

Women in Engineering at Exelon

Christie McMullen
VP, Gas Distribution

Julia Sichler
Associate Engineer, Gas Distribution



An Exelon Company



The Exelon Family



Generation



Energy Sales & Services



Transmission and Delivery



Exelon by the Numbers

- FORTUNE 100 Company
- Nation's Leading Competitive Energy Provider
- In 48 states, D.C. and Canada
- 10 million customers in Maryland, D.C., Delaware, Illinois, New Jersey, and Pennsylvania
- \$31.4 billion in revenue in 2016
- 34,000 Employees nationwide



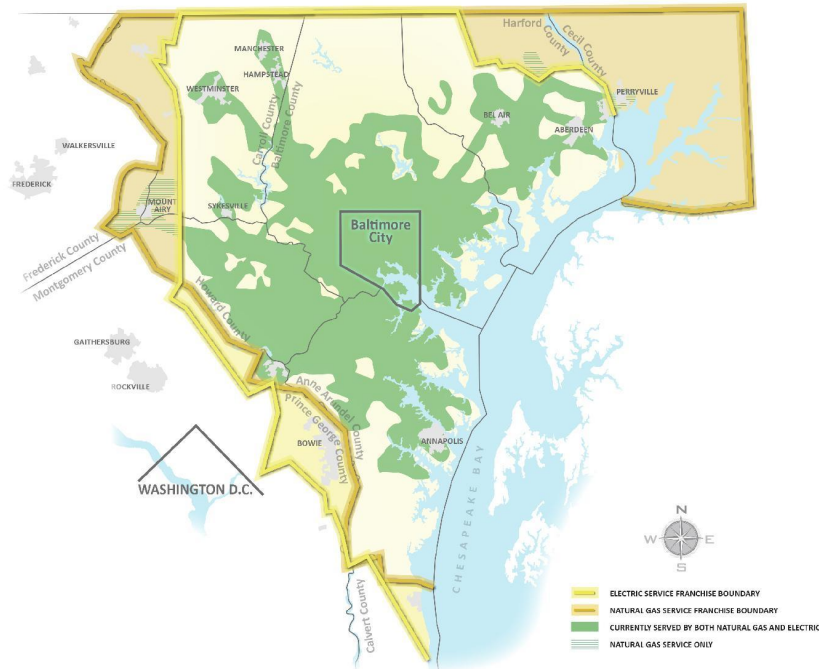
An Exelon Company



BGE - Who We Are

The Leading Gas and Electric Provider in Maryland

Founded in 1816, Maryland's largest provider of electricity, serving 1.25 million+ electric customers and 650,000+ gas customers, and the nation's first provider of natural gas.



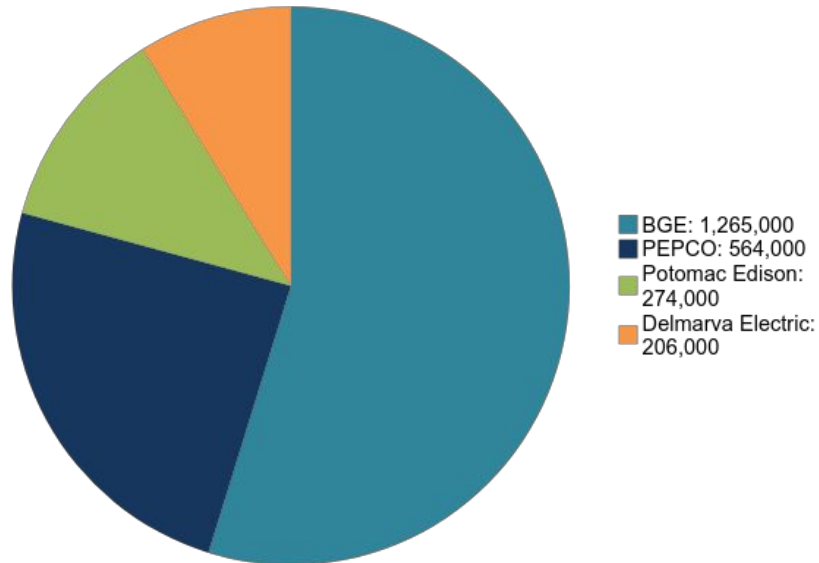
An Exelon Company

[THAT'S
SMART
ENERGY]SM

BGE - Who We Are

Operating in Central Maryland, BGE is a subsidiary of Exelon Corporation with six other utilities delivering electricity and natural gas to approximately 10 million customers through Atlantic City Electric, BGE, ComEd, Delmarva Power, PECO and Pepco.

Largest Provider of Residential Electricity in Maryland



BGE Services Maryland's Major Population Centers

Service area	Electric Customers	Gas Customers
Anne Arundel County	243,549	103,415
Baltimore City	266,090	204,509
Baltimore County	365,060	220,174
Calvert County	7,864	n/a
Carroll County	58,231	15,789
Cecil County	n/a	585
Frederick County	n/a	1,059
Harford County	102,625	46,425
Howard County	126,127	59,839
Montgomery County	13,900	46
Prince George's County	82,541	7,680
Totals	1,265,987	658,890



An Exelon Company



BGE - Who We Are

Quick Facts

- Service Area: Electric - 2,300 square miles,
Gas - 800 square miles
- Employees: approx. 3,200
- Substations: 243
- Power Lines: Over 25,000 circuit miles distribution,
1,300 circuit miles transmission
- Natural Gas Pipeline Network: Over 7,100 miles



An Exelon Company

















[THAT'S
SMART
ENERGY]SM

200 Years of BGE

moving smart energy forward

1816

2016

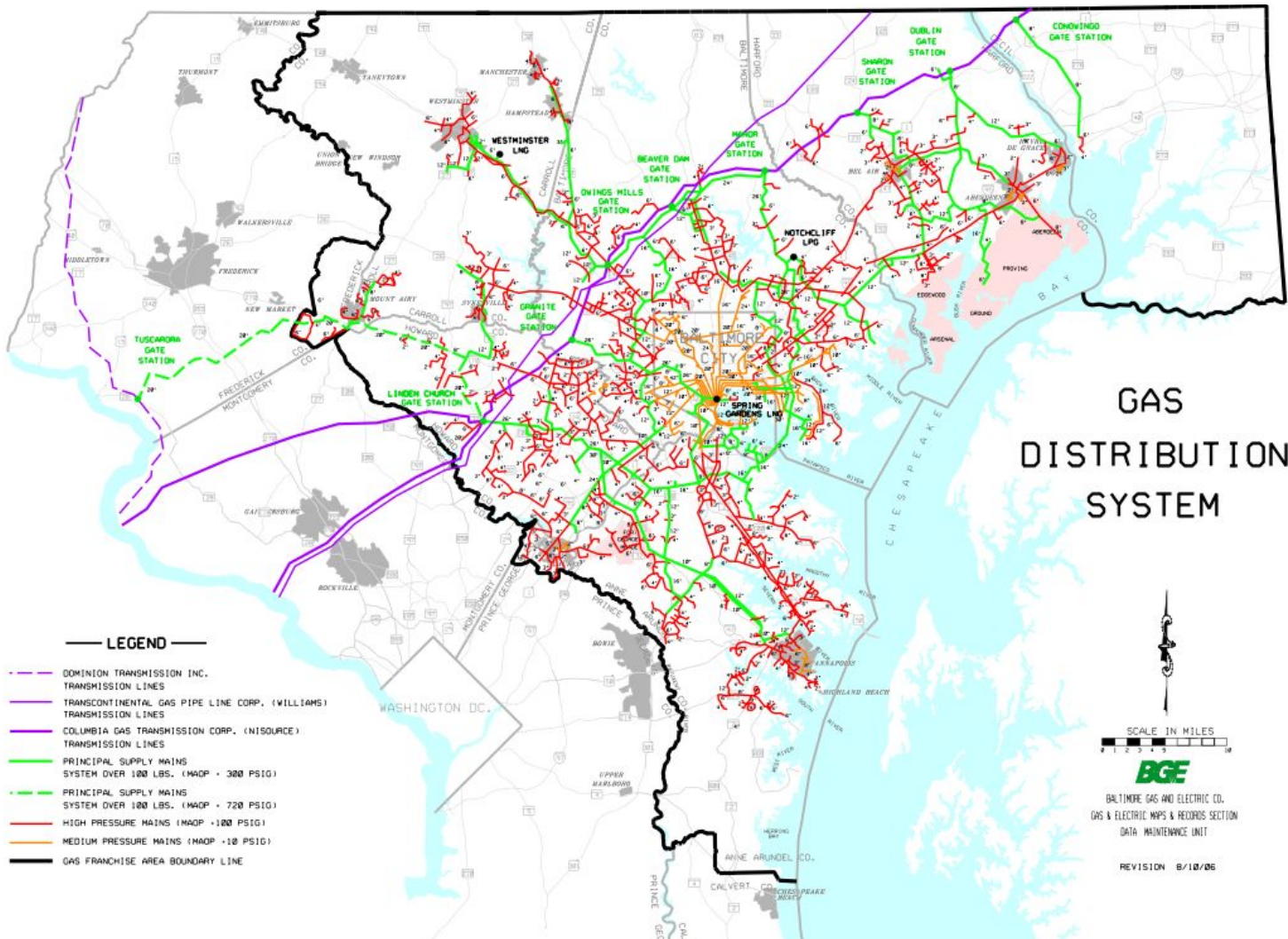
<p>1816 The Gas Light Company of Baltimore is created on June 17th. BGE's predecessor is the first gas company in the nation.</p> <p>1816 Baltimore Mayor Edward Johnson allows the Gas Light Company of Baltimore to begin plans for city street lights.</p>	 <p>1851 The Gas Light Company petitions city of Baltimore to begin laying underground gas pipelines. Plans expand the following year.</p>	<p>1860 Baltimore's population reaches 212,420.</p>	<p>1880 Three rival Baltimore gas companies merge to form the Consolidated Gas Company of Baltimore.</p> <p>1888 Chesapeake Gas and Equitable Gas Light, a company that also supplies electricity, merges with Consolidated to form the new Consolidated Gas Company of Baltimore.</p>	<p>1890 BGE bills begin featuring ads for gas cooking ranges and other appliances.</p>  <p>1900 BGE bills begin featuring ads for gas cooking ranges and other appliances.</p>	<p>1911 On June 30th, the utility files for its first rate case with newly formed Maryland Public Service Commission.</p>  <p>1918 Lexington Building becomes the company's headquarters in December.</p>	<p>1925 The first part of a high voltage ring around Baltimore is completed.</p> <p>1925 The company expands to other industries. Opens appliance stores and starts WBAL radio (sold in 1935).</p>	<p>1928 The company buys Baltimore Terminal Freezing and Heating Company, adding steam heat to its service capacity.</p> 	<p>1946 Baltimore City replaces 17,000 remaining gas lamps with electric ones.</p>  <p>1952 New service centers open in Baltimore City and suburbs to control cost and improve service.</p>	<p>1955 The Consolidated Gas Electric Light and Power Company of Baltimore is renamed Baltimore Gas and Electric Company.</p> 	<p>1967 Planning begins for a nuclear generating plant at Calvert Cliffs. By 1975, Unit 1 is fully operational.</p> 	<p>1968 BGE works with the EPA to research environmental impact and become more environmentally friendly and conscious.</p> 	<p>1966 BGE begins partnership with Baltimore area schools and starts education and outreach programs.</p>	<p>1966 BGE begins partnership with the Fuel Fund of Maryland. One of BGE's many long-standing partnerships with community organizations.</p> 	<p>1979 BGE begins partnership with the Fuel Fund of Maryland. One of BGE's many long-standing partnerships with community organizations.</p> <p>1987 Telecommunications completes the installation of GENET systems to connect all major BGE facilities.</p>	<p>1986 BGE begins partnership with Baltimore area schools and starts education and outreach programs.</p> <p>1987 Telecommunications completes the installation of GENET systems to connect all major BGE facilities.</p> <p>1992 Constellation Energy Group becomes the official holding company for BGE and affiliates.</p>  <p>1999 Maryland introduces deregulation and competition to supply customers with gas and electricity.</p> <p>2008 PeakRewards™ helps residential customers save.</p>  <p>2009 BGE Smart Energy Savers Program supports EmPower Maryland Act.</p>  <p>2010 Maryland Public Service Commission (PSC) grants BGE permission to proceed with smart grid project.</p>  <p>2012 Exelon Corporation and Constellation Energy Group merge.</p> <p>2012 BGE begins installing state-of-the-art digital meters.</p> <p>2012 Smart Energy Manager® provides smart meter customers with online toolbox for managing energy use.</p>  <p>2013 BGE Smart Energy Rewards® is launched.</p>  <p>2015 More than 1.7 million smart meters installed, with more than one million customers enjoying energy and bill savings programs.</p> <p>2015 BGE Smart Energy Rewards® bill credits reach \$24 million.</p> <p>2016 200 year anniversary on June 17, 2016</p> 
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



An Exelon Company

[THAT'S SMART ENERGY]SM

Gas Distribution



An Exelon Company

[THAT'S SMART ENERGY]SM

Gas Distribution

- STRIDE (Strategic Infrastructure Development and Enhancement)

- In 2013, the STRIDE Legislation was signed into law to establish a framework for the MDPSC to authorize a replacement plan to improve public safety and system reliability, as well as a surcharge for cost recovery of **accelerated** gas infrastructure replacement investments.
- BGE's STRIDE Plan was approved in 2014, with an Amendment added in late 2016



Abandonment of 30" Cast Iron main
(BOP: Edmondson)



Workspace of Catonsville BOP job

Gas Distribution

▪ Gas Operations

- Maintain existing infrastructure
- Support new projects



2017 Interns with Distribution Operations and TIMP



Joint Encapsulation completed by
Maintenance and Repair

Gas Distribution

▪ Peak Shaving Facilities

- Liquefied Natural Gas Plant (LNG)
- Propane Air Plant



An Exelon Company



Personal Experience



BGE's Hydrovac Truck



Electric Operations Overview

Summer Interns 2017



Installing Black Diamond Carbon Fiber Wrap



Gould Street Power Plant Tour

Summer Interns 2017



Inspecting Transmission Pipe



Trade Floor Tour at Constellation

Example Responsibilities

- Optimize future gas pipe routes
- Develop service packages for STRIDE
- Participate in leak cycle time reduction project
- Research diesel consumption due to idling
- Summer long innovation project with other interns throughout BGE



An Exelon Company



Come Visit Us!

UMBC Fall Career and Internship Fair

- Wednesday, September 27, 2017
- 11:30-3:30 PM
- UMBC Retriever Activities Center (RAC)

Apply Online at <http://www.exeloncorp.com/careers>

- Job Posting: 2018 Summer Internships – Engineering – Midatlantic (207574)



An Exelon Company

