



BRINGING GOOD ENERGY TO OUR COMMUNITIES







### FIRSTENERGY BRINGS GOOD ENERGY TO OUR COMMUNITIES

MESSAGE FROM THE CEO



Our commitment to sustainability takes many forms – from providing customers with safe, clean, reliable and affordable electricity, to improving the quality of life in the communities we're privileged to serve.

As part of these efforts, we're building a more robust and efficient electric system and minimizing the environmental impact of our generating plants and other facilities.

I'm proud of the progress we've made in creating a cleaner generating fleet. With the deactivation of a number of older, coal-fired units and improvements in the efficiency of our nuclear units, nearly 100 percent of our electricity is generated from non- or low-emitting sources. We remain on track to exceed benchmarks established by the U.S. Environmental Protection Agency's Mercury and Air Toxics Standards (MATS) and other environmental regulations. In addition, FirstEnergy expects to achieve a 25 percent reduction below 2005 levels of CO2 emissions this year.

We're supporting the energy needs of our customers and communities through our *Energizing the Future* initiative – an initial \$4.2 billion investment in our transmission

system, which began in 2014 and will continue through 2017. This includes advanced technologies designed to enhance system reliability and customer service as we continue to strengthen and expand one of the nation's largest transmission systems.

We're also making significant investments that improve the efficiency of our distribution system. For example, smart meter technologies show promise in empowering customers to make more-informed decisions about their energy use. Our accelerated deployment efforts in Pennsylvania will provide smart meters to nearly all of our customers in that state by mid-2019.

Our sustainability efforts include a strong focus on economic development and community support. We're working with companies, state and local governments and private agencies to help create jobs, attract new businesses and improve the economic vitality of our service area. In addition, our employees support community-based organizations and charities through their volunteer efforts and contributions.

Health and safety remain key priorities in every facet of our business. Employees strive to achieve an accident-free workplace by taking personal responsibility for their safety as well as the safety of their coworkers. Our companywide Occupational Safety and Health Administration (OSHA) rate in 2014 of slightly less than one injury per 200,000 hours worked places us in the top quartile in our industry.

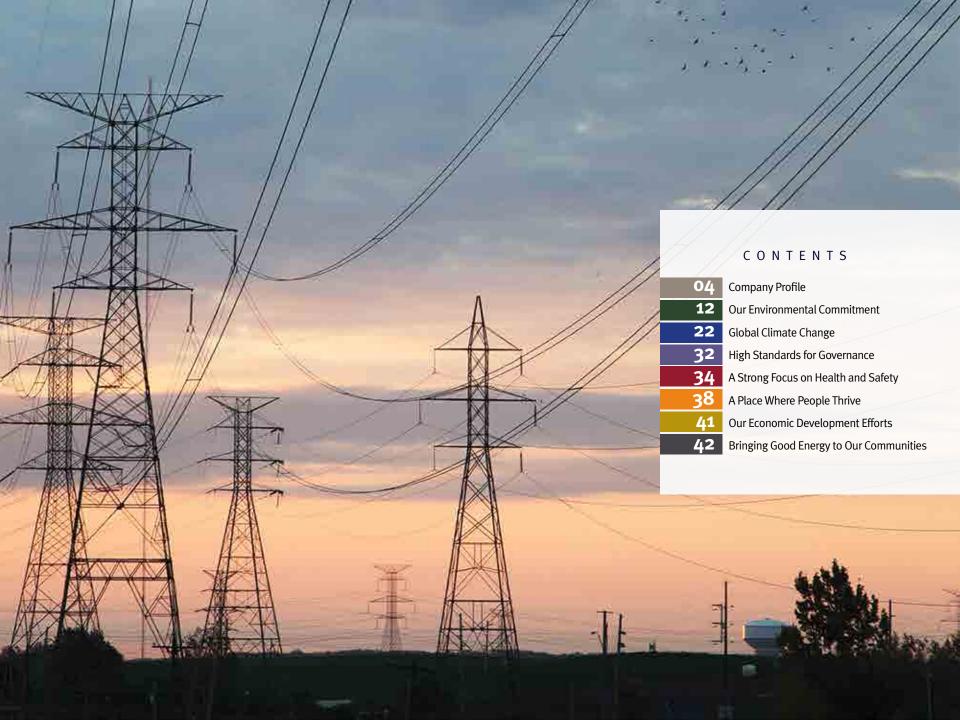
We're continuously evolving to meet the energy needs of customers who rely on safe, reliable, affordable and clean electricity to power their businesses and everyday lives. And, as this report illustrates, we remain dedicated to making a positive difference in communities throughout this region.

Sincerely,

Charles E. Jones

President and Chief Executive Officer





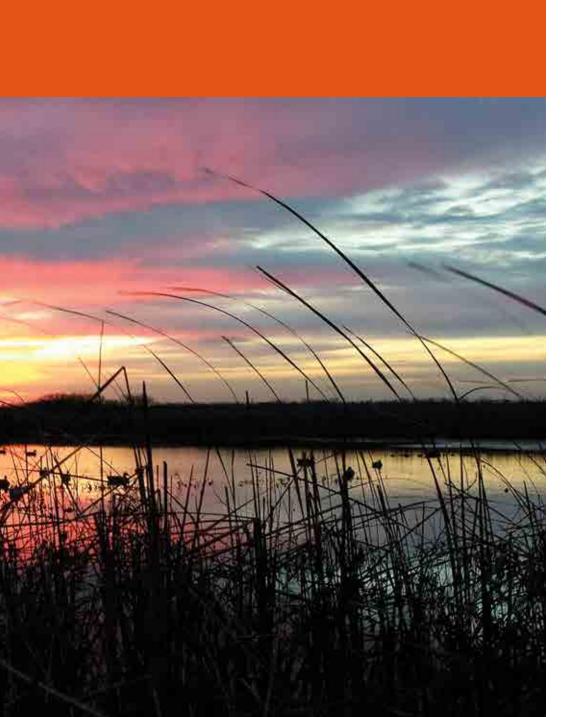
# HIGHLIGHTS OF FIRSTENERGY'S EFFORTS TO IMPROVE THE QUALITY OF LIFE IN OUR REGION

#### OUR ENVIRONMENT

- We've invested more than \$10 billion in environmental protection efforts since the U.S. EPA's Clean Air Act (CAA) became law in 1970, and these efforts are making a difference. Since 1990, we've reduced emissions of nitrogen oxides (NOx) by more than 80 percent, sulfur dioxide (SO2) by more than 90 percent, and mercury by about 70 percent. We expect to spend \$370 million on environmental control equipment to comply with the EPA's MATS.
- We have taken aggressive steps over the past two decades that have increased our generating capacity without adding to overall CO2 emissions. For example, since 1990, we have added through mergers and uprates more than 1,800 megawatts (MW) of non-emitting nuclear capacity to our fleet.
- FirstEnergy is one of the largest providers of wind energy in the region, with sales of more than 1 million megawatt-hours (MWH) per year of wind generation from capacity under contract.

- Nearly 100 percent of the power we generate is from non- or low-emitting sources, including nuclear, scrubbed coal, natural gas and renewable energy, following the deactivation of 5,429 MW of older, coal-fired generation since 2012.
- Our commitment to reducing waste led to one of the largest recycling efforts in North America at our Bruce Mansfield Plant in Shippingport, Pa. This project converts an average of 450,000 tons of scrubber byproduct annually into commercial-grade gypsum. The \$50 million project led to both a marked increase in scrubber byproduct recycling and a significant reduction in the amount of material sent to landfills.
- We've undertaken a number of remediation and investigative programs at our former facilities, including power plants, ash storage facilities and manufactured gas plants; developed conservation projects to protect wildlife diversity near our facilities; and responsibly conducted vegetation management and reforestation initiatives.
- From 2008 to 2014, we reduced the amount of water we use to cool our power plants by approximately 61 percent.





#### OUR EMPLOYEES

- We place a strong emphasis on health and safety, dedicating ourselves to achieving best-in-class results. In 2014, we attained top-quartile safety performance in our industry with a companywide OSHA rate of 0.97 injuries per 200,000 hours worked.
- We strive to build an inclusive working environment where people feel accepted, where their ideas are welcomed, and where they can make a positive impact on our business and in the community.

#### OUR COMMUNITIES

- Our philosophy the greater good is better business supports employee volunteerism and the investments we make in our communities through FirstEnergy and the FirstEnergy Foundation.
   Our employees lend their time and talents to assist hundreds of organizations and thousands of people each year – from raising funds, to feeding the hungry, to building energy-efficient homes for low-income families.
- In keeping with this philosophy, the FirstEnergy Foundation has awarded more than \$56 million in grants to more than 3,300 community-based organizations since 2001. The Foundation, which also matches employee contributions to qualifying organizations, has added \$1.7 million over the same period to the generous donations made by our employees.



COMPANY PROFILE FirstEnergy is a leading regional energy company dedicated to safety, operational excellence and responsive customer service. Our 10 electric distribution companies comprise one of the nation's largest investor-owned electric systems based on 6 million customers served within a nearly 65,000-square-mile area of Ohio, Pennsylvania, New Jersey, West Virginia, Maryland and New York. Our diverse generating fleet features non-emitting nuclear, scrubbed coal, natural gas, hydro and other renewables, and has a generating capacity of approximately 17,000 MW.





#### CORPORATE STRATEGY

Our strategy reflects a strong focus on the fundamentals: ensuring a safe work environment for employees, attaining operational excellence, strengthening financial performance, and enhancing shareholder value.

To achieve these goals, we changed the mix of our generating assets to a stronger platform of units, and we're growing our regulated operations by increasing investments in our transmission system. We're also improving the efficiency of our distribution infrastructure to enhance system reliability and customer service; completing necessary environmental enhancements; effectively managing commodity supplies and risks; and working to deliver consistent and predictable financial results.

#### OUR VISION

FirstEnergy will be a leading regional provider of electric utility service and retail electricity generation services, recognized for its dedication to safety, operational excellence and customer service; the choice for long-term growth, investment value and financial strength; and a company driven by the leadership, skills, diversity and character of its employees.

#### OUR ELECTRIC COMPANIES

FirstEnergy's 10 regulated distribution companies comprise one of the nation's largest investor-owned electric systems, based on serving 6 million customers in the Midwest and Mid-Atlantic regions. Stretching from the Ohio-Indiana border to the New Jersey shore, the companies operate a vast infrastructure of nearly 275,000 miles of distribution lines and are dedicated to providing customers with safe, reliable and responsive service.



**FAST FACT:** 6 million customers in the Midwest and Mid-Atlantic regions

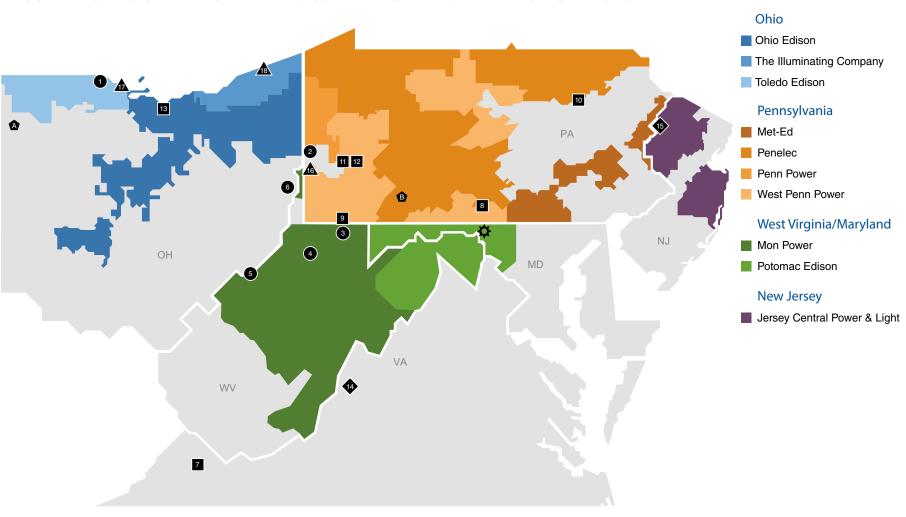


**FAST FACT:** 65,000 square miles of service territory



FAST FACT: 275,000 miles of distribution lines

### OUR ELECTRIC UTILITY OPERATING COMPANIES AND GENERATION STATIONS





- 1 Bay Shore Plant
- 2 Bruce Mansfield Plant
- 3 Fort Martin Power Station
- 4 Harrison Power Station
- 5 Pleasants Power Station
- 6 W.H. Sammis Plant

### Gas/Oil

- 7 Buchanan Generating Facility
- 8 Chambersburg Plant
- 9 Gans Plant
- 10 Hunlock Creek
- 11 Springdale Units 1 & 2
- 12 Springdale Units 3, 4 & 5
- 13 West Lorain Plant



14 Bath County Pumped-Storage Hydro

15 Yards Creek Pumped-Storage Hydro

### Nuclear

- 16 Beaver Valley Power Station
- 17 Davis-Besse Nuclear Power Station
- 18 Perry Nuclear Power Plant



- A Blue Creek, OH
- B Pennsylvania
- Meyersdale
- Casselman
- Allegheny Ridge I
- Allegheny Ridge II
- Highland
- C High Trail, IL<sup>2</sup>



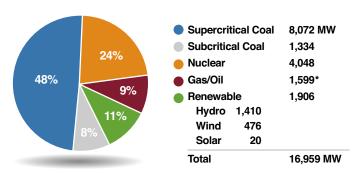
Maryland Solar

<sup>1</sup> Purchase Power Contracts

<sup>2</sup> Not shown on map

#### CLEAN GENERATING FLEET

Our generating fleet comprises non-emitting nuclear, low-emitting natural gas, scrubbed coal and renewables.



\*Includes generation from nominal gas/oil units not shown on map.

### INDUSTRY AND COMMUNITY PARTNERSHIPS

FirstEnergy addresses technological, environmental and industry issues through working relationships and participation in organizations including:













#### GENERATION BUSINESS

Our generating fleet produced approximately 98 million MWH of electricity in 2014 from a diversified mix of scrubbed coal, nuclear, natural gas, oil, hydroelectric pumped-storage and contracted wind and solar resources.

#### COMPETITIVE ELECTRICITY SALES

FirstEnergy Solutions (FES), our competitive subsidiary, is a retail supplier of electricity in the U.S. Building on the strength and diversity of its generating assets, FES provides retail electric generation service to various customer classes, with a focus on sales to large commercial and industrial customers as well as to wholesale customers and governmental aggregation groups.

## TRANSMISSION AND DISTRIBUTION OPERATIONS

FirstEnergy's transmission facilities include 24,000 circuit miles of transmission lines connecting the Midwest and Mid-Atlantic regions. To deliver safe and reliable electricity to homes and businesses, our electric companies operate a vast network of nearly 275,000 miles of distribution lines across our six-state service area.

#### ENERGIZING THE FUTURE INITIATIVE

Our Energizing the Future initiative, an initial \$4.2 billion investment in 2014 through 2017, involves upgrading and strengthening our transmission system to meet the future demands of our customers and communities. Three key factors drive this major investment in our electric system: replacing existing equipment with advanced technologies designed to enhance system reliability; meeting expected load growth from shale gas activity in our service area; and reinforcing the current system following generating plant deactivations.

Initial efforts focus on thousands of circuit miles of transmission lines to be evaluated and rebuilt as needed, as well as the renovation of substations serving Ohio Edison, The Illuminating Company, Toledo Edison and Penn Power. The program is expected to expand east across our service area over time as FirstEnergy continues to strengthen one of the nation's largest transmission systems.

Completed in December 2013, FirstEnergy's \$50 million Akron Control Center operates and monitors transmission operations across two-thirds of the company's bulk transmission system – from the Ohio-Indiana border to the New Jersey shore. As one of the nation's most advanced transmission control centers, it plays a vital role in enabling us to continue providing reliable electric service to our customers. Built with sustainable and green building features and practices, the facility earned the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Silver certification.



FAST FACT: Approximately 17,000 MW of generating capacity



**FAST FACT:** 24,000 miles of transmission lines



FAST FACT: Approximately \$52 billion in assets in 2014

#### **COMPANY PROFILE**

#### SELECTED AWARDS AND RECOGNITION

For the ninth consecutive year, FirstEnergy was recognized for its power restoration efforts by the Edison Electric Institute (EEI). FirstEnergy's utilities were awarded the *Emergency Recovery Award* for restoring service to Met-Ed and Potomac Edison customers following a February 2014 ice storm and the *Emergency Assistance Award* for assisting DTE Energy during a severe weather event in Michigan.

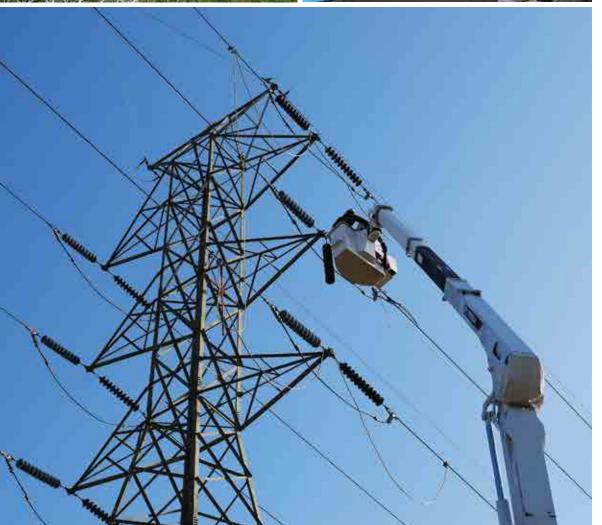
FirstEnergy Transmission and IT employees were honored by the Electric Power Research Institute (EPRI) with the inaugural Interoperability Leadership Award for 2014 for their commitment to enabling an integrated electric grid. This work, which involved a company cross-disciplinary team, provides a framework for developing improved software tools for future transmission system development to help enhance reliability of the nation's electric grid.

EPRI also recently honored a number of FirstEnergy employees with Technology Transfer Awards for 2014. These awards recognize industry leaders and innovators who have transferred research into applied results that not only benefit our company, but also the utility industry.

- Our Energy Policy group won an award for efforts in the development of EPRI's U.S. Regional Economy, Greenhouse Gas, and Energy model, which has advanced state-of-the-art electric sector and energy-economy modeling to enhance our understanding of the impact of current and future energy policies.
- Employees from Fossil Generation were honored for applying standard and consistent Preventive Maintenance Basis Database templates and maintenance plans to improve the reliability of critical equipment across our fossil fleet.
- FirstEnergy Nuclear Operating Company (FENOC) was recognized for improving circuit card and power-supply equipment performance using recommendations from EPRI's Gold Card research to enhance nuclear plant reliability.
- Employees from Technologies and Distribution Planning and Protection received an award for applying EPRI research to help support integration of distributionconnected energy storage systems. This work directly relates to the storage integration analyses utilities expect to use in the coming decade.







#### **COMPANY PROFILE**

#### OTHER RECOGNITION

- Energy Association of Pennsylvania 2014 Safety Achievement Award
- Energy Association of Pennsylvania 2014 Safety Sustainability Award
- Energy Association of Pennsylvania 2014 Motor Vehicle Fleet Safety Improvement Award
- Victory Media Top 100 Military Friendly Employers® for 2014
- United Way of Summit County Cornerstone Award, received every year since 2004
- Site Selection magazine, one of the top utilities for economic development
- J.D. Power 2014 Utility Website Evaluation Study: FirstEnergy's mobile website named top performer in customer satisfaction

In February 2015, FirstEnergy and its 10 utility companies were recognized as a Tree Line USA utility for the 17th consecutive year by the National Arbor Day Foundation in cooperation with the National Association of State Foresters. This award recognizes investor-owned and public utility companies that promote the dual goals of dependable utility service and healthy trees along America's streets and highways. Award-winning companies demonstrate excellence in tree care, training and public education.





#### **OUR HISTORY**

FirstEnergy Corp. was formed in 1997 through the merger of Ohio Edison Company and Centerior Energy Corporation. Through this merger, FirstEnergy became the holding company for Ohio Edison, its subsidiary, Penn Power, The Illuminating Company and The Toledo Edison Company.

At that time, FirstEnergy was the 11th largest investorowned electric system in the nation, based on annual sales of 64 billion kilowatt-hours (KWH), with total assets of nearly \$20 billion. Headquartered in Akron, Ohio, the new company employed some 10,000 employees, serving 2.1 million customers within 13,200 square miles of northern and central Ohio and western Pennsylvania. The company had approximately 12,000 MW of generating capacity and 57 transmission interconnections with eight electric systems.

In 2001, FirstEnergy nearly doubled its revenue to more than \$12 billion and customers served to more than 4.3 million when it merged with the former GPU Inc., based in Morristown, N.J. GPU served 2.1 million customers in a 24,000-square-mile service area in Pennsylvania and New Jersey through its three operating companies: Met-Ed, Penelec and JCP&L.

In 2011, FirstEnergy completed a merger with Allegheny Energy, a Greensburg, Pa.-based company that served 1.5 million customers in Pennsylvania, West Virginia and Maryland through its operating companies West Penn Power, Mon Power and Potomac Edison. The merger more than doubled FirstEnergy's highly efficient, supercritical coal capacity and provided opportunities for the company to grow and expand into new markets.

Today, FirstEnergy's 10 regulated utility companies form one of the nation's largest investor-owned electric systems based on 6 million customers served within a nearly 65,000-square-mile area of Ohio, Pennsylvania, New Jersey, West Virginia, Maryland and New York.



FAST FACT: Approximately \$15 billion in revenues in 2014



**FAST FACT:** Approximately \$4 billion in purchases of goods and services in 2014 (excludes fuel and purchased power)



**FAST FACT:** FirstEnergy and its subsidiaries paid nearly \$1 billion in taxes in 2014

## OUR ENVIRONMENTAL COMMITMENT

We're committed to protecting the environment while delivering safe, reliable electricity to 6 million customers in the Midwest and Mid-Atlantic regions. In keeping with our balanced, long-term approach, we're continually looking for ways to minimize the impact of our operations on the environment. Over the years, we've invested billions in environmental controls at our facilities that have led to substantial reductions in emissions.



Featuring sustainable building materials and construction practices, including wetlands protection and habitat restoration, our Akron Control Center earned the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Silver certification.

Our generation subsidiaries control approximately 17,000 MW of capacity from a diversified mix of scrubbed coal, nuclear, natural gas, oil and approximately 1,900 MW of renewable energy comprising hydroelectric pumped-storage and contracted wind and solar resources.

We're proud of the leadership role our employees have taken in finding new and innovative ways to enhance our environmental performance. We work hard every day to make that performance even better.

## PRODUCING ELECTRICITY IN AN ENVIRONMENTALLY SOUND MANNER

The electric power industry has long understood the need to produce electricity in an environmentally sound manner. Over the past two decades, we've made significant progress in reducing pollutants and greenhouse gas emissions.

FirstEnergy has spent more than \$10 billion on environmental protection efforts since the Clean Air Act became law in 1970,



The Unit 1 cooling tower at Beaver Valley Power Station helps protect Ohio River aquatic life while the plant's operations displace nearly 8 million metric tons of greenhouse gas emissions on average each year.



and we believe these investments are making a difference. Since 1990, FirstEnergy has reduced emissions of NOx by more than 80 percent, SO2 by more than 90 percent and mercury by about 70 percent. This year, we expect FirstEnergy's CO2 emissions to be approximately 25 percent below our 2005 levels.

FirstEnergy is working with technology developers, including Babcock & Wilcox and SRI Inc., on new proprietary pollution control technologies to further reduce SO2, NOx, mercury and other emissions. These include research into oxy coalfiring and solid sorbents – new technologies that may also help reduce CO2 emissions.

Our \$2 million grant to The University of Akron established the FirstEnergy Advanced Energy Research Center to build on existing research to support the development of carbon capture technologies and coal-based fuel cells for commercial use.

Our efforts to protect the environment combine innovative technologies with proven and effective work processes. An expanded environmental project management system provides up-to-date information to support our compliance with environmental standards.

We also employ a rigorous Environmental Compliance Assistance Program, or ECAP. Company personnel inspect our facilities – from generating plants to office buildings – conducting top-to-bottom operational reviews to ensure compliance with environmental regulations as well as company policies. This program also helps us identify best environmental practices that we can deploy companywide.

#### ENVIRONMENTAL POLICY STATEMENT

FirstEnergy is committed to providing energy and energy-related services to customers in a manner consistent with environmental policies, laws, regulations and rules. We will achieve this objective by effectively managing the environmental impact of our activities, using natural resources wisely, improving our environmental performance, enhancing our environmental stewardship, and supporting research on environmental technologies.

#### LAND RECLAMATION PROJECTS AND BROWNFIELDS DEVELOPMENT

Here are a few examples of ways we are making use of our real estate assets to benefit our communities and the environment:

- AKRON, OHIO: Collaborating with the City of Akron and EPRI, with
  oversight by the Ohio Environmental Protection Agency, we reclaimed
  a former coal ash site and transformed it into the Patterson Avenue
  Sports Complex with six public baseball fields. We remediated and
  demolished the former Gorge Power Station and then transferred
  the property to the City of Akron for future use as a park.
- ERIE, PA: Working with the Pennsylvania Department of Environmental Protection and government officials, we transformed our former Front Street Power Station into an award-winning waterfront complex with a library and the Erie Maritime Museum. The U.S. Brig Niagara a reconstruction of the vessel that fought in the Battle of Lake Erie in 1813 is berthed at the complex.
- NAVARRE MARSH, OHIO: The Navarre Marsh at our Davis-Besse Nuclear Power Station in Ohio occupies about 730 acres of wetlands bordered by Lake Erie and the Toussaint River, and is home to a variety of wildlife, including deer, coyotes, foxes, bald eagles, hawks, owls, herons, egrets, muskrats, mink, snakes and turtles. The marsh is part of a larger area once known as the Great Black Swamp, which stretched from Detroit, Mich., to Vermillion, Ohio. This area is important for many migratory birds because it serves as a stopping point along two major flyways. Seasonal water levels are controlled to promote plant growth and support bird populations. FirstEnergy preserves portions of the marsh on the Davis-Besse property.
- TORONTO POWER STATION: The site of the former Toronto Power Station in Toronto, Ohio, was remediated and transferred to a private entity for use in the shale gas industry. The presence of infrastructure typically associated with power stations, including access to rail, transmission and water resources, makes this site and other decommissioned power station properties attractive to developers. FirstEnergy continues to look for additional opportunities to reuse former power plant sites.

#### DEACTIVATED PLANTS

In response to environmental mandates and other regulations, FirstEnergy has deactivated 11 plants with a total generating capacity of 5,429 MW. During the deactivation process, which began in 2012, we took pre-emptive measures to minimize the safety and environmental risks associated with plants on long-term deactivated status. Proactive deactivation measures include cleaning ash ponds, removing oil from equipment, removing hazardous wastes and chemicals from the site, and cleaning storage tanks.

#### OUR ENVIRONMENTAL COMMITMENT



#### **GREATER CLEVELAND AQUARIUM**

An example of our commitment to beneficial reuse is the FirstEnergy Powerhouse, a 19th century power plant that has been converted into the Greater Cleveland Aquarium, which features 70,000 square feet of aquarium space. The aquarium is home to thousands of fresh and saltwater fish and has become a key attraction in Cleveland since opening in January 2012.

## DISTRIBUTED ENERGY RESOURCE PROJECTS

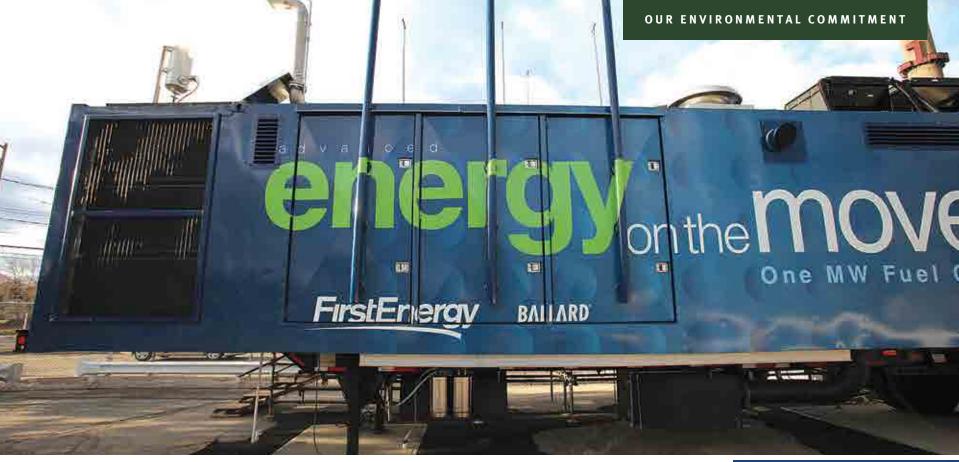
Distributed energy resources include solar and wind systems, fuel cells and energy storage technologies that generate clean electricity or provide load management to enhance the electric system. FirstEnergy has a long history of supporting research in this area through EPRI, universities and demonstration projects.

In New Jersey and Ohio, the impact of distributed energy storage on the grid is being evaluated through field tests involving advanced battery-based storage systems. In projects with EPRI, grid-interactive energy storage systems are under evaluation to assess their potential benefits. In another EPRI project, an ice energy storage technology for air conditioning is being evaluated.

To help manage peak demand on the distribution system, we're operating direct load-control technology with two-way communications capability on customers' air conditioning equipment in New Jersey.



FirstEnergy Solutions, our competitive subsidiary, buys renewable energy credits (RECs) from the Cincinnati Zoo and Botanical Garden. The facility's 6,400-panel, 1.6 MW solar array covers nearly four acres and began providing carbon-free power in 2011.



### RENEWABLE ENERGY CASE STUDY: FIRSTENERGY TESTS UTILITY-SCALE FUEL CELL SYSTEM

In collaboration with Ballard Power Systems of Vancouver, British Columbia, we have been conducting a field demonstration of a utility-scale fuel cell for several years. With the capability to produce one MW of electricity – enough to power some 600 homes – the mobile fuel cell (shown above) is operated during the summer when demand for electricity is highest. We have successfully shown the unit's capability to change power levels quickly and cycle on and off several times each day.

Fueled by hydrogen and the air around us, the fuel cell efficiently and quietly generates clean energy through an electro-chemical reaction rather than combustion. It emits no air pollutants and produces only pure water as a byproduct. In collaboration with EPRI, we will continue to test the fuel cell to evaluate long-term reliability, efficiency and performance under a range of field conditions.

#### NATIONAL ENERGY EFFICIENCY TECHNOLOGY INITIATIVES

FirstEnergy participated in a four-year national technology demonstration with EPRI, a nonprofit organization for utility energy research, to evaluate and test several categories of hyper-efficient, next-generation residential and commercial equipment. These technology assessments were performed at FirstEnergy field sites in Ohio and New Jersey and included LED street lighting (shown at right) and area lighting, hyper-efficient residential appliances and ductless heat pumps.

FirstEnergy also is part of EPRI's national Industrial Center of Excellence and Data Center Interest Group to evaluate new and emerging technologies that could save energy for manufacturing facilities and data centers. This work helps us to better understand the energy-related issues and challenges facing these industries, develop new energy efficiency programs, and improve productivity for these energy-intensive facilities.



#### WASTE REDUCTION AND MANAGEMENT

As stewards of our environment, FirstEnergy strives to reduce and recycle Coal Combustion Byproducts (CCBs) whenever possible. We have found opportunities to do this through various beneficial reuse projects.

During the electricity generating process, coal-fired power plants produce byproducts, or CCBs, including fly ash, bottom ash and gypsum. Approximately 35 percent of FirstEnergy's CCBs are beneficially reused or recycled in projects such as wallboard manufacturing, mine reclamation, liquid-waste stabilization in municipal waste landfills, concrete byproducts, underdrain materials, agricultural additives and structural fills. The remaining CCBs are handled in a safe and environmentally responsible manner through disposal at companyowned landfills and impoundments or off-site landfills.

The largest CCB beneficial reuse project is located at our Bruce Mansfield Plant in Shippingport, Pa., which turns a typically unusable byproduct of the facility's scrubber system into commercial-grade gypsum used to produce wallboard. This project annually converts 450,000 tons of scrubber byproduct into commercial-grade gypsum that is then sent to the National Gypsum Company's drywall facility adjacent to the Bruce Mansfield power plant. The \$50 million project led to both

a marked increase in scrubber byproduct recycling and a significant reduction in the amount of material sent to landfills. This effort, which began in 2000, is one of the largest recycling projects in North America.

Little Blue Run is a disposal facility for CCBs generated at the Bruce Mansfield Plant. We began initial closure activities there in early 2015, and will discontinue disposal of CCBs at the facility by December 2016. FirstEnergy is committed to closing Little Blue Run in a safe and sound manner and will use technologically advanced materials and processes for environmental protection to close the site. When Little Blue Run is no longer available, we expect to beneficially use or properly dispose of CCB material from the Bruce Mansfield Plant.

#### REMEDIATION EFFORTS

FirstEnergy is dedicated to environmental remediation activities that restore legacy manufacturing sites, or facilities owned by our companies or predecessor companies, and make them available for redevelopment. These sites include the former locations of power plants, ash storage sites and historic manufactured gas plants.









#### APPLIANCE RECYCLING PROGRAM

Our appliance recycling program, which is offered to customers in Pennsylvania and Maryland, is among our most popular energy efficiency programs. Customers who have a second, working refrigerator or freezer – often in a basement or garage and used for extra storage – can call us to pick up and recycle their outdated appliance and receive a cash incentive. Refrigerators and freezers manufactured before 1990 can use as much as three times more electricity than newer models. By recycling their old refrigerators, customers can save up to \$150 a year in energy costs.

Our contractor, JACO Environmental, transports these appliances to de-manufacturing facilities, where they are disassembled. Hazardous chemicals and coolants are safely removed, keeping them out of landfills, and about 95 percent of the metal, plastic and glass in these old appliances is returned to the manufacturing stream as recycled material.

As of December 2014, about 175,000 refrigerators, freezers and room air conditioners have been recycled in our service area. This has reduced electricity usage by more than 1.3 billion KWH (equivalent to eliminating approximately 1.2 million metric tons of CO2), which can power approximately 126,000 homes for a year.

## WILDLIFE DIVERSITY PROJECTS AND AVIAN PROTECTION PROGRAMS

FirstEnergy's conservation efforts include protecting wildlife and promoting wildlife diversity. We work closely with the U.S. Fish & Wildlife Service and various state agencies in building and maintaining our transmission lines and corridors. FirstEnergy also is partnering with state resource agencies and conservation groups for the enhancement and preservation of state and federally protected species. FirstEnergy is a member of the EEI Avian Power Line Interaction Committee, whose mission is to protect avian resources while enhancing reliable energy delivery. Our interactions with avian resources are governed by our avian protection plan.

During the siting of new transmission corridors, extensive ecological studies identify potential risks to protected species, including birds. These studies often have a significant effect on route selection and construction practices, including avoidance of sensitive areas and seasonal restrictions on vegetation clearing for construction and maintenance.

Transmission corridor maintenance activities occasionally require the removal of bird nests that have the potential for causing transmission outages. These nests are removed under permits secured from the U.S. Fish & Wildlife Service and state natural resource agencies. Alternate nesting sites sometimes are used to reduce the likelihood of birds returning to a high-risk location.

FirstEnergy power plants host several peregrine falcon nests. Peregrine falcons, once approaching extinction, now thrive in special nesting boxes placed by the Ohio Department of Natural Resources at our Bay Shore, Eastlake and Lake Shore power plants.

FirstEnergy recently joined an initiative with EPRI and others to assist the U.S. Fish & Wildlife Service in its process to list threatened and endangered species. The aim is to support and strengthen the review and listing process through the collection and dissemination of relevant technical data and information, and to address conservation planning as a means for species protection.





The FirstEnergy Foundation provided a grant to the Hawk Mountain Sanctuary Association in support of its mission to conserve birds of prey. Hawk Mountain, located in Berks County, Pa., is recognized worldwide as a global training and research center for raptor conservation.

## RESPONSIBLE VEGETATION MANAGEMENT AND REFORESTATION

FirstEnergy's vegetation management activities are essential to providing safe and reliable service to our customers. Responsible vegetation management involves removing, trimming or controlling trees and vegetation that could contact power lines, potentially causing a public safety hazard or service interruptions.

FirstEnergy supports and participates in research to identify more effective means of managing vegetation along our transmission and distribution line rights-of-way. We have collaborated on the Game Lands 33 Research and Demonstration Project near State College, Pa. – with the Pennsylvania Game Commission, Penn State University, Dow AgroSciences and Asplundh Tree Expert Company – to compare the effectiveness of various techniques used to control incompatible vegetation.

For more than 50 years, this project also has focused on developing a plant community of low-cover-type species within the maintained rights-of-way and evaluating the effects on wildlife. The Game Lands 33 study has demonstrated that an integrated vegetation maintenance program can create an ecologically vibrant and diverse plant and wildlife ecosystem within a maintained power line corridor without incompatible trees that pose a threat to system reliability.

We also have entered into a five-year study with EPRI and the Cuyahoga Valley National Park in northeastern Ohio to study the invasive exotic (IE) plant ecology that exists in the park and along electric transmission rights-of-way in or near the park. The study will compare how different vegetation management approaches affect plant community composition and structure, with specific attention to IE species abundance, dynamics and control.

JCP&L's environmental conservation partnership with the New Jersey Audubon Society and the Division of Fish and Wildlife helps boost the population of the threatened American kestrel, North America's smallest falcon. This successful collaboration has resulted in the birth of kestrel hatchlings at the South Branch Wildlife Management Area in Hunterdon County, N.J.

FirstEnergy is a founding member of the New Jersey Audubon Society's Corporate Stewardship Council (CSC) and supports the group's various initiatives for managing habitat and protecting endangered species. In 2013, JCP&L initiated its first habitat restoration project as part of the company's participation in the CSC, at the South Branch Wildlife Management Area. By voluntarily removing and recycling old wire, transformers and utility poles left on site by the former owner, JCP&L provided a significant enhancement to the critical habitat at this 422-acre site. JCP&L's efforts contributed to an ongoing large-scale grassland restoration to protect nesting populations of threatened and endangered grassland birds.

We also partner with the New Jersey Audubon Society to provide access to our Yards Creek pumped-storage hydro plant, which is near New Jersey's premier hawk-watching areas and the Raccoon Ridge area of the Appalachian Trail. The Yards Creek Scout Reservation also is the site of another critical-habitat restoration project conducted by JCP&L and supported by the CSC. Volunteering the use of its personnel and heavy equipment, JCP&L provided a key component in removing nonnative invasive vegetation that had adversely impacted many acres of woodland and young forest habitat vital for the survival of numerous wildlife species.

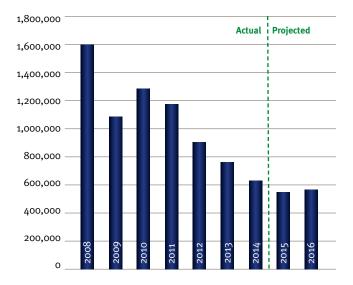


#### WATER USE

Water is essential to FirstEnergy's ability to generate electricity, as many of our plants use water for steam production and plant cooling purposes. Throughout our generation fleet, there are both closed-loop systems, which recirculate cooling water, and once-through cooling systems, which return most of the water to the source. From 2008 to 2014, the amount of water used to cool our power plants has decreased by approximately 61 percent.

### **OUR POWER PLANTS ARE USING LESS WATER**

Millions of Gallons of Water



#### PLUG-IN ELECTRIC VEHICLES

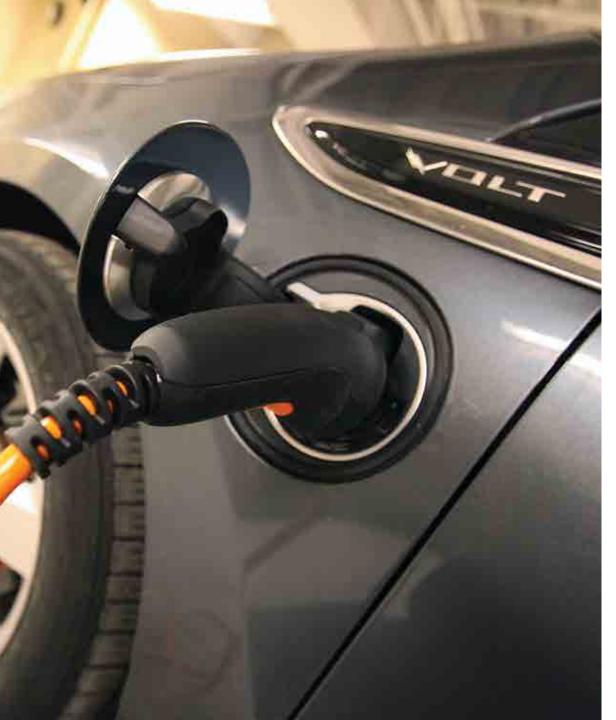
Plug-in Electric Vehicles (PEVs), which are growing in popularity, enable drivers to take advantage of a vehicle technology that can save energy and money while having a positive impact on our environment and economy. Powered by electricity, these vehicles are recharged at home, work or at public charging stations at a fraction of the current price of gasoline. In addition, PEVs offer a step forward in clean transportation and energy independence.

Since 2008, FirstEnergy has been part of a national GM-EPRI-Utility collaborative to ensure the Chevy Volt® PEV is compatible with the utility grid. As part of this research, FirstEnergy is conducting a two-vehicle demonstration – one in Ohio and one in New Jersey – to identify practical approaches to PEV charging and assess customer usage behaviors.

As part of our ongoing research, FirstEnergy also will deploy four plug-in hybrid electric vans in Ohio, Maryland and New Jersey as part of an EPRI national demonstration program. FirstEnergy has undertaken research initiatives with EPRI designed to ensure this technology is compatible with the grid infrastructure and supports reliable service. The objectives for this research include:

- Evaluating light- and medium-duty PEVs with all-electric range across the U.S.
- Developing a production-ready PEV system for light duty as well as medium- and heavy-duty trucks
- Quantifying performance attributes and environmental impacts
- Developing production-ready "smart charging" capabilities for PEVs







### WORKPLACE CHARGING AND PLUG-IN ELECTRIC VEHICLE READINESS

FirstEnergy is actively supporting workplace charging and PEV readiness plans with the states in our service area. The implementation of new electric vehicle technology helps bring additional manufacturing and employment opportunities to many parts of our region.

For example, in Ohio we supported the Electric Vehicle Readiness Plan in partnership with EPRI and Clean Fuels Ohio, a statewide nonprofit organization dedicated to promoting the use of cleaner domestic fuels and efficient vehicles to the transportation industry, government and general public. *Drive Electric Ohio* encourages widespread use of PEV technology and ownership throughout the state. The plan identifies potential locations for charging stations convenient to a majority of Ohio residents. FirstEnergy, in partnership with the City of Akron, has installed charging stations at its Akron General Office, Akron Control Center and West Akron Campus locations, as well as the Austen BioInnovation Institute in Akron.

### GLOBAL CLIMATE CHANGE

Climate change is a global issue, and any response must be global in nature. Programs designed to address greenhouse gas emissions must be both effective and economically prudent. We believe a well-designed, federal, fleetwide and market-based approach would be the most cost-effective means to reduce emissions with the fewest adverse economic impacts.





President Obama has directed the U.S. EPA to regulate greenhouse gas emissions under the Clean Air Act (CAA). The New Source Performance Standards for Greenhouse Gases (GHG) rule for new units was re-proposed on January 8, 2014. On June 2, 2014, the EPA proposed guidelines for the Regulation of Greenhouse Gas Emissions from Existing Power Plants under Section 111(d) of the CAA. The EPA also separately proposed CAA section 111(b) standards for modified and reconstructed power generating units.

## EPA'S PROPOSED CLEAN POWER PLAN

Scheduled to be finalized by mid-summer 2015, the EPA proposal under CAA Section 111(d) – called the Clean Power Plan – provides guidance to the states in developing individual or multistate implementation plans. While the EPA provided direction on what can be included in the state plans, the agency did not mandate how each state is to meet its emissions reduction goals. The proposed guidelines set a series of state-specific goals for CO2 emissions that would require states to reduce their power sector emissions rates.

The EPA's proposal consists of two main elements: rate-based goals for CO2 emissions measured in pounds of CO2 per MWH; and guidelines for the development, submission and implementation of state plans to achieve statewide goals. The plans are due by June 2016, but the deadline may be extended up to two years depending on each state's individual circumstances. Finally, the EPA must approve the state implementation plans before they are put into effect.

## OUR DIVERSE GENERATING FLEET AND CO2 EMISSION REDUCTIONS

The composition of FirstEnergy's generating fleet reflects the convergence of several factors, including the cost and availability of fuel, operational flexibility

and efficiency, regulatory and legislative actions, and market rules that impact our competitive generation business.

Based on these factors, our diverse generating fleet comprises 56 percent coal, 24 percent nuclear, 11 percent renewable energy and 9 percent natural gas and oil units. With the deactivation of a number of older coal-fired units and improvements in the efficiency of our nuclear units, we're creating a fleet that is more environmentally sound, with significantly lower CO2 emissions.

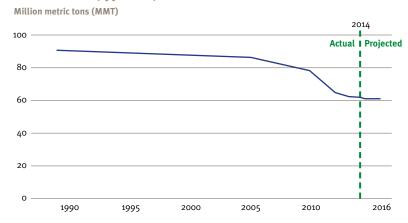
## PRESIDENT OBAMA'S CLIMATE ACTION PLAN TARGET

In 2009, the Obama administration committed to reducing U.S. greenhouse gas emissions in the range of 17 percent below 2005 levels by 2020. The president's plan focused on deploying clean energy and reducing power plant emissions, modernizing the transportation sector, and decreasing energy use in homes and businesses. In advance of the December 2015 United Nations Framework Convention on Climate Change meetings in Paris, the Obama Administration submitted on March 15, 2015, its formal pledge for the U.S. to reduce its economy-wide greenhouse gas emissions by 26 to 28 percent below 2005 levels by 2025.



### FIRSTENERGY'S ACTIONS

#### CO2 EMISSIONS (1990-2016)

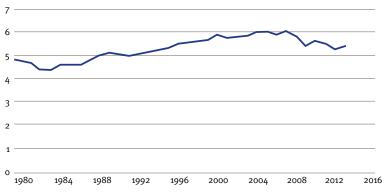


#### FIRSTENERGY'S CO2 EMISSION REDUCTIONS

FirstEnergy expects to achieve a 25 percent reduction below 2005 levels in CO2 emissions this year.

In fact, the U.S. electric generation fleet is in the midst of a major transformation to a significantly cleaner fleet as a result of several factors. These include using more low-cost, domestically produced natural gas to generate electricity; gaining new efficiencies in energy production; building new nuclear power plants, along with capacity expansions at existing facilities; and deactivating older, less-efficient coalfired generating plants. In 2013, U.S. energy-related CO2 emissions were 10 percent below their 2005 levels.

## ANNUAL CO2 EMISSIONS FROM U.S. ENERGY CONSUMPTION: 1980-2013 Billion metric tons of CO2



Source: U.S. Energy Information Administration, Monthly Energy Review, Sept. 2014

#### LONG-TERM ACTIONS

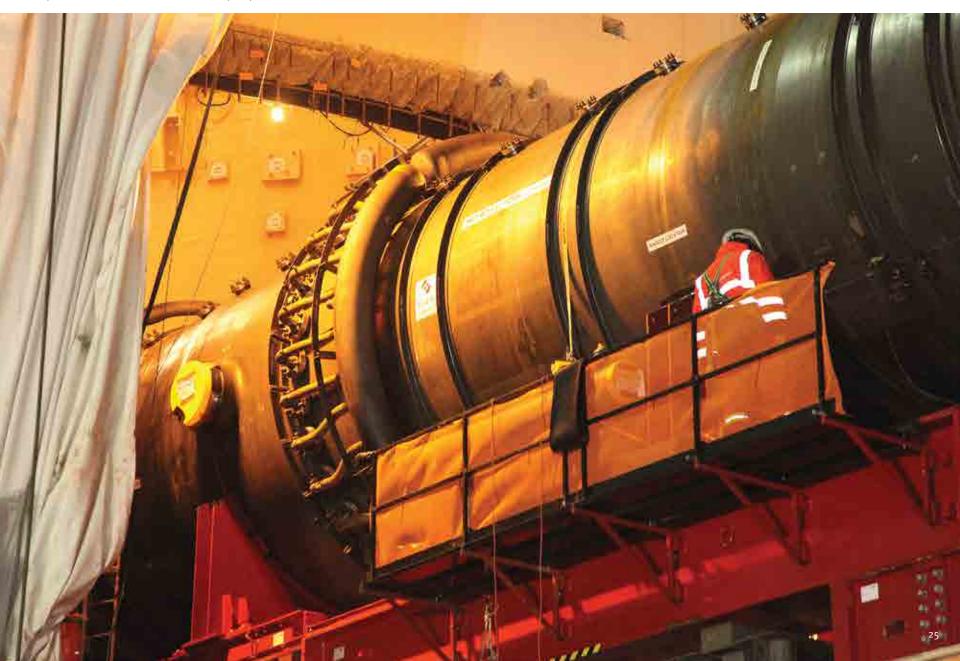
#### AGE AND LIFE OF EXISTING FOSSIL FLEET

According to the U.S. Energy Information Administration, more than half of the coal-fired generation fleet in the U.S. was more than 30 years old in 2012. However, many of these older, less-efficient coal units are expected to retire, in part, due to the significant capital investments needed for new environmental control equipment to comply with EPA regulations.

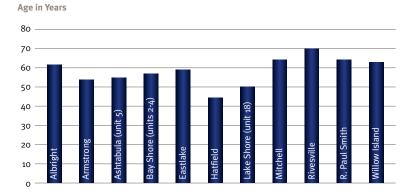
An EPRI study assuming future environmental regulations are in place – as well as a 70-year lifetime for existing coal units – indicates that conventional coal units will be replaced by lower-emission alternatives, which will significantly reduce CO2 emissions in the future generation portfolio.

On average, our coal-fired plants have been deactivated within a 70-year lifetime.

New steam generators were installed in 2014 at our Davis-Besse Nuclear Power Station near Toledo, Ohio, helping to ensure the plant will continue to provide clean, safe and reliable electricity for years to come.



#### AGE OF FIRSTENERGY POWER PLANTS AT TIME OF DEACTIVATION



#### **FUTURE REPLACEMENT GENERATION DRIVERS**

At FirstEnergy, we've reduced the size of our fleet and changed the mix of our generation assets to a much stronger platform of units. Today we operate one of the cleanest, lowest-cost generation fleets in the U.S.

Coal continues to play a vital role in our own fleet as well as the nation's generation mix. Among other benefits, coal offers a mature technology and on-site fuel storage, which make it a reliable source of electricity. FirstEnergy also has made significant investments in technologies that have reduced emissions from our coal fleet, and we continue to explore opportunities to improve the environmental performance and efficiency of all our generating units. As our industry continues to make the transition to other fuel sources, our primary goal should remain the same: ensuring reliable and affordable supplies of electricity for our customers.

However, the continued use of coal is challenged by more stringent environmental regulations, uncertainty about future environmental regulations, increased use of natural gas, and subsidization of other electric generation sources. In addition, we believe the current market construct of PJM Interconnection – the regional transmission organization that coordinates the movement of wholesale electricity in all or parts of 13 states and the District of Columbia – favors non-traditional resources such as imports, demand response and renewables, and undervalues the around-the-clock operating reliability of baseload generation. As PJM takes steps to address extensive problems in its energy and capacity markets, we continue to actively support efforts to ensure competitive wholesale markets adequately value baseload coal and nuclear plants.

## DECISION-MAKING AND FUTURE REGULATORY OUTCOMES

### STANDARDS OF PERFORMANCE FOR GHG EMISSIONS FROM NEW STATIONARY SOURCES: ELECTRIC UTILITY GENERATING UNITS

On June 25, 2013, President Obama directed the EPA to use its authority under the CAA to develop GHG emission standards for new power plants. A proposed rule issued by the EPA on January 8, 2014, would apply only to new fossil fuel-fired electric utility generating units (EGUs), and not to any existing, modified or reconstructed EGUs. New coal-fired units would be limited to 1,100 pounds of CO2 per MWH over a 12-operating-month period, or 1,000 to 1,050 pounds of CO2 per MWH over a seven-year period, or nearly a 50 percent reduction below what the most efficient new coal unit is capable of achieving. Essentially, the EPA's proposal requires any new coal unit to utilize carbon capture and sequestration (CCS) technology, with an approximate 50 percent CO2 capture rate.

New, large natural gas combined-cycle units would be limited to 1,000 pounds of CO2 per MWH, while smaller units would be limited to 1,100 pounds of CO2 per MWH. Modern combined-cycle gas plants can meet that standard without utilizing CCS. New simple-cycle units that sell less than one-third of their potential output to the grid, as averaged over a three-year period, would not be regulated by the standards.

### REGULATION OF CARBON POLLUTION FROM EXISTING POWER PLANTS UNDER SECTION 111(d) OF THE CLEAN AIR ACT

The president also directed the EPA to issue carbon emission standards, regulations or guidelines, as appropriate, for modified, reconstructed and existing power plants. As a result, on June 2, 2014, the EPA proposed guidelines for states to regulate CO2 emissions from existing electric generating units. The EPA calculated state-specific emission rate goals using 2012 data as a baseline. The proposal consists of two main components: state-specific, rate-based goals for CO2 emissions, measured in pounds of CO2 per MWH; and guidelines for the development and implementation of state plans.

As proposed, each state has interim and final emission rate goals set by the EPA. The proposed interim CO2 emission rate goals phase-in period is from 2020 to 2029, and the final CO2 emission rate goals must be achieved by 2030. States will develop plans by June 30, 2016, for meeting the EPA goals, but can seek a one-year extension to June 30, 2017. States pursuing a multi-state regional approach can seek a two-year extension to June 30, 2018. The EPA must approve state implementation plans before they are put into effect.

On June 2, 2014, the EPA also separately proposed standards for existing electric generating units that are modified and reconstructed. After being subject to the requirements of a state implementation plan for existing units, modified and reconstructed units would also be required to comply with additional CO2 emission rate standards.

#### RESEARCH AND DEVELOPMENT SUPPORT

FirstEnergy is an industry leader in pursuing new technologies that show promise in achieving reductions in CO2 emissions.

- We collaborated with the Midwest Regional Carbon Sequestration Partnership, one of several regional partnerships established by the Department of Energy (DOE).
- We supported research to develop and evaluate cost-effective solid sorbent materials for CO<sub>2</sub> capture, including work by EPRI and The University of Akron.
- We are supporting research and testing of PEVs with EPRI and the help of a
  test group of customers who are driving PEVs to evaluate the impact of this
  technology on the electric grid, as well as its ability to improve air quality
  and reduce greenhouse gas emissions and our dependence on foreign oil.

In addition, FirstEnergy has participated in the EPA SF6 (sulfur hexafluoride) Emissions Reduction Partnership for Electric Power Systems since the partnership's inception in 1998. Since it began reporting emissions to the EPA's GHG Mandatory Reporting Rule in 2011, FirstEnergy has reduced SF6 emissions equal to approximately 230,000 metric tons of CO2.



#### OUR COMMITMENT TO ENERGY EFFICIENCY

Our 10 utility companies help customers better manage their energy use through the energy efficiency programs we offer. These programs also play a key role in helping us meet state mandates for energy efficiency.

**OHIO:** Historically, to achieve state mandates, Ohio Edison, The Illuminating Company and Toledo Edison have offered a portfolio of programs for residential, commercial and industrial customers. Our programs for residential customers included discounted compact fluorescent light bulbs; rebates on the purchase of new, efficient appliances and products; rebates on the cost of home energy audits and heating, ventilation and air conditioning (HVAC) replacements; an incentive to recycle older, less-efficient refrigerators, freezers and room air conditioners; home energy usage reports and energy efficiency kits; and targeted programs for low-income customers.

Our programs for commercial and industrial customers provided incentives to install efficient lighting, HVAC, motors, drives and other equipment. In addition, we have offered retroactive incentives for qualified investments in energy efficiency to commercial and industrial customers who already have made energy efficiency improvements.

In 2014, Ohio passed S.B. 310, which, among other provisions, keeps the 2014 level of energy efficiency and peak demand reduction targets in place for 2015 and 2016 if an amended plan is filed. This will allow time for an Energy Mandates Study Committee to evaluate the costs and benefits

of the energy efficiency and peak demand reduction mandates. Ohio's current mandated goals are to reduce electricity usage 22.2 percent by 2027 and peak demand 7.75 percent by 2020. Our amended plan for 2015-2016, as permitted by S.B. 310, is now in effect.

**PENNSYLVANIA:** Energy efficiency programs offered by Met-Ed, Penelec, Penn Power and West Penn Power largely mirror the programs that were available in Ohio. Energy efficiency mandates in Pennsylvania require our utilities to reduce electricity usage between 1.6 and 2.3 percent, depending on the operating company, between June 1, 2013, and May 31, 2016.

**MARYLAND:** Potomac Edison offers rebates and incentive programs under the state's EmPOWER Maryland program to reduce per capita energy consumption 10 percent and demand 15 percent by 2015. Potomac Edison's portfolio of programs also is similar to those in Ohio, with rebates and incentives that encourage customers to save both money and energy by investing in energy efficiency improvements.

**NEW JERSEY:** Rates for electric utility customers in New Jersey include a charge that funds the New Jersey Clean Energy programs offered by the State's Office of Clean Energy.

**WEST VIRGINIA:** West Virginia does not have legislation mandating energy efficiency, but Potomac Edison and Mon Power provide two energy efficiency programs – one for low-income customers and one for government, commercial and industrial facilities.





Our energy efficiency programs for residential customers include discounted pricing on compact fluorescent light bulbs and rebates on the purchase of new, efficient appliances and products.



For industrial and commercial customers, we provide incentives to install efficient motors, drives, HVAC systems, lighting and other equipment.

### SMART GRID PROJECTS

FirstEnergy is evaluating smart grid technology to help us better understand how it can be used to modernize the electricity distribution system and to enhance service reliability. Partially funded by the U.S. DOE, pilot programs and technologies have been initiated in Ohio, Pennsylvania and New Jersey.

In portions of The Illuminating Company and Met-Ed service areas, we are improving distribution circuit reliability and optimizing voltage on distribution circuits. Smart grid technologies have shown promise by demonstrating faster restoration and avoiding sustained power outages. Since implementing this new technology, customers located in our Ohio and Pennsylvania pilot areas have experienced an estimated 42 percent improvement in service reliability.

Since 2010, we have installed more than 34,000 smart meters within The Illuminating Company service area as part of a five-year pilot program. Information from this pilot will help us understand how our customers participate in voluntary demand response pricing incentive programs and evaluate potential expansion of smart meter implementation efforts in Ohio.

In Pennsylvania, the Public Utility Commission approved our amended Smart Meter Deployment Plan, which calls for an accelerated deployment of smart meters in the Penn Power service territory. Installation began for Penn Power customers in July 2014, and nearly all of Penn Power's smart meter system – 170,000 meters and related field equipment – is expected to be installed by the end of 2015 under the amended plan. The full deployment plan anticipates approximately 2.2 million customers, or nearly 99 percent of all our Pennsylvania customers, having smart meters by mid-2019, and all Pennsylvania customers by 2022.

In New Jersey, JCP&L continues to operate and measure the success of a smart grid program that encourages approximately 16,000 customers to reduce their consumption of electricity during times of high demand. The program enables real-time monitoring and control of non-critical, end-use equipment – such as residential air conditioners – during high system load conditions.



#### WHAT IS A SMART METER?

A key component of smart grid technology, a smart meter is a digital device with two-way communications that connects the utility with the customer. Smart meters can enable advanced capabilities, such as time-of-use and consumption data, price information, outage periods and voltage at the customer's location. Once the technology is fully developed, smart meters could help customers make better-informed decisions about their electricity usage.



#### WHAT IS A SMART GRID?

A smart grid is a modernized electricity supply and distribution network that uses advanced automation and communications technology, including smart meters, to collect information such as energy usage to improve the efficiency and reliability of service.

#### **GLOBAL CLIMATE CHANGE**





## OUR COMMITMENT TO RENEWABLE ENERGY

FirstEnergy continues to pursue new sources of clean, renewable energy and other opportunities to meet customers' needs in an environmentally sound manner. We're one of our region's largest providers of renewable energy, with approximately 1,900 MW of pumped-storage hydro and contracted wind and solar resources. The diversity of FirstEnergy's renewable energy portfolio has grown significantly, putting us in a strong position to meet changing environmental requirements.

**WIND:** FirstEnergy is one of the largest providers of wind energy in the region, with a portfolio of nearly 500 MW in Illinois, Pennsylvania and Ohio, and sales of more than 1 million MWH per year of wind generation from capacity under contract.

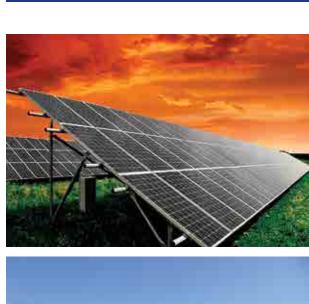
**SOLAR:** FirstEnergy has long-term contracts to purchase solar renewable energy credits (SRECs) from solar projects across our service territory. We also have a long-term contract in place to purchase the output from Maryland Solar LLC, operator of the largest solar facility in the region.

**HYDROELECTRIC:** Pumped-storage hydroelectric facilities enable storage of energy for use when it is needed most. During times of low demand for electricity, water is pumped uphill into a high-elevation reservoir. When demand for electricity is at its peak, the stored water is released to flow through turbines to produce electricity. FirstEnergy has 1,400 MW of hydroelectric generating capacity, all of it from pumped-storage hydro facilities.

**RENEWABLE ENERGY CREDITS (RECs):** In addition to solar RECs, FirstEnergy also manages a large portfolio of RECs throughout our service area, including those created from wind, landfill gas, municipal solid waste and biomass projects. In New Jersey, we manage a Solar REC program supported by the Board of Public Utilities to encourage the development of solar energy resources in the state.

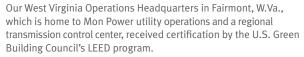


### GLOBAL CLIMATE CHANGE





Bath County Pumped-Storage Hydro facility in Warm Springs, Va.





### HIGH STANDARDS FOR GOVERNANCE

FirstEnergy's Board of Directors and senior management team are committed to corporate governance policies and practices that provide for shareholders' interests to be represented independently and thoughtfully.

Our rigorous standards for accountability, effective internal controls and financial reporting support our belief that high standards for corporate governance and the pursuit of strong financial results go hand in hand.

Sustaining a business environment that follows both the letter and spirit of the law is important to our company's long-term success. We support good corporate governance practices, and we review our governance policies and practices to ensure compliance.

## CORPORATE COMPLIANCE PROGRAM

FirstEnergy intends to operate all of our businesses – including regulated and competitive units – with integrity and in accordance with sound business ethics. Our Corporate Compliance Program applies to every business we operate and assists employees in complying with applicable laws, policies and regulations.

#### CODE OF BUSINESS CONDUCT

We support a culture in which sound business conduct and high ethical standards are recognized, valued and practiced by employees at every level. Our Code of Business Conduct communicates the fundamentals of ethical behavior in the workplace and provides important guidelines for all employees as they formulate and pursue company goals and objectives. Our Code of Business Conduct helps reinforce each employee's good judgment and personal integrity in conducting day-to-day business activities.

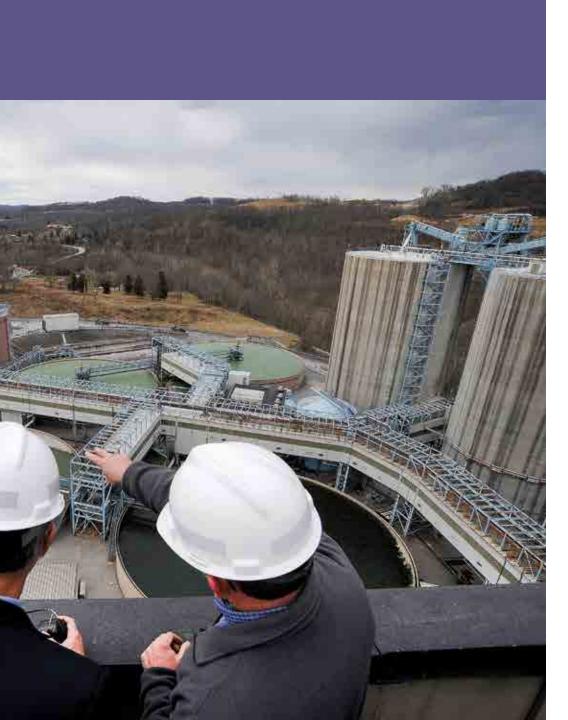
#### CONFLICT OF INTEREST POLICY

Our business is built on public trust and confidence. To protect the company's reputation, FirstEnergy employees must avoid conflicts of interest or the appearance of conflicts of interest while performing their jobs. Generally, a conflict of interest occurs when an employee's personal interests, or those of an immediate family member, interfere or appear to interfere with the interests of FirstEnergy. Guidelines found in our Conflict of Interest Policy are intended to help employees recognize and avoid these situations.

#### ANTI-FRAUD POLICY

Fraud generally refers to any intentional act committed to secure an unfair or unlawful advantage or gain. Our Anti-Fraud Policy facilitates the development of internal controls to help prevent and detect fraud against FirstEnergy. This policy applies to the Board of Directors, officers and employees, as well as contractors, suppliers and others in a business relationship with FirstEnergy. The company's Chief Ethics Officer is responsible for directing an investigation and review of all reported instances or allegations of fraud or other impropriety.







### EMPLOYEE CONCERNS LINE

Our Employee Concerns Line provides a way for employees to anonymously report any known or suspected Code of Business Conduct violation, and encourages open communication on ethics and compliance issues – in confidence and without fear of retribution. In addition, employees may report such concerns directly to their supervisor or Chief Ethics Officer. We actively promote the Employee Concerns Line through our internal website and newsletters as well as references in compliance-related policies and business practices.

A STRONG FOCUS
ON HEALTH AND
SAFETY

Health and safety are core values that shape every decision at every level of FirstEnergy. Reflecting these priorities, we strive to provide a safe and healthy work environment; to attain an accident-free, injury-free and illness-free workplace; and to promote, support and maintain public safety. To meet these goals, we remain focused on achieving excellent safety results. In 2014, FirstEnergy's companywide OSHA rate of slightly less than one injury per 200,000 hours worked placed us in the top quartile in our industry.





### RESPONSIBILITY AND ACCOUNTABILITY

We believe employees are primarily responsible and accountable for their safety. They are expected to be thoroughly familiar and fully in compliance with all practices in the company's health and safety programs. Through these programs, we ensure employees have the tools, information and processes necessary to perform their duties in a manner that ensures safety for themselves, their coworkers, our customers and the public.

#### SAFETY, EDUCATION AND TRAINING

Education and training are the keys to safety awareness and hazard recognition. FirstEnergy builds employees' awareness and recognition skills through a number of essential programs that reinforce and supplement formal education and training programs. We do this by:

- Improving safety communications
- Following appropriate health and safety programs, rules and practices
- Increasing safety awareness and hazard recognition
- Establishing corrective actions and accountability for incidents and accidents
- Motivating employees to work safely through personal example
- Rewarding strong safety performance through incentive compensation





We strive to provide employees with a safe working environment and the tools, technology, leadership and training to support an accident-free workplace.

#### JOB SAFETY BRIEFINGS

Conducted prior to the start of each individual job where required, safety briefings help employees identify hazards associated with the job; review safe work procedures; identify any special precautions; identify and review all personal protective equipment requirements; and provide an opportunity to discuss all energy source controls.

#### JOB SAFETY ANALYSES

Analyses are generally developed for jobs that have a history of accidents, or a high potential for high risk or a history of high risk. A list of steps required to perform each job identifies hazards associated with the job, as well as guidelines for eliminating or controlling hazards.

#### SAFETY COMMITTEES AND MEETINGS

FirstEnergy plants and work locations have safety committees to review and maintain local health and safety programs. Monthly meetings cover many safety topics including lessons learned and industry best practices. Information is shared with other FirstEnergy work groups through our Health & Safety database.

### SAFETY TRAINING OBSERVATION PROGRAM

Our Safety Training Observation Program and similar hazard recognition and control programs provide training to help employees observe, correct and prevent unsafe workplace conditions and acts, and reinforce good practices.

#### **NUCLEAR SAFETY**

The FirstEnergy Nuclear Operating Company (FENOC) – including the Beaver Valley Power Station, Davis-Besse Nuclear Power Station and Perry Nuclear Power Plant – places a strong and clear emphasis on nuclear, personal and radiological safety throughout the fleet.

We've made safety the most important part of our organizational culture. We measure the strength of our safety culture annually, using a rigorous self-assessment process. This assessment is based on the 10 Traits of a Healthy Nuclear Safety Culture developed by the Institute of Nuclear Power Operations, a national organization that promotes operational excellence by setting performance objectives, criteria and guidelines industrywide for nuclear power plant operations.

#### MAKE SAFETY A WAY OF LIFE

Our safety vision is rooted in the concept that safety is our most important value and that each of us is responsible for our safety and the safety of those around us. To ensure the safety of our employees



and the public, we work every day to strengthen our safety culture and maintain an accident-free work environment.

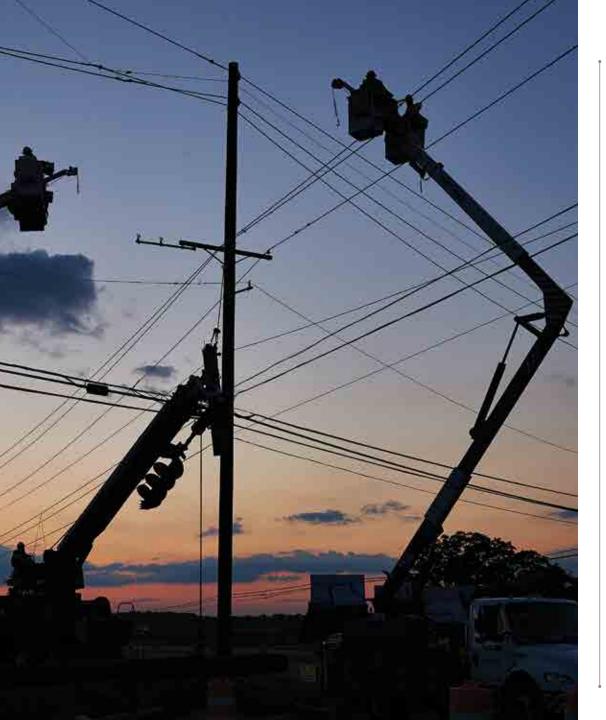
Employees in our power plants and utility facilities rely on error-prevention tools – proven work practices that help keep the focus on working safely every day, on every job. These include conducting pre-job briefings, demonstrating a questioning attitude that welcomes thoughtful discussion, strictly following procedures that have been proven to lead to safe work execution, and taking time to review risks before performing critical steps.

At FirstEnergy, safety is more than a slogan. It's a way of life.

#### CONTINUAL COMMITMENT

Achieving our employee and public safety goals requires constant attention, continuous improvement, focused education and training, and disciplined adherence to health and safety rules, regulations and practices. Our companies and employees embrace these commitments as a vital part of our daily operations.







### FIRSTENERGY UTILITIES: SAFETY & HUMAN PERFORMANCE INITIATIVE

The goal of excellence in human performance is to achieve incidentfree performance by managing human error and strengthening our defenses against workplace hazards to optimize the performance of individuals, leaders and the organization.

Led by a cross-functional core team, the Safety and Human Performance Initiative was introduced to FirstEnergy in 2012. Employees are trained on the application of error-prevention tools and field safety assessments, and job briefing forms are updated to reflect the use of these tools.

Safety and Human Performance Coordinators are identified in each operating company and corporate department and assist in the rollout of each activity.

As a result of this initiative, we are seeing changes in the way employees approach their work and how they speak about human performance. Our efforts focus on refresher training, root cause training and an assessment of our safety culture.

# A PLACE WHERE PEOPLE THRIVE

We are committed to building an inclusive workplace, where people feel accepted, where their ideas are welcomed, and where they can make a positive impact on the business and in the community. We help employees reach their full potential as both individuals and professionals. Toward that end, we provide them with opportunities to sharpen their skills, embrace new challenges, and advance their professional and personal growth. These efforts all take place in an environment that respects and rewards individual and team achievement and provides employees with the tools they need to do the job right.





#### DIVERSITY COMMITMENT

We cultivate a diverse workforce that draws upon distinct perspectives and skills to help us achieve superior financial, organizational and operational results. We value diverse perspectives and support work environments that foster respect, candor, opportunity and inclusiveness.

#### RULES OF ENGAGEMENT

Our Rules of Engagement – value-based guidelines given to every FirstEnergy employee – set the tone for how we work together with trust and mutual respect. They emphasize the importance of open and honest communication and serve as reminders of the standards we must meet in our day-to-day business activities.

#### TRAINING AND DEVELOPMENT

Employees want to know how they can contribute to the success of the company. We support their growth and achievement through training and development programs that increase their understanding of the company, improve their skills and provide the knowledge they need to succeed. Our Onboarding Program enables us to begin developing strong connections with new employees and helps them understand their roles in achieving FirstEnergy's goals and objectives.

Our Employee Development Center is home to the New Supervisor and Manager Program, which provides an open and collaborative environment in which new supervisors and managers receive the necessary training to make the transition to management. The center also provides employees with convenient access to professional and business skills training through an extensive library of web-based courses.

#### BUILDING TOMORROW'S WORKFORCE

FirstEnergy is addressing a significant issue facing companies throughout the nation – the need to replace experienced employees who are reaching retirement age.



To prepare for this transition – and to meet the workforce needs of our businesses – positions are being filled across the company through promotions, internal job postings and recruitment of talented people from outside the company.

In addition, several business units rely on our Co-Op/Intern Program to build talent pipelines to fill future forecasted openings. We also focus our recruiting efforts on attracting candidates with military backgrounds, as their skills and experiences align with our needs.

Established by FirstEnergy, the Power Systems Institute (PSI) trains the next generation of line and substation workers. In this unique partnership with community colleges and universities across our service area, the PSI program combines classroom learning with hands-on skills training at company facilities. Students earn an Associate of Applied Science degree, and qualified graduates are offered positions with a FirstEnergy operating company. Nearly 1,200 students have graduated from the program since its start in 2000.

#### CRITICAL SUCCESS FACTORS

To achieve our goals, employees must consistently perform well in key areas called Critical Success Factors that span the entire organization. These areas define essential behaviors we are expected to demonstrate and serve as guidelines for how we work together to accomplish our business objectives:

- **LEARN AND GROW:** Pursue continuous learning and personal development to enhance one's own and others' skills, knowledge and capabilities; infuse new ideas and energy; ensure knowledge transfer.
- WORK ACROSS FIRSTENERGY: Think and work across FirstEnergy; collaborate with and reach out to other areas to overcome barriers; know your contribution to the whole and provide support to others.
- **DELIVER RESULTS:** Produce results that have a direct, positive impact on FirstEnergy; exercise sound judgment with integrity and ethics; be accountable for safety and customer service.

### NEW SUPERVISOR AND MANAGER PROGRAM

FirstEnergy is investing in the future of our employees and our company. Our New Supervisor and Manager Program helps train the next generation of leaders at FirstEnergy in a consistent manner.

The three-week program, developed through our Employee Development Center, helps supervisors and managers cultivate their leadership skills, build a network of resources, exchange best practices, and integrate behaviors that reflect our Critical Success Factors. Now in its seventh year, the New Supervisor and Manager Program graduated more than 1,200 new leaders by the end of 2014.



To achieve our goals, employees must consistently perform well in key areas called Critical Success Factors that span the entire organization.

## OUR ECONOMIC DEVELOPMENT EFFORTS

Over the past 10 years, FirstEnergy's economic development efforts have helped attract approximately \$26 billion in capital investment and create nearly 89,000 jobs in our service area.\*

As states, regions and cities compete more than ever for their share of economic activity, FirstEnergy promotes our service area's capacity for meeting the needs of new and existing businesses. We assist site seekers with FirstProspector, a web-based geographic search program, which finds and analyzes potential sites for new commercial and industrial construction as well as existing space that may be on the market. The program also provides prospects with the ability to generate site-specific and countywide demographic and business analysis reports.

We continue to support community efforts to evaluate the economic impacts of prospects by offering IMPACTfactor+, a computer simulation program for economic development. The program models the increase in economic activity as a result of new investment in an area's economy. The program enables us to generate customized reports for our county economic development partners, helping them measure the impact of new business development in the number of jobs, output, personal income and tax revenue, using industry-specific multipliers customized for their region.

FirstEnergy also continues to sponsor community-based business retention and expansion initiatives, including greater use of the Synchronist Business Information System. This system provides an early warning for potential issues that could impact the local economy – including market changes, facility changes, operating conditions and corporate strategy – and encourages companies and our economic development partners to take appropriate action. Several of our partners have received national recognition for their business retention efforts.

#### SHALE GAS OPPORTUNITIES

Much of the Marcellus and Utica shale gas formations are located directly beneath FirstEnergy's service area – primarily across western Pennsylvania, eastern Ohio and West Virginia. Manufacturing growth and other business opportunities resulting from shale gas provide encouraging signs of industrial sales growth and business development.

A team of FirstEnergy employees is working to leverage the economic potential of shale-related projects in our region. From gas drilling, gathering and transporting, to processing it into chemicals, plastics and other everyday products, our region is playing host to an energy-intensive industry. This could significantly boost our electric load as well as potentially create thousands of new jobs in our service area in the years ahead.

With the shale gas industry expected to account for approximately 1,000 MW of new load across our service area through 2019, we believe shale-related development will bring a new, vital manufacturing base into former industrial areas in our region.



# ECONOMIC DEVELOPMENT SUPPORT\* 2005-2014

\$26
BILLION
CAPITAL INVESTMENT

1,700 NUMBER OF PROJECTS

89,000 JOBS CREATED

<sup>\*</sup>Represents customers' capital investment for new or retention/expansion projects.

BRINGING GOOD ENERGY
TO OUR COMMUNITIES

The resources of FirstEnergy and the FirstEnergy Foundation, combined with the energy and enthusiasm of our employees, benefit hundreds of organizations and thousands of people each year.





FirstEnergy's roots run deep in our communities. Employees share a strong commitment to fostering the development of our neighborhoods and communities, and reaching out to help those in need. Our philosophy to generate goodwill, transmit knowledge, deliver support to enhance community relationships, and encourage employee volunteerism provides the basis for investing in our communities.

Bringing good energy to our communities means more than delivering safe and reliable power – it means making a commitment to building a brighter future for our employees, their families and the communities in which we live and work.

#### OUR PRIORITIES

Our charitable efforts focus on initiatives that parallel our business interests. For example, we work to improve the vitality of our communities and support programs that enhance the safety of our employees and customers. It's all part of our efforts to help our communities and the people who live in them succeed.

We also promote quality of life and economic development initiatives, as well as projects that bolster community growth and stability. In addition, we encourage employees to volunteer and take on challenging community leadership roles. We provide financial support to qualifying organizations where employees hold leadership positions or those that include many employee volunteers.

Educational initiatives are another priority for us. We are proud to support programs and projects that advance an educated workforce, such as literacy and science, technology, engineering and mathematics (STEM) education.

#### CORPORATE MEMBERSHIPS

We strongly encourage and proudly support participation in professional organizations, investing some \$8 million annually in professional memberships. Our company and our employees are active in industry and professional organizations as well as chambers of commerce and economic development groups. These memberships strengthen the social and economic fabric of our communities and advance employees' personal and professional development.

#### CORPORATE CONTRIBUTIONS

Since 2001, we have donated more than \$8.5 million to enrich the quality of life in our communities. Whether it's United Way or a local charitable agency, our corporate contributions are directed toward organizations and projects dedicated to improving the environmental, economic, social, educational and cultural aspects of the community.



JCP&L connects with customers through its sponsorship of the Hot Air Balloon Festival at the Warren County Farmers' Fair in Warren County, N.J.

#### EMPLOYEE VOLUNTEERISM

We believe that giving our time, talent and resources is as important as our financial contributions. That's why FirstEnergy proudly supports our employees' efforts to assist hundreds of organizations and thousands of people each year – from raising funds and feeding the hungry, to building energy-efficient homes for low-income families.

Our employees' volunteer efforts are inspiring. Following are just a few examples of how our employees contribute their time and efforts to community-based services:

- FirstEnergy employees serve as directors on the boards of various nonprofit organizations throughout our communities, including chambers of commerce, United Way, Junior Achievement, economic development corporations and health and human services organizations.
- In 2014, employee volunteers in Akron, Ohio, helped the Akron Children's Hospital raise more than \$655,000 during its 15th Annual Radiothon.
- Our employees in Pennsylvania share their time and talents at local Salvation Army agencies, distributing food and raising the funds necessary to provide quality social services for the entire community. They also raise money each year by participating in the American Cancer Society Relay For Life event.
- Employees at our Davis-Besse Nuclear Power Station raise money for 16 homeless shelters and food pantries as part of an annual holiday collection.
- Potomac Edison employees at our Williamsport, Md., office participate in a Toys for Tots program and collect gifts for local children.
- JCP&L employees in New Jersey offer their time cooking meals at homeless shelters, collecting food for food banks and pantries, outfitting children with coats, book bags and toys and participating in fundraising events, such as Making Strides Against Breast Cancer.

- West Penn Power employees at our Greensburg, Pa., office collect toys, clothing and other items for children in Westmoreland County as part of the Treasures for Children program. They also collect "Books for Soldiers" that are shipped to our military personnel.
- FirstEnergy and Ohio Edison employees have been dedicated AkronReads volunteer tutors for many years.
- Mon Power has a long-standing team of employees who participate in Relay For Life, raising money for the American Cancer Society.

#### THE FIRSTENERGY FOUNDATION

Funded solely by FirstEnergy Corp., the FirstEnergy Foundation awards grants to qualified not-for-profit, tax-exempt organizations. These include the United Way, Habitat for Humanity, higher educational organizations, cultural and arts institutions, and organized civic and economic development groups throughout our service area and in communities where we conduct business.

To encourage personal philanthropy, the FirstEnergy Foundation matches employee contributions to qualifying educational, cultural, youth, civic and health and human services organizations. In fact, since 2001, the Foundation has donated \$1.7 million by matching employee contributions to qualifying organizations.

### THE FIRSTENERGY ALL-AMERICAN SOAP BOX DERBY

FirstEnergy is proud to be the title sponsor of the legendary All-American Soap Box Derby racing event.

FirstEnergy has been a longtime supporter of the Derby, which draws more than 500 finalists from 230 races, including competitions in Canada, Japan, New Zealand, Germany and around the United States. As the title sponsor, FirstEnergy is doing its part to keep the tradition alive for future generations – so young people can continue to learn the basics of design and engineering as well as experience the joys of good, old-fashioned teamwork and competition.



### BRINGING GOOD ENERGY TO OUR COMMUNITIES



**FAST FACT:** Since 2001, the FirstEnergy Foundation has awarded more than \$56 million in grants to over 3,300 community-based organizations.



**FAST FACT:** Over the same period, the Matching Gifts program has added \$1.7 million to the generous donations made by FirstEnergy employees.



### BRINGING GOOD ENERGY TO OUR COMMUNITIES

#### UNITED WAY

Since 2001, the FirstEnergy Foundation, employees and retirees have contributed more than \$53 million to United Way campaigns to help ensure the safety and health of the communities we serve.

We have long been strong supporters of United Way. In fact, FirstEnergy has received the Cornerstone Award every year since it was first presented in 2004 for total annual giving of more than \$1 million.

In addition, hundreds of FirstEnergy employees have volunteered during United Way's Day of Action/Day of Caring by painting homes, trimming trees and shrubs, performing minor repairs and cleaning up trash. This activity promotes the spirit and value of volunteerism and team building, and helps our employees see firsthand how their United Way contributions are put to work by the nonprofit agencies that rely on these donations.

#### HABITAT FOR HUMANITY

FirstEnergy's long-standing partnership with Habitat for Humanity of Ohio helps make home ownership possible for low-income families in the communities we serve. By providing more than \$19 million to Habitat for Humanity since 2001, FirstEnergy has helped build 450 ENERGY STAR®-certified homes, many with high-efficiency appliances.

FirstEnergy employees have spent countless hours building affordable, energy-efficient homes, joining local Habitat volunteers to improve communities and the lives of families in our region. To acknowledge these efforts, FirstEnergy was named a Cornerstone Partner by Habitat for Humanity of Ohio in recognition of our significant contributions to advance its mission.





### EDUCATIONAL RESOURCES AND SCHOOL ACTIVITIES

Teachers in our communities count on our support through much-needed grants and educational materials. For years, we've been lending a hand to teachers through programs that promote electrical safety; career development; proficiency and skills development for students; STEM education; literacy; and other initiatives.

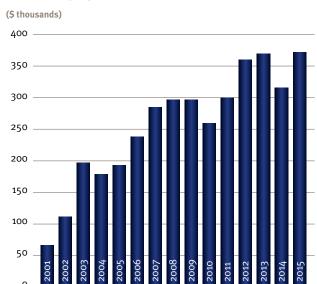
The FirstEnergy Educational Advisory Council, a panel of elementary, middle and high school teachers and administrators, helps us create and select timely and relevant educational materials that we provide to local schools and community groups.

### HARVEST FOR HUNGER: MAKING A DIFFERENCE, HAVING FUN

As of March 2015, FirstEnergy Harvest for Hunger campaigns have raised \$3.8 million, or the equivalent of more than 27 million meals, for community food pantries. Every March, we raise funds by offering everything from chili cook-offs and car washes to silent auctions and talent competitions. Employees are energized by fun, food and camaraderie as business units across the company engage in friendly competition to raise money for food banks in our communities.

The top fundraiser earns an additional \$2,500 from the FirstEnergy Foundation for his or her local food bank. All contributions remain in the communities where they are raised, providing millions of meals to neighbors in need.

### EMPLOYEE-RAISED FUNDS FOR HARVEST FOR HUNGER (2001 to 2015: \$3.8 Million)





**FAST FACT:** Since 2001, we've awarded more than 550 STEM education grants to educators and youth group leaders for projects ranging from electric safety, magnetism and robotics to the physics of kites, superconductors and high-speed transportation.



#### FORWARD-LOOKING STATEMENTS

Forward-Looking Statements: This report includes forward-looking statements based on information currently available to management. Such statements are subject to certain risks and uncertainties. These statements include declarations regarding management's intents, beliefs and current expectations. These statements typically contain, but are not limited to, the terms "anticipate," "potential," "expect," "forecast," "target", "will," "intend," "believe," "project," "estimate" and similar words. Forward-looking statements involve estimates, assumptions, known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements, which may include the following: the speed and nature of increased competition in the electric utility industry, in general, and the retail sales market in particular; the ability to experience growth in the Regulated Distribution and Regulated Transmission segments and to successfully implement our revised sales strategy for the Competitive Energy Services segment; the accomplishment of our regulatory and operational goals in connection with our transmission investment plan, pending transmission rate case and the effectiveness of our repositioning strategy to reflect a more regulated business profile; changes in assumptions regarding economic conditions within our territories, assessment of the reliability of our transmission system, or the availability of capital or other resources supporting identified transmission investment opportunities; the impact of the regulatory process on the pending matters at the federal level and in the various states in which we do business including, but not limited to, matters related to rates and the Electric Security Plan IV in Ohio; the impact of the federal regulatory process on the Federal Energy Regulatory Commission (FERC)-regulated entities and transactions, in particular FERC regulation of wholesale energy and capacity markets, including PJM Interconnection, L.L.C. (PJM) markets and FERC-jurisdictional wholesale transactions; FERC regulation of cost-of-service rates, including FERC Opinion No. 531's revised Return on Equity methodology for FERC jurisdictional wholesale generation and transmission utility service; and FERC's compliance and enforcement activity, including compliance and enforcement activity related to North American Electric Reliability Corporation's mandatory reliability standards; the uncertainties of various cost recovery and cost allocation issues resulting from American Transmission Systems Incorporated's realignment into PJM; economic or weather conditions affecting future sales and margins such as a polar vortex or other significant weather events, and all associated regulatory events or actions; changing energy, capacity and commodity market prices including, but not limited to, coal, natural gas and oil, and their availability and impact on retail margins; the continued ability of our regulated utilities to recover their costs; costs being higher than anticipated and the success of our policies to control costs and to mitigate low energy, capacity and market prices; other legislative and regulatory changes, and revised environmental requirements, including, but not limited to, proposed greenhouse gases emission and water discharge regulations and the effects of the United States Environmental Protection Agency's coal combustion residuals regulations, Cross-State Air Pollution Rule, Mercury and Air Toxics Standards, including our estimated costs of compliance, and Clean Water Act 316(b) water intake regulation; the uncertainty of the timing and amounts of the capital expenditures that may arise in connection with any litigation, including New Source Review litigation, or potential regulatory initiatives or rulemakings (including that such initiatives or rulemakings could result in our decision to deactivate or idle certain generating units); the uncertainties associated with the deactivation of certain older regulated and competitive fossil units, including the impact on vendor commitments, and the timing thereof as they relate to the reliability of the transmission grid; the impact of other future changes to the operational status or availability of our generating units; adverse regulatory or legal decisions and outcomes with respect to our nuclear operations (including, but not limited to the revocation or non-renewal of necessary licenses, approvals or operating permits by the Nuclear Regulatory Commission or as a result of the incident at Japan's Fukushima Daiichi Nuclear Plant); issues arising from the indications of cracking in the shield building at Davis-Besse; the risks and uncertainties associated with litigation, arbitration. mediation and like proceedings, including, but not limited to, any such proceedings related to vendor commitments; the impact of labor disruptions by our unionized workforce; replacement power costs being higher than anticipated or not fully hedged; the ability to comply with applicable state and federal reliability standards and energy efficiency and peak demand reduction mandates; changes in customers' demand for power, including, but not limited to, changes resulting from the implementation of state and federal energy efficiency and peak demand reduction mandates; the ability to accomplish or realize anticipated benefits from strategic and financial goals, including, but not limited to, the ability to continue to reduce costs and to successfully execute our financial plans designed to improve our credit metrics and strengthen our balance sheet through, among other actions, our previously implemented dividend reduction, our cash flow initiative project and our other proposed capital raising initiatives; our ability to improve electric commodity margins and the impact of, among other factors, the increased cost of fuel and fuel transportation on such margins; changing market conditions that could affect the measurement of certain liabilities and the value of assets held in our Nuclear Decommissioning Trusts, pension trusts and other trust funds, and cause us and/or our subsidiaries to make additional contributions sooner, or in amounts that are larger than currently anticipated; the impact of changes to material accounting policies; the ability to access the public securities and other capital and credit markets in accordance with our announced financial plans, the cost of such capital and overall condition of the capital and credit markets affecting us and our subsidiaries; actions that may be taken by credit rating agencies that could negatively affect us and/or our subsidiaries' access to financing, increase the costs thereof, and increase requirements to post additional collateral to support outstanding commodity positions, letters of credit and other financial guarantees; changes in national and regional economic conditions affecting us, our subsidiaries and/or our major industrial and commercial customers, and other counterparties with which we do business, including fuel suppliers; the impact of any changes in tax laws or regulations or adverse tax audit results or rulings; issues concerning the stability of domestic and foreign financial institutions and counterparties with which we do business; the risks associated with cyber-attacks on our electronic data centers that could compromise the information stored on our networks, including proprietary information and customer data; and the risks and other factors discussed from time to time in our United States Securities and Exchange Commission filings, and other similar factors. Dividends declared from time to time on FirstEnergy Corp.'s common stock during any period may in the aggregate vary from prior periods due to circumstances considered by FirstEnergy Corp.'s Board of Directors at the time of the actual declarations. A security rating is not a recommendation to buy or hold securities and is subject to revision or withdrawal at any time by the assigning rating agency. Each rating should be evaluated independently of any other rating. The foregoing review of factors should not be construed as exhaustive. New factors emerge from time to time, and it is not possible for management to predict all such factors, nor assess the impact of any such factor on First Energy's business or the extent to which any factor, or combination of factors, may cause results to differ materially from those contained in any forward-looking statements. FirstEnergy expressly disclaims any current intention to update, except as required by law, any forward-looking statements contained herein as a result of new information, future events or otherwise. Except where noted, all data as of publication date.

