storage, grid enhancing technologies, and distributed energy resources – considered?

A: Yes. Both PJM and BGE did review alternative technologies, such as battery storage systems, to see if any were capable of meeting the reliability needs presented by the retirement of Brandon Shores in a more cost effective, less impactful manner. No better alternatives were identified.

- Ultimately, it was determined that battery storage itself cannot resolve the types of serious reliability violations that PJM determined will occur because of the retirement of Brandon Shores.
- Additional technologies must be coupled with battery storage to try to resolve the types of reliability challenges—which involve both voltage and thermal violations—arising from the retirement of Brandon Shores.
- Although battery storage technologies are promising in their ability to enhance and support the transmission grid under the right circumstances, such circumstances do not exist with the retirement of Brandon Shores, and the expected costs of battery storage technologies are exponentially more than that of the BSRM Project.
- In addition to the significant additional costs to construct battery energy storage systems, it would likely take several more years to construct such systems as compared to the BSRM Project, thereby adding further costs due to accumulating monthly RMR charges.
- BGE also evaluated grid enhancing technologies. Grid enhancing technologies include hardware and software technologies that can increase the capacity, efficiency and reliability of existing transmission lines. BGE determined that due to the size and severity of the reliability issues presented by the retirement of Brandon Shores, grid enhancing technologies are not capable of addressing such issues instead of the BSRM Project. That said, the BSRM Project does utilize grid enhancing technologies in the form of advanced conductors where appropriate and STATCOMs to manage voltage fluctuations.

Q: Did BGE evaluate other potential routes for the BSRM Project?

A: Yes, in addition to underground options, BGE evaluated several other overhead route alternatives for the BSRM Project. Alternative routes were determined to be inferior to the Project, which will utilize existing BGE ROW that already contains existing transmission infrastructure and has the room to accommodate the Project. The alternate routes considered were rejected due to longer length, new necessary ROW, larger community impacts, significant environmental/cultural impacts, and/or impacts to existing system infrastructure, all of which also drove higher costs and longer implementation times.

Q: Why can't BGE use superconductors to eliminate the need for more overhead transmission lines?

A: Superconductors are materials that exhibit very low electrical resistance when they are cooled to extreme temperatures using mediums such as liquid nitrogen, which allows them to transfer more electrical current than typical conductors. This requires cooling facilities and

specialized conductor construction. However, superconductor technology is not currently suitable for long distances. Superconductors are part of a larger category of “advanced conductors”, which the Federal Energy Regulatory Commission (FERC) defines as “superconducting cables, advanced composite conductors, advanced steel cores, high temperature low-sag conductors, fiber optic temperature sensing conductors, and advanced overhead conductors.” BGE is proposing to use “advanced conductors” for certain segments of this Project where they are suitable, and cost justified based on Project requirements.

Q: Is it feasible to upgrade the existing lines to 500kV to increase power capacity?

A: Upgrading to 500kV is problematic for two key reasons: clearance space and real estate.

- Higher voltage transmission lines need more space between each other and the structures that hold them. That means system design for 500kV lines is different than 230kV lines, which is the voltage for most of this Project.
- Space between conductors is important because the air that occupies that space has insulative properties. If the space is too small, the voltage will jump the gap and will arc to the structure or adjacent conductor.
- To ensure the proper operation of transmission lines, BGE design requirements for clearances are based on the National Electric Safety Code (NESC), which provides the industry accepted calculations for minimum clearances by voltage.
- The existing lines along the Graceton to Batavia Road route were designed for 230kV operation. There is not sufficient clearance to upgrade the voltage, which means a full line rebuild is required.
- Increasing the voltage on the existing 230kV line would also require additional system upgrades at Graceton, Bagley, and Raphael Road substations, and there is not sufficient real estate to make those upgrades.
- Even if these technical and practical issues could be solved, upgrading the existing line voltage to increase power throughput does not solve other reliability issues created by the retirement of Brandon Shores.

Q: Did BGE choose the overhead transmission route to make the Project more profitable?

A: No. PJM directed BGE to construct the BSRM Project to avoid unacceptable risks of power outages for millions of customers in Maryland and in the region, including BGE’s customers.

- The BSRM Project was directed to BGE by PJM—the regional transmission operator—to address severe voltage stability threats that would occur if the Brandon Shores Generating Station, owned by Talen Energy, shut down with no replacement capacity in place.
- Transmission work is reviewed and regulated at the federal and state level.

- BGE and other regulated utilities can only earn cost recovery and a return on Transmission work after review and approval by federal regulators.
- Undergrounding this Project from Graceton Substation to Batavia Substation is expected to be 5x-10x more expensive than the planned overhead configuration, which means undergrounding would entitle BGE to seek more of a return on the underground investment as compared to the less expensive overhead configuration. BGE is proposing an overhead line because it makes the most sense from an engineering perspective under the circumstances presented by the retirement of Brandon Shores, and minimizes costs to BGE's customers, not because it maximizes profits to BGE.

Wildfire

Q: What about the risk of wildfires and the BSRM Project?

A: BGE does not expect that the BSRM Project will contribute to or be impacted from wildfire risk. BGE's comprehensive vegetation management plans work to keep ROWs clear of significant wildfire fuels such as trees and brush. As the Project will be constructed on already-managed ROW, there will be very little new dead wood left under the lines. Routine vegetation management will maintain the edges of the transmission line corridors, leaving only low grasses and shrubs near the lines, consistent with BGE's current Integrated Vegetation Management practices. In addition, BGE's preventative maintenance programs carried out for transmission assets ensure that there are limited sources of ignition coming from the transmission lines. These programs look to ensure the structures are grounded to reduce the opportunity for arcing at ground level and that the connection hardware is intact to avoid dropping conductors that could become an ignition source. Encroachments or unauthorized uses of transmission line corridors such as dumping, if found, are managed through these program efforts. Also, in reviewing the Intergovernmental Panel on Climate Change materials, the Eastern North America area has limited expected increase in fire risk due to it being an area of forecasted increase in heavy precipitation combined with low drought risk and, therefore, no change in exposure is anticipated.

Q: Do overhead transmission lines pose a wildfire risk, like what California has experienced in recent years?

A: Continued maintenance of all power lines helps reduce myriad risks, including wildfires. For this and other reasons, transmission lines in the BGE service territory do not pose a significant wildfire risk.

- Safety remains the number one priority in BGE's work to maintain and enhance our energy delivery systems.
- We regularly review risks posed by many different natural threats, including storms, winds, flooding, cold weather events, and wildfires.
- We consider how risks are evolving, and our work is supplemented by evaluations, guidance, and actions at the federal and state levels, as well as from PJM.
- We design and manage our systems to meet the risks of the environments in which they operate, coordinating with our regulators and local officials to identify priorities for risk mitigation.

- Robust vegetation management is among our most important wildfire risk mitigation work throughout our electric distribution system and along our transmission rights of way.
- We proactively prepare for wildfires and emergent scenarios impacting our operations by developing extensive response plans, internal procedures for public health and safety, infrastructure protection, regulatory compliance, and risk mitigation, while maintaining close relationships with emergency services providers in our jurisdictions to ensure prompt coordinated responses.

Q: How does wildfire risk in Maryland compare to wildfire risk in California?

A: Comparing Maryland to California, and BGE to California utilities, requires context.

- California’s weather, climate, [forest structure](#), geography, and topography differ substantially from central Maryland. All of these factors and more [contribute to wildfire risk](#).
- Investigators determined the cause of the 2018 Camp Fire in California was a [failed C-hook](#) on one of PG&E’s transmission lines, and timely replacement of the C-hook could have prevented ignition of the fire.
- As part of its wildfire mitigation plan, California’s PG&E [is undergrounding](#) 10,000 miles of *distribution lines*—the smaller wires on wooden poles that deliver power to your neighborhood. Southern California Edison is also engaged in [targeted undergrounding](#) of *distribution lines*, not transmission lines, in high-risk fire areas.

EMF

Q: Will overhead transmission lines expose nearby residents to unhealthy levels of electric and magnetic fields (EMF)?

A: No. Expert panels of scientists assembled by scientific and government agencies have reviewed the 50 years of scientific and medical studies on EMF and human health and have not concluded that EMF from the electric power system, e.g. house wiring, appliances, distribution lines, transmission lines or substations, cause adverse health effects.

- These studies looked for a relationship between EMF and multiple kinds of cancer and diseases affecting the heart, nervous and immune systems without confirming any causal relationship.
 - The National Cancer Institute [concluded from their review](#) “no consistent evidence for an association between any source of non-ionizing EMF and cancer [in children] has been found.”
 - The World Health Organization [agrees](#): “Despite extensive research, to date there is no evidence to conclude that exposure to low level electromagnetic fields is harmful to human health.”

- The Environmental Protection Agency came to a [similar conclusion](#), noting “scientific studies have not consistently shown whether exposure to any source of EMF increases cancer risk.”

Q: How does EMF from transmission lines compare to other sources of EMF?

A: The EMF from transmission lines is the same as that from other electrical sources inside the home – wiring and appliances – and those outside the home – service drops to residences and local distribution lines.

Generally, transmission lines are not major contributors to our exposures because they are constructed on dedicated rights-of-way not close to homes and are high above the ground. Further, electric fields are effectively blocked by trees, fences, and buildings.

Q: Does BGE provide information about the independent scientific and health agencies to customers who have questions about EMF?

A: Yes. Please refer to the following references for more information:

Health Canada. Power lines and electrical products: Extremely low frequency electric and magnetic fields:

<https://www.canada.ca/en/health-canada/services/health-risks-safety/radiation/everyday-things-emit-radiation/power-lines-electrical-appliances.html>

U.S. National Cancer Institute. Electromagnetic Fields and Cancer:

<https://www.cancer.gov/about-cancer/causes-prevention/risk/radiation/electromagnetic-fields-fact-sheet>

U.S. National Institute of Environmental Health Sciences. Electric and Magnetic Fields Associated with the Use of Electric Power:

https://www.niehs.nih.gov/sites/default/files/health/materials/electric_and_magnetic_fields_associated_with_the_use_of_electric_power_questions_and_answers_english_508.pdf

World Health Organization. Electromagnetic Fields Questions and Answers:

<https://www.who.int/news-room/questions-and-answers/item/radiation-electromagnetic-fields>

Aviation permitting

Q: Is the BSRM Project going to comply with all aviation permitting and safety requirements?

A: Yes.

- BGE is still in the permitting process for this Project and we are engaged with Maryland Aviation Administration’s Office of Planning and the Federal Aviation Administration to ensure full compliance with all applicable requirements.

- We will follow all applicable permitting rules and regulations and are committed to the safety of everyone within our service area.

Tree trimming/vegetation management

Q: Will BGE cut trees or trim bushes on my property?

A: BGE has designed the BSRM Project to minimize the need to trim or remove trees. If any tree trimming or removal on customer property is required, BGE will coordinate with the property owner.

Q: How often does BGE cut and trim along the rights of way?

A: BGE cuts and trims along its transmission ROW on a five-year cycle, meaning, every portion of our transmission assets will be assessed at least one time every five years.

Easements and land rights

Q: Does BGE have the right to construct the BSRM Project on its existing rights of way?

A: BGE either owns its existing ROW in fee, or has easement agreements, that allow BGE to construct the overhead transmission work required by PJM. BGE has designed the Project to avoid the need to acquire new land or property rights for the overhead transmission line work. BGE may need to acquire some limited additional aerial rights amounting to approximately 3,500 square feet and is working to restore certain ROW easement rights with a State agency. BGE is also in the process of acquiring some additional land related to substation work.

Q: What is an easement and where can I find information about where BGE's easements are located?

A: An Easement is an interest in property that allows for a certain use.

- BGE's easement ownership is documented in the land records of your county.
- You can also access land records through Maryland's online database at mdlandrec.net.

Q: What if I have a playground, garage, pool, or other structure or improvement within BGE's transmission ROW?

A: BGE is performing a survey of our existing ROW to identify any current encroachments and will have individual conversations with those property owners who may have structures or improvement that encroach upon BGE's ROW.

Q: Will BGE need additional easements on my land?

A: To help ensure minimal impact to customers, all overhead transmission facilities included in this Project have been designed to maximize BGE's existing ROW. Except for some limited easement rights that BGE is working to restore with a State agency, BGE does not believe that it needs to acquire any addition land rights to construct the overhead transmission work. BGE may need to acquire some limited aerial easements for the overhead transmission lines and is in the process of acquiring some additional land related to substation work.

Q: What if I farm this property? Will you work with my crop cycle? Will I get paid if I miss a planting cycle?

A: When feasible we will work with crop cycles to avoid disruption of farming activities.

- BGE will work with individual property owners to review specific plans.

Q: Does this transmission infrastructure impact my county or state tax responsibilities?

A: Property owners are not taxed on transmission infrastructure.

- The State of Maryland taxes BGE for all its utility facilities separately from the real estate tax bill you may receive, and BGE is responsible for paying the taxes on the utility facilities.

Inspections / ensuring safety

Q: Does BGE inspect its transmission lines?

A: Yes. BGE inspects the transmission system using various methods.

- Our FAA-certified Unmanned Aerial Systems (UAS) team uses drones to conduct detailed visual inspections of lines, structures, and hardware under our Transmission Comprehensive Visual Inspection (CVI) program.
- Transmission crews perform similar visual inspections from the ground.
- BGE also conducts thermographic inspections, routine patrols, and [LiDAR surveys](#) of transmission infrastructure.
- BGE's Transmission teams review inspection data to identify and triage issues based on severity.

Q: How often does BGE inspect transmission lines?

A: Every line is inspected every 5 years under our Transmission Comprehensive Visual Inspection (CVI) program. These inspections are performed by drone.

- In addition, inspections from the ground are also on a 5-year cycle but are offset from the CVI by 2-3 years.
- Thermographic inspections and visual patrols are completed on every overhead line twice per year.

Q: Does BGE inspect new transmission lines before they are put into service?

A: Yes. All newly constructed transmission lines are inspected before they are energized.

- The BGE UAS (drone) team “flies” the new infrastructure to capture pictures for analysis of all completed work.
- BGE’s Transmission teams review the images to identify and triage issues based on severity.
- Any critical corrective actions are completed prior to energization of the line.
- As part of the final stages of the project, the entire line will be [LiDAR surveyed](#) to ensure that it was constructed to the design specifications within appropriate tolerances and to create an accurate as-built model of the new line.

More info and additional questions

Q: Where can I find more information about the BRSM Project, and how do I contact the Project team if I have additional questions?

A:

- More information is available on the project website, www.goodenergyinprogress.com.
- BGE’s CPCN application and related materials provide extensive information about the Project and are available on the Maryland PSC website under Case No. 9748.
- Maryland State agencies have also performed comprehensive evaluations of the proposed BRSM Project, and their current conclusions and recommendations are also available on the Maryland PSC website under Case No. 9748.
- You may submit questions through the contact form on the Project website, www.goodenergyinprogress.com. You may also email BGE at brandonshores@goodenergyinprogress.com, or call BGE at 443-423-1116.

- The project team is available to attend community meetings and meet with customers directly. To schedule, please contact the team through the Project website, by email, or by phone.