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Pepco Holdings, Inc.

2009 Annual Environmental Sustainability Report

Powering a Sustainable Future

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ON THE COVER:
PHI's service territory includes some of the most scenic and productive natural habitats in the country, such as this shoreline on the Delmarva peninsula.



PHI CEO Joseph M. Rigby delivers remarks at the opening ceremony of the 2009 U.S. Department of Energy Solar Decathlon. PHI was a sustaining sponsor of the event. (See p. 43)



Joseph M. Rigby
Chairman, President and CEO

A Sustainability Message from Our Chairman

Here at Pepco Holdings, Inc. (PHI), “sustainability” is a critical concept, but one of fundamental simplicity—“meeting the needs of the present without compromising the ability of future generations to meet their own needs.”

At PHI, “meeting the needs of the present” means ensuring the continued safe, reliable and cost-effective delivery of electricity and natural gas to our customers. Preserving the “ability of future generations to meet their own needs” means supplying our customers with the energy and services they need, while reducing our environmental impact.

Like the sustainability field itself, PHI’s approach to sustainability is evolutionary. It requires ongoing review and adjustment as conditions change and advances in technology become available.

Sustainability principles and initiatives are not add-ons to our businesses, nor have we pursued sustainability programs because they are “the thing to do.” We develop and implement them because they are the right thing to do. These sustainability programs align directly with our



...solutions to climate change that balance the need to minimize economic impacts. need to protect the environment with the

commitment to reduce our energy use, help our customers do the same, and support local, state and federal government energy goals. Here at PHI, we have come to see sustainability as a welcome opportunity to help our customers receive cost-effective energy services, while reducing the environmental impacts of those services.

In addition to long-accepted environmental considerations such as natural habitat protection, land and water conservation, clean generation, and energy conservation, PHI recognizes the benefits of reducing the use of fossil fuels on a global basis. Reducing oil and other fossil fuel consumption can help in many areas, including reduction in greenhouse gas emissions; improved balance of trade and national security considerations; and reserving of fossil fuel feedstocks for manufacturing materials such as the plastics that are the basis for thousands of essential items in our everyday lives. PHI is taking action to address its carbon footprint and works with policymakers to devise solutions to climate change that balance the need to protect the environment with the need to minimize the economic impacts on American families and businesses.

To demonstrate our commitment on climate change, and to proactively monitor and reduce the carbon emissions associated with carrying out our business, we report our emissions data and detail our carbon emission reduction strategies and programs through the independent Carbon Disclosure Project (CDP). This will be the third year of our participation in the CDP. Last year, PHI was ranked in the top three by the CDP for disclosure and performance among all participating North American utilities and achieved a CDP score very close to the highest score of companies in all sectors. In addition,

PHI is evaluating EPA's Climate Leaders program as the basis for improving the cost-effectiveness of our climate change management program.

Reducing our carbon footprint is only the most recent of our environmental commitments. While meeting our fundamental obligations to stakeholders, including customers, shareholders and the communities where we conduct our businesses, PHI is committed to: conserving and improving the natural environment where we operate; seeking out and adopting the most efficient, cost-effective technologies for producing and delivering our essential products and services; fostering the development of renewable generation and procuring "green" electricity for our customers as it becomes both available and affordable; introducing effective and affordable technologies to help our customers conserve energy; and working with suppliers through the U.S. Department of Commerce/EPA's Green Supplier Network Program and PHI's Supplier Audit Program to ensure they meet minimum conservation and pollution abatement standards.

I am pleased to present PHI's *2009 Environmental Sustainability Report*, our annual accounting of our environmental challenges and achievements. I am proud of our performance in these areas, and of the many awards and recognitions we received in 2009. But past achievements are only the foundation upon which to build a sustainable tomorrow. We continue to do the hard work necessary to maintain PHI's leadership position as an energy company committed to excellence in conducting our businesses, while creating a sustainable future for all to enjoy.

Joseph M. Rigby
Chairman, President and CEO



PHI is committed to conserving and improving the natural environment.

PHI Environmental Policy



Pepco Holdings, Inc. is dedicated to conducting its business activities with respect and care for the environment. We focus on providing safe, reliable and affordable energy to our customers while we strive to minimize environmental impacts that result from our operations. The following principles guide our activities in protecting and preserving the environment for future generations.

We will:

- Conduct all operations, including production, transmission, distribution and sales of our products and services, in compliance with applicable environmental laws and regulations and corporate policies and procedures.
- Seek to continually assess and improve our environmental performance at all levels of the Company through proactive management and integration of innovative pollution prevention, greenhouse gas management, habitat and species protection and natural resource conservation considerations into our business planning process.
- Use cost-effective advanced technologies, innovative customer programs and renewable energy sources to enable a reliable, energy-efficient and environmentally friendly tomorrow for our customers.
- Foster open dialogue with employees, shareholders, customers and other stakeholders, and respond to their concerns about potential impacts of our operations.
- Provide appropriate resources to meet our environmental commitments.
- Collaborate with members of the scientific, business and government communities and other stakeholders to analyze emerging environmental issues in our industry and foster the development of sound, scientifically based policies and solutions.
- Work with our suppliers and contractors to promote the use of environmentally preferred products and services.

Compliance with applicable environmental laws and regulations is a critical aspect of our corporate values. All PHI employees, contractors and business partners are responsible and will be held accountable for implementing this policy and ensuring ongoing environmental compliance and protection. In support of this policy, fair and reasonable disciplinary action may be applied when appropriate levels of environmental compliance and protection are not achieved.

About PHI

Pepco Holdings, Inc. (PHI) is one of the largest energy delivery companies in the mid-Atlantic region. PHI subsidiaries Atlantic City Electric, Delmarva Power and Pepco provide regulated electricity service; Delmarva Power also provides natural gas service. Competitive subsidiary Pepco Energy Services is engaged in providing energy-saving performance contracting and other energy services. In 2009, PHI also provided competitive wholesale generation services through Conectiv Energy, and retail energy products through Pepco Energy Services.

Our vision of a new energy future is defined by a partnership between the utility and the customer that leverages technology and information to drive energy efficiency, increase reliability and create a cleaner environment.

Power Delivery

PHI's three regulated public utilities deliver electricity to about 1.9 million residential, industrial, business and government customers in Delaware, the District of Columbia, Maryland and New Jersey; PHI also supplies and delivers natural gas to a limited market in Delaware. Each PHI utility owns and operates a network of wires, substations and other equipment for the transmission and distribution of electricity. Transmission systems carry wholesale electricity into and across the utility's service territory. Distribution facilities carry electricity to end-use customers in the utility's service territory.

All three utilities operate under PHI's Corporate Environmental Policy. They follow the same rigorous guidelines governing PHI's environmental and resource sustainability standards, and have implemented customer-focused energy conservation programs under agreements with the regulatory bodies in each jurisdiction. All three utilities also are key participants in PHI's *Smart Grid* program.



"We are excited to be at the forefront of developing a Smart Grid for the mid-Atlantic region that will benefit both the company and our customers. The new Advanced Metering Infrastructure (AMI) that we are installing – a key Smart Grid component - will dramatically increase our customers' ability to manage their energy needs, enhance our customer service and improve energy efficiency."

David Velazquez
Executive Vice President, Power Delivery

About PHI

Atlantic City Electric

Atlantic City Electric delivers electricity to more than 547,000 customers in a 2,700-square-mile area comprising eight counties in southern New Jersey. In response to New Jersey's Energy Master Plan and the federal and state stimulus initiatives, which collectively encourage new investment in utility infrastructure and energy conservation programs, Atlantic City Electric is committed to investing in stimulus-related projects and capital improvements in 2010.



"We are privileged to serve the citizens in southern New Jersey and we want to partner with them by providing them with the necessary tools to satisfy their energy needs while minimizing the impact to our planet."

Vincent Maione
Region President

Delmarva Power

Delmarva Power delivers electricity to approximately 500,000 customers in Delaware and along the Eastern Shore of Maryland, and delivers natural gas to approximately 122,000 customers in Delaware. Delmarva Power has committed to ensuring that a portion of its energy supply comes from clean, renewable resources. As part of that commitment, Delmarva Power received its first wind power in late 2009 from a land-based wind farm in Pennsylvania. In total, the company has four long-term contracts to receive wind power and expects to soon have a long-term contract for solar power as well.



"We have a responsibility to invest in and support the development of clean, renewable energy sources. I'm proud to say Delmarva Power is walking that talk."

Gary Stockbridge
Region President

Pepco

Pepco delivers electricity to more than 750,000 customers in the District of Columbia and Montgomery and Prince George's counties in Maryland. Pepco is a partner in a "Smart Meter" energy conservation pilot for customers in the District of Columbia. The pilot concluded in October 2009 and the impact evaluation and customer exit survey is currently being evaluated. Pepco continues to work with regulators toward the introduction of a variety of energy-conservation programs for its customers in Maryland.



"Environmental values remain the driving force for Pepco. Conserving our natural resources and working with customers on energy conservation measures has never been more important. We want our customers to know that our ultimate goal is a healthy, sustainable environment now and into the future."

Thomas H. Graham
Region President

Conectiv Energy

Conectiv Energy is a competitive wholesale energy company that manages more than 6,000 megawatts of generation, including a fleet of generating stations in five mid-Atlantic states. In addition to the generating stations the company owns and operates, Conectiv Energy manages additional capacity through service contracts.

Led by its mid-merit plants, the company operates 3,800 megawatts of generation located within the PJM Interconnection transmission system. Mid-merit plants use combustion turbine/combined-cycle technology to utilize environmentally clean fuel and recovered waste heat to increase capacity without the need to consume additional fuel.

To reduce market risk, Conectiv Energy is active in the merchant energy business and operates a cross-commodity trading floor with an emphasis on power, natural gas, coal, oil, renewables and emissions.

By both generating power and participating in the merchant energy business, Conectiv Energy achieves the greatest flexibility to optimize its generation. Because of the fuel-flexibility of its generation fleet, Conectiv Energy can: switch fuels as needed; minimize congestion; immediately take advantage of market opportunities; and better plan power plant construction.

Conectiv Energy is noted for the many wildlife and habitat renewal and protection projects on and around its facilities, and for its community engagement, particularly through environmental education projects.



"We have continued to expand our clean, gas-fired generation fleet, including construction of two current projects on brownfield sites. We also are actively expanding our renewable energy portfolio, including a 4.1 MW solar project built in partnership with local authorities in Vineland, N.J. Our commitment goes beyond business; it is lived out by our employees in the plants and at our headquarters in Newark, Del. Whether they are organizing and participating in community clean-ups or finding ways to construct habitat for native wildlife, our employees give action to environmental stewardship as a core value."

Gary Morsches
President & CEO

Pepco Energy Services

Pepco Energy Services is a leading provider of comprehensive energy management solutions to clients in fields ranging from industrial, commercial, educational and health care to local, state and federal governments. Founded in 1995, the company helps its clients reduce their energy consumption, expenses and carbon footprints. Over the last 15 years, Pepco Energy Services has developed, implemented and financed over \$750 million in energy savings performance contracts for more than 300 customers.

In addition to providing significant business offerings in energy efficiency and energy management services, Pepco Energy Services is highly experienced in developing renewable energy projects. The company has designed and developed multiple solar, landfill gas and geothermal plant installations in the mid-Atlantic states and is experienced in maintaining and operating these plants as well. In 2009, Pepco Energy Services generated approximately \$2.4 billion in revenue (including electricity and natural gas sales), representing clients from Massachusetts to Georgia and from New York to Illinois.



"Pepco Energy Services was established with one goal in mind—reducing our customers' energy use. With a 15-year track record that includes hundreds of millions of dollars in energy savings along with significant reductions in greenhouse gas and other emissions, we are extremely well positioned to help our customers save money and help the environment."

John Huffman
President & CEO



“Historic solutions will no longer work to resolve our future challenges.”

JOSEPH M. RIGBY
CHAIRMAN, PRESIDENT AND CEO

The intensity of energy usage along the mid-Atlantic corridor – illustrated by the “hot spot” in this nighttime satellite image – underscores the energy efficiency benefits of innovative technology such as PHI’s Smart Grid. Photo: NASA

Mapping the Future with PHI’s Smart Grid

PHI’s electric grid—the backbone of the mid-Atlantic economy—is on the brink of profound transformation: it will soon become the Smart Grid, a sophisticated, interconnected network of automated delivery components capable of communicating vast amounts of real-time information.

PHI’s visionary *Blueprint for the Future* anticipated the need for this transformation, placing the company at the forefront of the revolution in technology essential to meeting twenty-first century customer expectations and demands for energy in a manner that is both reliable and sustainable. First published in 2007, the *Blueprint* laid out PHI’s strategy for incorporating sustainable practices—including smart grid principles and technologies—across its service territories.

What Is the Smart Grid?

For PHI, the Smart Grid is a portfolio of multiple advanced technologies designed to modernize the electric grid and which will provide a higher level of system performance for our customers, deliver electric power more efficiently, and employ digital communications to optimize routing and rerouting of power in response to real-time fluctuations in energy demands or system disturbances.

As envisioned, PHI’s Smart Grid has three essential characteristics: *Intelligence, Efficiency and Resiliency*. It must be more intelligent, capable of communicating information to manage the way that the electric distribution system operates. It must use electricity more efficiently through increasingly refined technology, thereby reducing losses. And it must be more resilient in response to outages and threats, both human and natural.

Why the Smart Grid?

Though the U.S. electric grid is 99.7 percent reliable, much of its infrastructure continues to operate with pre-1970s technology. PHI recognizes that customers require more information to help them to



Installing smart meters is one of the first steps toward helping customers better manage their energy use and reduce carbon emissions.

manage their energy usage and that continuing to meet growing demand for electricity in its service territories will require modernizing its portion of the grid with new digital technology and information systems.

The Smart Grid will touch every part of the electric system and will evolve over time. PHI is committed to making the Smart Grid a reality.

Two Key Reasons for the Smart Grid

In order to ensure that our customers have the information and electricity they need, PHI’s delivery system must achieve maximum efficiency and reliability. At the same time, we must help our customers to use the least amount of electricity possible without sacrificing comfort or productivity.

Why would PHI, an electric delivery utility, want its customers to use less electricity? Because it is in everyone’s interest to increase energy efficiency and conserve valuable resources, including electricity. To make promoting energy efficiency and conservation economically viable, PHI has sought *rate decoupling*



Smart thermostats work with smart meters to deliver maximum customer benefits.

in all of its jurisdictions. With rate decoupling, also called *Bill Stabilization Adjustment (BSA)*, the distribution portion of a customer's electric bill is no longer "coupled" with the amount of electricity the customer uses. This ensures that the company will have adequate income to maintain its system and offer energy- and money-saving programs to its customers.

PHI has received regulatory approval for BSA in its Maryland Pepco and Delmarva Power jurisdictions, as well as in the District of Columbia Pepco jurisdiction. It is awaiting approval in the New Jersey Atlantic City Electric and the Delaware Delmarva Power territories. This new billing structure has made possible a closer alignment of customers' and PHI's interests. PHI can now fully partner with customers in working towards a more energy-efficient and sustainable future while continuing to meet its obligations to all its stakeholders.

PHI's Groundwork for the Smart Grid

PHI detailed its Smart Grid vision in 2007 and has been laying the necessary groundwork ever since. That foresight was rewarded with \$168 million in U.S. Department of Energy (DOE) grants for the rollout of several Smart Grid components in its Pepco and Atlantic City Electric service territories:

Advanced Metering Infrastructure (AMI), Distributed Automation (DA) and Communications Infrastructure. The grant will go towards residential central air conditioner direct load control equipment (smart thermostats and smart cycling switches). The grant effectively cuts in half the cost to PHI customers for Advanced Meter deployment while accelerating the company's Smart Grid rollout schedule.

In Maryland, Pepco and Delmarva Power have

completed significant steps toward implementation of initial Smart Grid projects. In Delaware, vendors for AMI, direct load control (DLC), Communications Infrastructure and IT integration have been selected and several contracts related to Smart Grid deployment were positioned to be "shovel ready" in late 2009.

Efficient Technologies

The electric power needs of the mid-Atlantic region are expected to keep growing at a steady pace, placing increased strain on the region's transmission capabilities. As energy demand in the PHI service territory continues to increase, so too does PHI continue to find new ways of satisfying those demands while reducing environmental impacts.

The Future Is Now

Personal computers, the Internet, wi-fi connectivity... together they have transformed modern life. The Smart Grid will have a similar impact on PHI's power delivery system and on the customers it serves. Customers will benefit from a number of advanced—and advantageous—technologies once the Smart Grid is fully deployed.

Smart Meters & Smart Thermostats will provide a constant flow of information from the grid operator, including the real-time price of the energy you use. The system can also react to price changes according to preset customer preferences, automatically cycling down or off customer systems such as air conditioning when demand and prices are high. How, or even if, to respond to these price signals is up to the customer. Alternatively, the customer may install a solar panel, and let the price signal activate it automatically to send electricity to the grid when demand is high, replacing bill increases with bill credits.

Electric Vehicle Technologies – Full deployment of Smart Grid technologies will spark accelerated development of electric vehicle technologies. Three forms of electric vehicles already exist



today: hybrid, plug-in hybrid and battery-powered electric. The most advanced in terms of proven technology and market acceptance is the hybrid: vehicles powered by both an internal combustion engine and a battery that is recharged by operating the engine. Plug-in hybrid electric vehicles (PHEV) are just entering the U.S. market. PHEVs can charge by connecting to home or commercial charging stations and by operating their internal combustion engines. When gasoline prices are high, customers can save on fuel costs by charging from the electric grid, especially during the time of day when the price per kWh is the lowest. Battery-powered electric vehicles are available, but existing battery technology limits their miles-per-charge range, and therefore their market penetration. Smart meters, which will provide customers with data sufficient to choose the most cost-effective source of power for their vehicle at a given time, are expected to boost consumer acceptance of

PHEVs. This also may spur more rapid improvement of battery technology.

System Control/Outage Management – With its revolutionary communications and controls, the Smart Grid also will be able to help avoid or minimize power outages during summer storms or winter blizzards. And when an outage does occur, the Smart Grid's system management tools will enable PHI to restore power much faster than is possible with current technology. And while customers will receive automatic estimated restoration times via text message, this alert will not be needed in most cases, since reconnection will be almost immediate.

Enhanced Access to Renewable & Distributed Generation – The Smart Grid will enable seamless integration of distributed and renewable generation with reliable, traditional generation



PHI field staff – like this Delmarva Power lineman – help educate customers to the benefits of their newly installed Smart Meters.



“The Smart Grid will enable seamless integration of distributed and renewable generation ...”

mixes, further ensuring against the risk of a cascading failure as has occasionally occurred in certain regional grids.

High-Voltage Direct Current Transmission –

Among the portfolio of technologies planned for the Smart Grid is new superconducting high-voltage direct current

(HVDC) transmission. HVDC technology allows for much greater control over the flow of electricity than does a traditional alternating-current (AC) system, while at the same time reducing the environmental footprint of a major transmission project. In the case of the Mid-Atlantic Power Pathway (MAPP)—a major component of PHI’s planned smart grid transmission construction—HVDC technology allows for much greater control over the flow of electricity compared to a traditional AC system, while reducing the environmental footprint of a major transmission project at the same time. The primary benefit of such control is the ability to transmit energy in both directions across the Chesapeake Bay in response to load/demand on either side, greatly enhancing the flexibility of that transmission system. In addition, the system will have a smaller impact on wetlands and the underwater environment of the Bay because fewer cables are required to transmit DC power.

Advanced Metering Infrastructure (AMI)

AMI is the infrastructure that will measure, collect and analyze energy usage data from devices such as advanced digital electric meters. It includes hardware, software, communications and meter data management software (MDMS) that will enable two-way communications for the data collection and measurement functions.

The AMI program has three key components: (1) physical deployment of a two-way communication network and replacement of all existing

electric meters with new smart meters; (2) integration of new and existing information technology systems needed to deliver the data required to enable redesigned business processes and empower customers to manage their energy usage; and (3) development and implementation of redesigned utility business processes to align with the new AMI technology.

The 1,200,000 advanced meters PHI is installing across its jurisdictions will measure and record all electricity flowing through the customers’ system. Such detailed data will enable our customers to better manage their energy usage and PHI to better manage utility operations. AMI will permit meter readings to be recorded at hourly intervals, and greatly improve meter reading accuracy. The meters ultimately will be able to communicate outage information, significantly reducing the duration and impact of power outages. Advanced meters also will be able to tell PHI if they are malfunctioning, further improving the quality of service. Detailed data will enable customers to better manage their energy costs, set their own billing dates and eliminate estimated bills. AMI also will enable new customer rate structures called dynamic pricing options. These rates will better reflect the true cost of producing electric energy at any point of time.

Dynamic Pricing and Demand Reduction

PHI will soon be able to provide “dynamic” price signals to customers through in-home, easy-to-use visualization technology. Customers will be alerted when prices will rise or fall, on a day-ahead or hour-ahead schedule, so they can adjust their usage accordingly, either manually or automatically. Dynamic pricing has important implications for peak demand reduction, a key goal of PHI’s *Blueprint for the Future*.

Since electricity cannot be stored, but must be used the instant it is generated, the electric grid infrastructure must be capable of meeting the highest levels of demand (peak demand). Much of the U.S. electric grid infrastructure is designed to meet approximately 60 hours of peak usage per year. And yet, more than once, growing demand

has come close to overtaking that design. Therefore, reducing the load during peak periods, commonly referred to as *peak-shaving*, will greatly enhance PHI’s load-serving performance.

In the District of Columbia, Pepco completed its PowerCents DC™ pilot program, the first utility test of consumer response to smart meters and dynamic pricing. Customers who participated got a glimpse of life with the Smart Grid, including the option to use dynamic pricing. Smart meters provide peak energy price alerts; smart thermostats with two-way communications, which display current energy prices and monthly usage and bill amounts to date; and critical peak cycling of air conditioning. Both the pricing data and the cycling option allow customers to take advantage of “dynamic pricing,” using less energy when prices are relatively high and rescheduling tasks such as laundry and cooking for when they are relatively lower.

A June 2009 Federal Energy Regulatory Commission (FERC) report identified Maryland as the state with the second-highest demand response potential—a projected reduction in peak demand of 23.8 percent from current levels—under its “achievable” scenario, which includes AMI deployment, DLC and some automated thermostats.

Maryland’s EmPOWER Maryland Energy Efficiency Act of 2008 establishes a goal of 15 percent reduction in electric energy demand by 2015, and requires Maryland’s electric utilities to develop programs that achieve all specified peak demand goals and two-thirds of energy reduction goals. Similarly, goals of 20 percent reduction by 2020 have been set by New Jersey and 15 percent by 2015 by the District of Columbia. PHI’s Smart Grid program will be key to meeting these state goals.

Distribution Automation

Distribution Automation technology is the foundation of the Smart Grid’s resiliency. Its components—automated switches and controllers, smart sensors and substation electronic relays connected to components of the physical distribution system—allow for continuous visibility and remote control of the system. These devices work

together to identify faults on the distribution system, automatically isolate identified problem areas, reconfigure the controlled feeders and reduce the impact on customers.

The Smart Grid will be capable of working autonomously to route or reroute power as conditions require, and faster than is currently possible. This nearly instantaneous response capability will enable more rapid response to emergencies and anticipation and prevention of problems. This will increase system reliability by reducing the duration of electric system outages.

Because it lacks communications capabilities, today’s electric grid cannot alert system operators to delivery failures. When implemented, PHI’s Smart Grid vision includes the capability to signal system operators with the exact nature and location of outages. Armed with this information, crews can arrive quickly at the trouble site fully prepared to perform the necessary repairs. And in many cases, power outages will be resolved automatically with power rerouted to limit the number and duration of customer outages. PHI has already installed a limited number of these devices and found that their performance both benefitted customers and significantly improved reliability performance.

The Smart Grid: The Key to Achieving PHI’s Sustainability Vision

A more intelligent, efficient and resilient electric grid—the Smart Grid—will employ efficient distribution, storage and deployment technologies; advanced communications; and emergency anticipation and rapid response; and will integrate various traditional and renewable energy generation sources. Through these advances, PHI can partner with our customers in their efforts to consume less energy, nurture a rich and healthy environment and sustain the flow of electricity, a vital component of any successful future.



Data is transmitted through fiber optic cable from smart substations like this one to a secure central data point to help customers better manage their energy usage.

Mid-Atlantic Power Pathway

Environmental Preparation Is Phase One

Our priority is to protect natural and cultural resources throughout the MAPP project. This habitat on the Delmarva peninsula illustrates PHI's commitment to environmental stewardship.

In the past 30 years, the population of the mid-Atlantic region has risen dramatically; at the same time, today's American home uses approximately 20 percent more power than in the mid-1970s. The existing electric transmission system in the region—which is already congested—will not be able to keep up with this increased demand for power in the years ahead. Experts such as PJM, the regional transmission operator, and the U.S. Department of Energy have concluded that building new, backbone transmission will help solve this problem.

Enhancing the power delivery system with well-planned, properly sited new transmission lines is one of the most effective ways to protect the environment while meeting the need for more and cleaner electricity. PHI's proposed Mid-Atlantic Power Pathway (MAPP) project, a 150-mile, high-voltage transmission line, will significantly increase access to renewable power where it is generated for delivery to the customers in our region. Local utilities and electric cooperatives rely on the transmission system to keep the lights on for their customers, and early estimates suggest that when completed, MAPP could bring enough new power to the region to light up an additional 800,000 to 2 million homes.

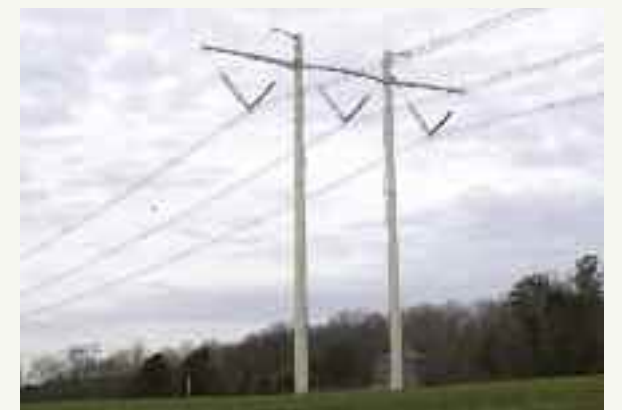
Combining this access to more energy with a stronger focus on energy conservation and development of new, clean and carbon-neutral power sources like wind, solar and nuclear, the mid-Atlantic region, including the Delmarva Peninsula, will be well-positioned to meet energy challenges in the future.

At least 70 percent of MAPP's transmission lines will be built on existing rights-of-way in Prince George's, Charles, Calvert and Wicomico counties in Maryland, and Sussex County in Delaware. Permit applications are currently under review by the Maryland Public Service Commission and state and federal environmental agencies for construction of the first phase of the project in Prince George's, Charles and Calvert counties.

New right-of-way is required for the planned crossing of the Chesapeake Bay and

across Dorchester County, Md. The Chesapeake Bay is the largest estuary in the United States, and was once known for its highly productive seafood industry. Today, species such as rockfish, oysters and blue crabs are still harvested and the Bay is a way of life for Chesapeake watermen and a major source of recreation and tourism as well. Dorchester County, known as "The Heart of Chesapeake Country," contains significant areas of wetlands, agricultural lands, forested lands, conservation lands and cultural resources. The county is home to the Blackwater National Wildlife Refuge and the proposed Harriet Tubman Underground Railroad National Historic Park. Obtaining and building transmission line rights-of-way across the Chesapeake Bay and Dorchester County—while minimizing impacts to environmental, cultural and community resources—is one of the biggest challenges of the MAPP project.

To ensure that the project is sited and constructed in a manner that will meet that challenge, PHI is conducting comprehensive and extensive evaluation and analyses of environmental, cultural and community resources. In addition to working closely with environmental regulatory agencies, the company also is seeking input from communities through the establishment of a Citizens Advisory Council (CAC). The company is integrating that input in its planning process to minimize impacts on the Bay and other sensitive environments, including many in Dorchester County.



More than 80 percent of MAPP's high-voltage transmission lines will be run on existing rights-of-way.



A PHI consultant (left) sets a motion-triggered camera to photograph Delmarva Fox Squirrels attracted by corn and fruit (below). Fox Squirrels have lost 80-90 percent of their native habitat, and PHI is mapping its boundaries to help protect the squirrels' remaining territory.

Due to the complexity of siting a new transmission line, PHI used the Electric Power Research Institute (EPRI) Transmission Siting Line Methodology to identify the most preferred areas for siting the MAPP transmission line in Dorchester County. PHI is taking a careful, multi-step approach to siting the line, based upon both the EPRI methodology input from all important sources, including government agencies and local communities. This approach integrates input from local leaders and concerned citizens, nongovernmental environmental groups, expertise from engineers and surveyors, satellite imagery and publicly available data with guidance and information from government agencies. This research is combined and modeled to generate those corridors that reflect input from area residents and will have the least impact on both local communities and the environment. Within these corridors, PHI is working with landowners to obtain easements or property for the transmission line right-of-way.

Based on feedback from the CAC, PHI has developed and evaluated nine alternatives for crossing the Bay and the new right-of-way through Dorchester County. Detailed information on possible routes is available on the MAPP project website: www.powerpathway.com.

Extensive environmental studies are underway in the Bay and in Dorchester County to identify and assess potential



environmental impacts. Some of these studies include wetlands delineation; identification of threatened and endangered species; forest stand delineation; assessments of oyster beds and essential fish habitats; an aquatic survey; and sediment turbidity modeling. Assessment of the area's cultural resources also is part of the environmental studies.

Once the environmental studies are complete, the proposed crossing of the Chesapeake Bay, Maryland's Eastern Shore and southern Delaware will undergo a thorough environmental assessment in order to apply for environmental permits from the many state and federal regulatory agencies that have oversight of construction projects such as MAPP.

Based on the studies conducted to date, the MAPP project will have limited environmental impacts on the

Chesapeake Bay and some areas of Dorchester County, and PHI will ensure that appropriate measures are taken to properly mitigate those impacts. Some examples of mitigation include creation or enhancement of forested wetlands and planting trees in non-forested upland areas to compensate for the clearing associated with construction of the project's right-of-way.

PHI has contracted with animal habitat experts to survey and delineate the habitat of the Delmarva fox squirrel, which has experienced an 80-90 percent reduction. To minimize and help prevent further habitat loss, PHI will conserve mature stands of forested areas in the delineated areas.

Installing the submarine cable for crossing the Bay and adjacent waterways will result in impacts to "mapped" oyster beds

within the project corridor, many of which do not have oysters present. To offset these impacts, PHI will create or restore oyster beds in the Bay and its tributaries. These mitigation activities could result in long-term improvements to the natural resources of both the Bay and Maryland's Eastern Shore.

PHI is committed to working with interested parties and government agencies in order to assess and address MAPP's effect on the environment. Our priority is to protect the natural and cultural resources throughout all aspects of the project. In addition to complying with all regulations and acquiring all necessary approvals and permits, PHI will employ multiple state-of-the-art techniques for route selection analysis, design optimization, installation and operation, and maintenance practices.

Natural Resource Conservation



Fostering natural habitats on and around our service territory lands helps protect native flora and fauna, like this naturalizing seed pod in southern New Jersey.

Pepco Holdings, Inc. (PHI) is dedicated to conducting its business activities with respect and care for the environment. While our mission is to provide safe, reliable and affordable electric service to our customers, we are also committed to maintaining the health of our environment and conserving and protecting our natural resources.

Proactive & Sustainable Conservation

As public concern about ecosystems, changing habitats, pollution and land management continues to grow, PHI remains committed to addressing all of these with proactive and sustainable conservation and restoration initiatives carried out in the course of its business operations. PHI uses an interdisciplinary, proactive approach to promote sound ecological practices and to restore, conserve and manage wetlands, protected public areas, forests and private property along its transmission and distribution line projects. PHI's three utility companies – Atlantic City Electric, Delmarva Power and Pepco – are among the few nationwide to receive annual recognition as Treeline USA utilities by the Arbor Day Foundation for superior vegetation management on their rights-of-way.

PHI also partners with educational groups to help youth understand the importance of wildlife habitat conservation so that our natural resources are protected for future generations.

Impact Prevention & Mitigation

PHI's natural resource conservation and habitat management goals are accomplished in part through pre-project planning studies designed to identify sensitive locations; guide implementation of protective measures and best management practices; avoid impacts wherever possible; minimize unavoidable impacts; restore temporary impacts; and miti-



Sunrise over the Atlantic shore near the Pinelands National Refuge in New Jersey

gate for permanent impacts related to our business activities.

Such measures include matting to cross wetlands; diverse methods to control erosion and sediment; use of low-impact vehicles; and hand clearing of vegetation in sensitive areas. During the Piney Grove to Mount Olive 69kV Line Reconducting Project in Maryland, for example, matting was placed along access routes to prevent damage to habitat. Silt fences were placed at the edges of the mats and around work areas to reduce siltation impacts. For projects where wetlands mitigation may be needed, PHI works closely with permitting agencies and other groups to create, enhance and/or preserve wetlands to increase the functional value of the area, particularly with regard to plant and wildlife habitat. Large-scale or small, these initiatives all have their place in helping to meet PHI's commitment to maintaining a healthy environment that meets the needs of both human and wildlife populations.

Atlantic White Cedar Planting Project

In 2009, PHI's active conservation initiatives included continuation of the Atlantic White Cedar Planting Project, in which Atlantic City Electric supported the New Jersey Forest Service in establishing stands of Atlantic White Cedar in the Bass River State Forest. Atlantic White Cedar is an important tree species that will thrive only in wetlands. Its historic range once covered approximately 500,000 acres, fragmented and isolated in noncontinuous populations ranging down a narrow strip of the Atlantic seaboard from Maine to Florida and west into parts of Mississippi. Today, it covers a significantly smaller area within the same range—approximately 110,000 acres—mostly in wetland swamp environments. In 2008, PHI volunteers collected almost 50 pounds of Atlantic White Cedar fruit which could yield approximately 1.5 million seeds. In 2009, these seeds were cultivated and then planted by the New Jersey Forest Service and the Conserve Wildlife Foundation in areas within the Pinelands National Refuge.

Great Bay Eel Grass Project

In 2009, PHI continued to support the Manahawkin Bay (N.J.) Submerged Aquatic Vegetation Restoration Project with ongoing monitoring and supplemental planting efforts. Approximately 3,000 sprigs of eel grass had been planted previously in Manahawkin Bay as restoration for impacts relating to installation of an underground cable and disturbance to existing eel grass beds. As part of the 2009 supplementary planting and seeding effort, an additional 1,800 sprigs of eel grass, along with an estimated 600,000 seeds, were planted in a 46,850 square foot restoration site. PHI worked with LGA Engineering and Dr. Paul Bologna of

Montclair State University to complete the successful restoration efforts. Student volunteers from Montclair State University's Aquatic and Coastal Sciences Program, New Jersey's Marine Academy of Science and Technology and Monmouth County Vocational School District assisted in the project.

The additional planting and seeding will increase the area of restored eel grass beds from 0.13 acres to more than one acre in the Cedar Bonnet Island area of Manahawkin Bay. The project team chose to supplement restoration efforts by expanding the restoration area, increasing the number of plantings, and adding an intensive seeding component in order to achieve a high level of success. Studies of the restoration site show that increases in nitrogen and sediment from surrounding development is a significant obstacle to success of the restoration project. PHI is sharing data gathered from this project with the N.J. Dept. of Environmental Protection; the U.S. Army Corps of Engineers; and local conservation groups in an effort to address the impacts of development on the Great Bay. Once restoration is complete, the eel grass beds will help to improve water quality in the Great Bay and provide essential habitat for migratory fish as well.

James Farm Marsh Enhancement Project

PHI is sensitive to the impact of our operations and is committed to restoration of sensitive environments. After several years of monitoring, evaluation, planning and design, Conectiv Energy constructed and opened to the public in June 2009 a 24-acre salt marsh enhancement project at the Delaware Center for the Inland Bays' James Farm Ecological Preserve. Located in Ocean View, Del.,

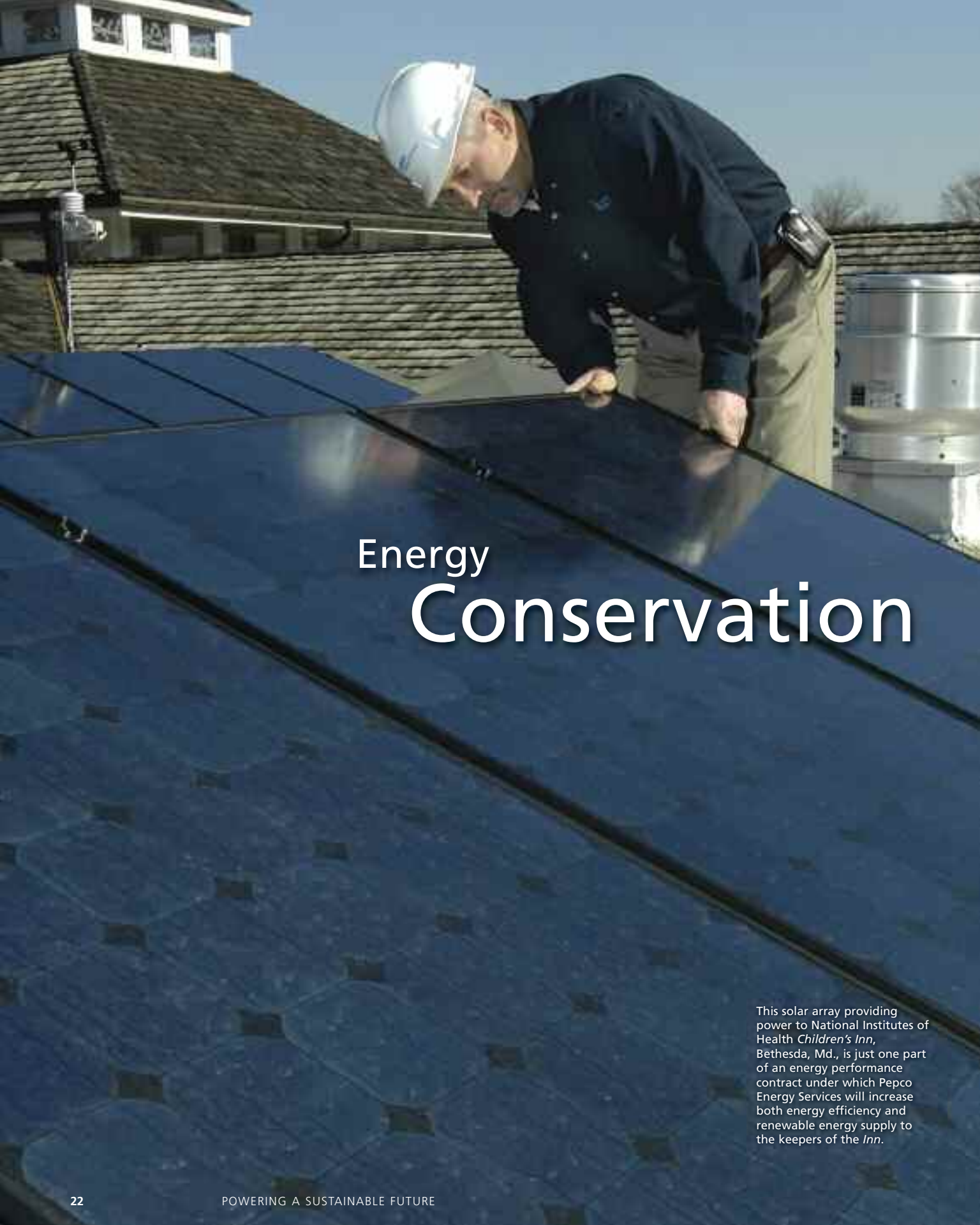
the project is intended to enhance the habitat value of the salt marsh for invertebrates, fish, birds and plant life. Grid-ditching from the 1930s had altered the habitat structure and negatively affected the ecological functions and values of this wetland. The project has replaced the linear ditches with a network of meandering tidal creeks and newly created pools and tidal mudflats that are typical of interior portions of an undisturbed coastal salt marsh.

The James Farm Marsh Enhancement Project is the final step in the natural resource damage assessment and restoration process that compensates for environmental impacts of an early-2000 fuel oil release at the Indian River Power Plant into the Indian River Estuary. The plant was owned at the time by Delmarva Power. The project team included members of the Delaware Center for Inland Bays and representatives of Sussex Co., Del.; the Del. Dept. of Natural Resource and Environmental Controls; the U.S. Fish & Wildlife Service; National Oceanographic and Atmospheric Administration; ENTRIX, Inc. (environmental and natural resource consultants); and Conectiv Energy.

Completed in March 2009, the project has restored a more natural flow of water into and over the marsh, enhancing the habitat. Conectiv Energy will continue to monitor the site for five years, after which the Center for the Inland Bays will assume long-term stewardship of the preserve.

Conectiv Energy restored this salt marsh in Ocean View, Del., enhancing the habitat value for invertebrates, fish, birds and plant life.





Energy Conservation

This solar array providing power to National Institutes of Health *Children's Inn*, Bethesda, Md., is just one part of an energy performance contract under which Pepco Energy Services will increase both energy efficiency and renewable energy supply to the keepers of the *Inn*.

Conservation is at the heart of Pepco Holdings, Inc. (PHI's) sustainability efforts. These include external, customer-focused programs that provide our customers with the tools to use energy more efficiently and economically; internal programs designed to ensure maximum energy- and resource-efficiency for all PHI operations; and energy conservation consulting and services provided by Pepco Energy Services. PHI's commitment to "Reduce, Reuse, Recycle" is detailed in "Environmental Performance."

PHI's *Blueprint for the Future* charted the course for the company's strategy for reaching sustainability goals. Some of the initiatives planned or launched under the Blueprint—as approved by governing regulatory authorities—include:

- Financial incentives for energy efficiency, including rebates, bill credits or other programs to both residential and commercial customers who invest in energy-saving equipment or who participate in voluntary peak-demand reduction programs;
- Smart meters to improve reliability and empower customers to control their own energy usage (see Advanced Metering Systems below);
- Innovative rate options to encourage the use of plug-in vehicles and small-scale renewable energy generators; and
- PHI-wide initiatives affecting all parts of our operations to reduce the carbon footprint created by providing our essential products and services.

Advanced Metering and Demand-Side Management

Advanced Metering Infrastructure (AMI)

The energy industry today is introducing advanced electric metering

technology to give consumers more information about the energy they use – and to empower consumers to make wise energy decisions. This new technology gives individuals, businesses and utilities a greater ability to monitor and reduce energy usage through real-time information about usage and pricing.

AMI is a significant step in the direction of achieving *PHI's Blueprint for the Future*. It is one of many technologies that will be installed to help us transform the utility industry. Advanced meters have the ability to collect customer electricity and usage data via an embedded computer paired with a communications system. This advanced infrastructure will further have the capability of communicating outage and power quality information on a more immediate basis, while obtaining near real-time customer usage and demand information, communicating with programmable controllable thermostats and facilitating remote disconnection of a customer's electrical service.

The goal is to help customers reduce their demand for power at times of peak usage, when power costs the most. With advanced meters and a smart thermostat or Internet portal designed to work with the meter, customers will be able to see the impact on their bill by adjusting the thermostat just a few degrees. They also will be able to see when their bill has hit a certain level and can decide to take actions to keep it from getting much higher.

From a utility's point of view, smart meter technology offers reliability benefits and the ability to remotely identify power problems. It also provides customers with access to information they need to make informed decisions about their own energy use. Under agreement with the Delaware Public Service Commission, PHI has begun

installing smart meters for all Delmarva Power's Delaware customers. The Blueprint vision is for customers of all three PHI electric utilities to have the benefit of AMI. This huge undertaking will take considerable time and investment, but the benefits to customers and all other stakeholders will make it more than worthwhile.

Demand-Side Management

Advanced meters also will enable and support Demand Side Management programs that encourage customers to modify their level and pattern of electricity use in order to reduce the demand for electricity during peak load times. The company proposes to offer rebates, bill credits or other financial incentives to both residential and commercial customers who install energy-efficient appliances, equipment or other measures and/or who participate in voluntary peak-demand reduction programs. Successful programs can reduce the need for new or additional power generation and the environmental impacts of that additional generation.

In 2009, PHI began to implement the first of these proposed programs, a new direct load control program that provides equipment, technologies and services for PHI's Maryland residential customers served by Pepco and Delmarva Power. Customers who voluntarily enroll will be able to reduce energy consumption through either a programmable communicating thermostat or an outside air-conditioning cycling switch. The devices will have the capability of cycling the central air conditioning system compressor, and customers will be able to choose from three cycling strategies, each of which has a different incentive payment.

Demand-side management is a key part of Blueprint realization. With today's high energy costs, we believe the most

cost-effective and environmentally friendly unit of electricity is the one that's never used. It's in everyone's interest to find ways to better manage our energy use so we can meet our future energy and environmental challenges.

Fleet Transformation

PHI is moving ahead with the transformation of its vehicle fleet by adopting environmentally friendly technologies such as hybrids, plug-ins, and alternative-fuel vehicles to curb greenhouse emissions, and by the use of biodiesel fuel in those vehicles that have a diesel engine. The fleet will be transformed as vehicles are due for replacement, initially with hybrid or alternative fuel vehicles and later with newer technologies as they become commercially available. PHI's innovative fleet program is part of a long-term strategy to meet future demand for electricity and keep costs manageable.

Volunteers from Environmental Services, Vehicle Resources Management and other departments represented PHI at the 2009 Washington, D.C., Auto Show.

PHI has added eight more hybrid bucket trucks to its fleet as a result of our successful 2004 participation as one of 14 utility companies to partner with Westart-CALSTART, International and Eaton Industries to test and evaluate a 42-foot hybrid bucket truck. The vehicle debuted in Pepco's District of Columbia and suburban Maryland region in January 2007 and was monitored for 12 months. Atlantic City Electric currently operates two hybrid bucket trucks; Delmarva Power operates two hybrid bucket trucks; and Pepco operates five hybrid bucket trucks. The truck's bucket can be operated in electric-only mode, which reduces emissions and eliminates engine noise while workers are maintaining utility equipment. The hybrid bucket trucks are fueled with biodiesel.

PHI continues to participate in pilot programs and has supported research in vehicle-to-grid technology sponsored by the University of Delaware. The company also is participating in an Electric Power

Research Institute (EPRI) program to test a plug-in electric bucket truck, and is working with Odyne Systems to test a plug-in compressor truck for the Delmarva Power Gas Division in Wilmington, Del.

Plug-In Hybrid Vehicles

PHI is in the second year of a three-year program to demonstrate and evaluate the general performance characteristics and

plug-in performance of the plug-in hybrid Ford Escape. The company also is partnering with General Motors Corp. to evaluate their *Chevy Volt* plug-in electric passenger car, and has converted an existing Toyota Prius hybrid passenger car to an electric plug-in. These plug-in electric vehicles will be tested to determine suitability for our fleet as well as compatibility with emerging Smart Grid technology.

2009 Hybrid Vehicles

TYPE	ACE	DPL	PEPCO	TOTAL
Hybrid pass Cars	8	34	32	74
SUV Hybrids	15	21	19	55
Hybrid Buckets	2	2	5	9
Total	25	57	56	138

By the end of 2009, PHI had a total of 138 hybrid vehicles in its fleet.

Fleet Transformation Milestones

- In early 2007, PHI started with a total of seven hybrid vehicles in its fleet, including one hybrid bucket truck.
- By the end of 2007, PHI had expanded that number to 40 hybrid passenger vehicles, including vehicles from Ford, Mercury, Toyota and Honda as well as the hybrid bucket truck from Eaton.
- In 2008, PHI ensured that all of its company-owned diesel fuel sites were pumping B10 BioDiesel. PHI uses approximately 915,000 gallons of B10 each year.
- Also in 2008, PHI converted its Centerville, Md., fuel site to add the capability for pumping E85 ethanol fuel for use in flex-fueled vehicles.

Pepco Energy Services

Pepco Energy Services engineers develop recommendations to reduce energy usage and identify optimum

methods to monitor, measure and verify energy use for peak performance and cost savings. The solutions the company designs, builds and maintains generate enough savings that nearly all the projects are self-funding, allowing customers to shift operational dollars to fund capital improvements.

From a single building to a multi-facility campus, Pepco Energy Services also develops and builds new, highly efficient energy infrastructures for reliable operations. The company designs, constructs, operates and maintains state-of-the-art combined heat and power systems for facilities of all sizes. The company also develops thermal storage systems that allow chiller plant loads to be shifted to less expensive "off-peak" hours.

Every Pepco Energy Services project is unique, tailored to the client's particular needs and specifications. The following projects contracted in 2009 are typical in the sense that the client had well-defined and challenging goals, and Pepco Energy Services created successful solutions for each.

Maryland Stadium Authority

The Maryland Stadium Authority selected Pepco Energy Services to implement a \$9 million comprehensive energy-efficiency contract at Camden Yards, Oriole Park and M&T Bank Stadium in Baltimore, Md. The 13-year contract, including the historic B&O Warehouse that has been converted to office space on the 85-acre sports complex, calls for Pepco Energy Services to install energy-efficient lighting, upgrade the cooling and heating plants, update building automation systems, provide maintenance services for these systems, and install water-saving fixtures in these facilities. The company also will install daylight harvesting controls— devices that use sunlight for interior

lighting in Oriole Park.

This project is among the first of its kind for NFL and MLB stadiums and will save the State of Maryland more than \$16 million over the performance period, as well as eliminating 3,454 metric tons of carbon dioxide – the environmental equivalent of planting more than 1,250 acres of trees. Construction for this project is expected to be completed by October 2010.

Appalachian State University

Pepco Energy Services was selected to implement a \$5.4 million comprehensive energy performance contract program for Appalachian State University (ASU) in Boone, N.C. Under the 12-year contract, the company will provide conservation measures in 15 buildings on the ASU campus. These measures will reduce ASU's annual energy and water consumption by 30 percent and reduce carbon dioxide production by 1,045 metric tons per year. The guaranteed annual energy savings will exceed \$550,000 per year and allow ASU to add over \$5.4 million in energy infrastructure, all paid for by the reduced spending on energy and water. The project also will include an Energy Awareness program with a Web site that will monitor how much energy is being used in buildings where energy-efficiency measures have been implemented. Construction is expected to be completed by the end of 2010.

Pennsylvania Farm Show Complex and Expo Center

Pepco Energy Services was selected to implement a \$3.6 million comprehensive energy savings performance contract for the Pennsylvania Farm Show Complex and Expo Center, a 1 million square foot complex located in Harrisburg, Pa. Under the 15-year contract, the company will



PHI is one of the first utilities to partner with Chevrolet in testing the plug-in hybrid Chevy Volt.

install new energy-efficient lighting fixtures and water-saving fixtures, replace and upgrade heating and air conditioning systems, and install a solar thermal heating system in the facility. Annual energy savings for the complex will exceed \$300,000, with a reduction of 1,650 metric tons of carbon dioxide emissions each year. The project is expected to be completed in the first half of 2010.

The British Embassy

After an extensive evaluation was performed in accordance with European Union Procurement Rules, the British Embassy - with nearly 500 employees, the largest in Washington, D.C.— awarded Pepco Energy Services a \$9.5 million contract to design, install and maintain a new combined-heat and power system. The design calls for two natural gas-powered internal combustion engines that will produce electricity for the embassy offices and British





PHI's Pilot LED Streetlight Project is testing customer response to the newly developed fixtures, as well as their reliability, energy efficiency and light quality. In addition to their energy savings, the LED lights are directional, so they don't cause "light pollution" in our night skies. The first of PHI's test LED streetlights were installed at *National Harbor* in Prince George's Co., Md.

Ambassador's residence. Using waste heat from the engines, the system will generate low-temperature hot water for heating or cooling. This technology provides higher efficiency than competing designs. In addition, by having on-site generation, the embassy will have an excess source of conserved power should there be an outage on the local grid. This also will allow for peak-shaving to reduce metered demand during extreme heat and cold events when stress on the grid is greatest and cost per kilowatt-hour are highest. Annual energy savings for the complex will exceed \$218,000 with a reduction of 919 metric tons of carbon dioxide emissions each year. Construction began in 2009 and is expected to be completed in 2010.

The company is also undertaking a comprehensive Leadership in Energy and Environmental Design (LEED®) assessment of the embassy and will incorporate processes and measures that will contribute to LEED® certification of the complex. In addition, this project will incorporate best practices from the Energy Efficiency Partnership of Greater Washington, the Virginia Tech-led initiative for energy savings projects in Washington, D.C., of which Pepco Energy Services is a core partner.

City of Greensboro, North Carolina

Pepco Energy Services is implementing a \$6.1 million comprehensive energy-efficiency contract with the City of Greensboro, N.C. The 13-year contract calls for the company to provide energy conservation measures to 46 city buildings. These measures will reduce the city's energy use by 28 percent and cut water consumption

by 6.3 million gallons annually (a 21 percent reduction). These measures also will reduce the city's energy and water costs by more than \$500,000 annually and reduce carbon dioxide emissions by more than 5,000 metric tons per year. As part of the contract, the company will install energy-efficient lighting fixtures and water-saving fixtures, replace old chillers, update building automation systems, and commission and rebalance heating and air conditioning systems in many of these facilities. The company also will provide solar energy for space heating and hot-water systems at the Melvin Municipal Office Building and at five city fire stations, and an Energy Awareness program to train building occupants on efficient practices and encourage energy savings.

National Institutes of Health Children's Inn

Pepco Energy Services is implementing a \$1.3 million comprehensive energy performance contract program for the National Institutes of Health Children's Inn in Bethesda, Md. Under the 10-year contract, Pepco Energy Services will upgrade or install new energy-efficient lighting fixtures in the Children's Inn, the Family Lodge and four parking garages. Additionally, Pepco Energy Services will

introduce controls, upgrades and a solar-energy system array in the Children's Inn. In addition to providing the building with electric energy converted from the sun's light, the solar array also will provide a learning experience for the children and guests. Annual energy savings for Children's Inn will exceed \$180,000. The project began in November 2008 and is expected to be completed in 2010.

Green Building Council Membership

Pepco Energy Services is a corporate member of the U.S. Green Building Council, the group responsible for developing the Leadership in Energy and Environmental Design (LEED®) Green Building Rating System. LEED® is a third-party certification program and the nationally accepted benchmark for the design, construction and operation of high-performance green buildings. LEED® gives building owners and operators the tools they need to have an immediate and measurable impact on their buildings' performance. LEED® promotes a "whole building" approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality.

PHI's facilities—office buildings, power plants and energy transmission and distribution centers—offer many opportunities for implementing green-building solutions and PHI has been taking advantage of these green-design techniques. Edison Place, the state-of-the-art and energy-efficient headquarters of PHI, earned accolades for its architecture and design, and has earned the U.S. Environmental Protection Agency's 2009 ENERGY STAR® and was recognized with its first LEED® certificate, which is a major environmental award.



Power Supply

Efficient Generation and Renewable Energy

"We are actively expanding our renewable energy portfolio."

Conectiv Energy and Pepco Energy Services are PHI's competitive energy companies. Conectiv Energy supplies electricity to the wholesale markets; Pepco Energy Services supplies electricity and natural gas to wholesale and large retail customers. Delmarva Power, a regulated utility, sells natural gas to retail customers in Delaware.

Conectiv Energy

Conectiv Energy is a competitive wholesale energy company that manages more than 6,000 megawatts (MW) of generation. Approximately 3,000 MW are accounted for by its fleet of generating stations in five mid-Atlantic states. The balance is operated under asset management contracts.

Clean Generation Fleet Expansion

In 2009, Conectiv Energy continued to expand its clean, gas-fired generation fleet with the completion of our Cumberland Two project in New Jersey, and continued construction of our

Delta Power Plant in Pennsylvania. Delta's design incorporates valuable efficiencies and real-time waste minimization during construction. Following company policy of supporting the clustering of industrial activities to minimize environmental impacts, both projects are built on "brownfield," or former industrial sites.

Cumberland Two

The second generating unit, which went online in mid-2009, can produce approximately 100 MW of electricity, adding significant reliability in southern New Jersey. The new unit is an aero-derivative combustion turbine, capable of operating on natural gas or ultra-low sulfur distillate oil.

This unit also has an electric motor-driven gas compressor to boost line pressure. It utilizes water injection for NOx control, and post-combustion catalysts for additional NOx and CO control, as well as a continuous emissions monitoring system for emissions measurement. Cumberland Two can be operating at full power in minutes.



Construction of Conectiv Energy's *Delta* combined cycle generating plant utilized mountains of recycled material from the slate processing plant that formerly occupied the site, located about 50 miles southeast of Harrisburg, Pa.

Delta

Located approximately 50 miles southeast of Harrisburg, Pa., near the Borough of Delta, Conectiv Energy's Delta Power Plant is a nominal 550 MW combined cycle (gas and steam), electric generating plant. On schedule to begin service in 2011, this facility will have the flexibility to run on either natural gas or ultra-low sulfur distillate oil.

The Delta project site includes portions of a former slate manufacturing facility that first began operating in the 19th century. With the approval of the Pennsylvania Dept. of Environmental Protection, the project team used material reclaimed from the historic on-site slate-grinding operations to build roads, back-fill foundations and fill pipe trenches for the new facility. Forty thousand cubic yards of material—enough to fill a football field 24 feet high—were thus recycled that otherwise would have entered a waste stream.

Renewable Power

Solar Power

Beyond our gas-fired fleet expansion, we are actively expanding our renewable energy portfolio. In conjunction with Vineland Municipal Utility Authority and the Landis Sewerage Authority, we have developed and built the *Vineland Solar One* project, a solar facility in Vineland, N.J., that brought more than four MW of renewable energy to the grid.

Wind Power

Conectiv Energy is contracting for a share of energy and Renewable Energy Credits (RECs) from a 198 MW wind farm operation in Illinois. The company will buy 50 percent of the wind farm's output (approximately 100 MW) effective Nov. 1, 2008 through July 1, 2017. Conectiv



The four MW *Vineland Solar One*, a key supplier of renewable energy in southern New Jersey, was built and developed by Conectiv Energy.

Energy's share of the wind farm output is expected to be approximately 300,000 MWh per year (35 percent capacity factor). This contract expands Conectiv Energy's current activities in Illinois, which also include supplying load to the state's ComEd customers. Portions of Illinois are part 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. States within PJM accept only those RECs generated by facilities in, or interconnected with, PJM's territory. As a load-serving entity, Conectiv Energy is required to provide a specified percentage of renewable energy in the states where the company operates. While each state has different rules for what type of generation qualifies as renewable, the required percentages of supplied load are scheduled to increase significantly over the next several years. Wind is accepted in all states and is specifically required by some buyers in the renewable marketplace. Including wind as part of Conectiv Energy's renewable portfolio gives the company valuable flexibility in managing its renewable obligations.

Clean and Efficient Generation

Conectiv Energy is committed to efficient, clean, wholesale energy production. Conectiv Energy implements several clean initiatives at its power facilities:

- Maintaining fuel specifications to provide optimal combustion efficiency
- Regular boiler overhauls to ensure efficient operation and minimize fuel use
- Adding new, clean natural gas-fired electric generating capacity and renewable energy capacity to its electric generating fleet, and ultimately the power grid
- Financial support of local and national carbon sequestration projects

Reducing Greenhouse Gases

Conectiv Energy works to reduce greenhouse gas (GHG) emissions through the use of mid-merit power plants that utilize environmentally clean fuel and recovered waste heat to increase the capacity of the power plants without the need to consume additional fuel. Conectiv Energy's Vineland Solar One project is part of the company's initiative to develop renewable energy generation. The Vineland Solar One facility will displace approximately 10.4 million pounds of CO₂ per year over its projected 30-year life, and can power approximately 500 homes during peak periods. According to calculations provided by the U.S. Environmental Protection Agency, this is equal to removing more than 860 cars from New Jersey's highways every year.

Conectiv Energy's Environmental Commitment

At Conectiv Energy, our commitment goes beyond business and is lived out by our employees in the plants and at our



Conectiv Energy's *Delta* combined cycle power plant will be able to use either natural gas or ultra-low sulfur distillate oil.

headquarters in Newark, Del. Whether they are organizing and participating in community cleanups or finding ways to construct habitat for native wildlife, our employees give action to environmental stewardship as a core value.

Pepco Energy Services

Pepco Energy Services was one of the largest providers of renewable energy in the United States in 2009, supplying a wide range of customers. In the mid-Atlantic region, the company supplied renewable energy to 9.5 percent of its New Jersey load, 7.6 percent of its Maryland load, 8.1 percent of its District of Columbia load and 2.2 percent of its Delaware load. The company also helps a number of customers to purchase

Renewable Energy Certificates (RECs), through which it provides cost-effective, environmentally sound green energy solutions individually tailored to meet each customer's goals within budget.

Pepco Energy Services sold electricity in many states that require the purchase of renewable energy to comply with state-specific Renewable Portfolio Standards (RPS). States with green energy requirements include Maryland, New Jersey, Pennsylvania, Massachusetts, Connecticut, Texas, Delaware and the District of Columbia. The company has designed and developed multiple solar, landfill gas and geothermal plant installations throughout the mid-Atlantic region, and in many cases the company maintains and operates these facilities as well.

“Pepco Energy Services is highly experienced in developing renewable energy projects...and is experienced in operating these plants as well.”



Landmark Solar Installation

In February 2009, the company formally brought online the largest single roof-mounted installation of solar electricity panels in the United States, covering more than 290,000 square feet on the roof of the Atlantic City Convention Center in New Jersey. The project’s 13,486 solar panels are capable of creating 2.36 MW of power and delivering nearly 3 million kWh of electricity annually—enough to provide 25 percent of the convention center’s total electricity needs. The annual energy savings are estimated to equal 5,000 barrels of oil or at least 2,000 tons of CO₂ every year. The construction process was environmentally conscious as well, and a high percentage of construction waste—including cardboard, wood pallets and other materials—was recycled. Even the new roof membrane of the installation will help reduce energy use. Its white color reflects the sun’s rays, reducing the

amount of air conditioning required by the convention center. Pepco Energy Services will own, operate and maintain the solar array to ensure peak operational efficiency.

Landfill Gas – Recycled and Renewable

Both Conectiv Energy and Pepco Energy Services are active in generating power from reclaimed methane gas produced by landfills, which has been identified as a greenhouse gas suspected of contributing to global climate change. Pepco Energy Services constructed and owns three landfill gas-to-energy facilities—one each in Fauquier County, Va.; White Marsh, Md.; and Bethlehem, Pa. The company offers each customer advanced engineering solutions to capture and burn this naturally occurring gas to generate electricity. These projects also offer positive long-term environmental impacts.

White Marsh, managed by the Maryland Department of Public Works, is the company’s newest landfill gas (LFG) solution, created for the Eastern Sanitary Landfill in Baltimore County, Md. Containing roughly 4.5 million tons of garbage, the landfill grows by more than 160,000 tons annually. The department sought an efficient landfill gas-to-energy system requiring no financial investment by the county. In response, Pepco Energy Services designed an electric power generating system that consists of three state-of-the-art engine/generator sets, expandable to four. The generators burn the LFG and generate up to three MW of electricity per hour—the equivalent of 79 railroad cars of coal per year. This unique solution has dual benefits: it delivers enough energy to power 1,900 homes annually, while reducing GHGs equivalent to the removal of 3,000 cars from the county’s roads each year. The system is housed in the landfill’s main building, which is designed to contain the sound from the engines and turbines, reducing noise pollution. The company’s Bethlehem, Pa., landfill gas project delivers five MW of electricity per hour. The 8,800 square-foot plant houses a combustion turbine that will ultimately produce enough electricity to power 3,000 homes and replace 140 railcars of coal per year. This will eliminate the more than 73 metric tons of CO₂ that would be emitted by a conventional coal-burning power plant to produce the same amount of power. Burning LFG also curtails the release of landfill-generated methane, another greenhouse gas. The company also operates a two MW LFG generating station in Fauquier County, Va., which generates smaller amounts of energy; its GHG reductions are proportionately lower.

Delmarva Power

Wind Power Dominates, but Renewable Portfolio Is Diverse

Delmarva Power delivers electricity to about 500,000 customers in Delaware and along the Eastern Shore of Maryland, and delivers natural gas to about 122,000 customers in Delaware. Delmarva Power has made a commitment to ensuring that a portion of its energy supply comes from clean, renewable resources. Together with the State of Delaware, the company is further committed to significantly increasing the use of renewable sources of energy. Under legislation enacted in 2005 and amended in 2007, Delaware’s Renewable Portfolio Standard (RPS) requires Delmarva Power to increase the amount of energy generated from renewable sources like wind, solar, biomass, hydro and others.

To help meet its RPS targets, Delmarva Power has contracted for up to 200 MW of energy generated from an off-shore wind project and up to 150 MW of land-based wind resources. When in operation and combined, the wind sources we have contracted for in Delaware will satisfy our RPS requirements through 2019 and are expected to supply almost 20 percent of our SOS customers’ annual energy requirements.

Delmarva’s contracted wind power providers include:

- Bluewater Wind, located off the coast of Delaware: up to 200 MW of energy, starting around 2014-15;
- Armenia Mountain wind project in Pennsylvania: this project began producing clean energy in 2009 and is now fully operational, capable of producing up to 50 MW of energy;
- Roth Rock and Eastern Wind projects in western Maryland: up to 100 MW of power starting in the 2010-2011 timeframe.



Solar Also Has Important Role

Delmarva Power has also announced plans to participate in the first utility-scale solar power plant in the region. The company would partner with the City of Dover and others to construct a 10 MW solar power plant in the city’s Garrison Oak Technology Park, to be named Dover SUN Park.

Delmarva Power will continue to explore additional opportunities for expanding renewable supplies beyond the state-mandated RPS levels by providing its customers with options to increase their own individual participation in programs designed to protect the environment.

PHI’s Renewable Commitment

Providing ample supplies of renewable energy will help PHI to achieve its core

goals of sustainability, reliability and cost-effectiveness for the communities it serves. PHI companies share this commitment to providing customers with affordable electric power from renewable sources. State laws require Atlantic City Electric, Delmarva and Pepco to increase every year the proportion of energy from renewable resources in their total power procurements. And the required percentages are scheduled to increase significantly over the next several years in every jurisdiction where PHI operates. Wind power qualifies as renewable energy in each of these jurisdictions, and is also one of the more economical renewable energy resources in the mid-Atlantic marketplace. As a result, PHI’s utility companies are working hard to include as much cost-effective wind energy in their renewable energy supply portfolios as possible.

Environmental Performance

PHI recognizes the benefits of reducing greenhouse gas emissions on a global basis, and the company is taking action to address its carbon footprint.

PHI's environmental management system (EMS) helps set priorities for action and challenges our employees to continually look for ways to lessen the impacts from our business activities while constantly improving our environmental performance. PHI's EMS integrates environmental responsibility in its decision making at all levels and in the conduct of all our operations and activities.

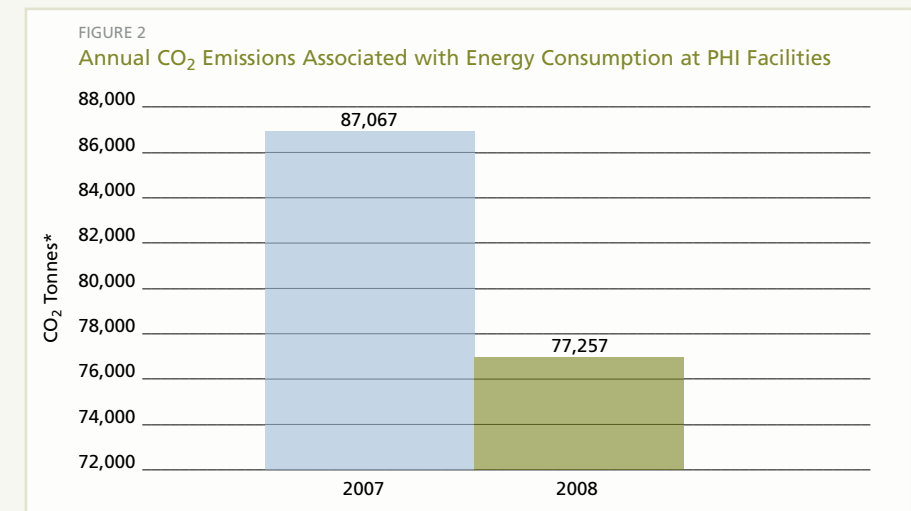
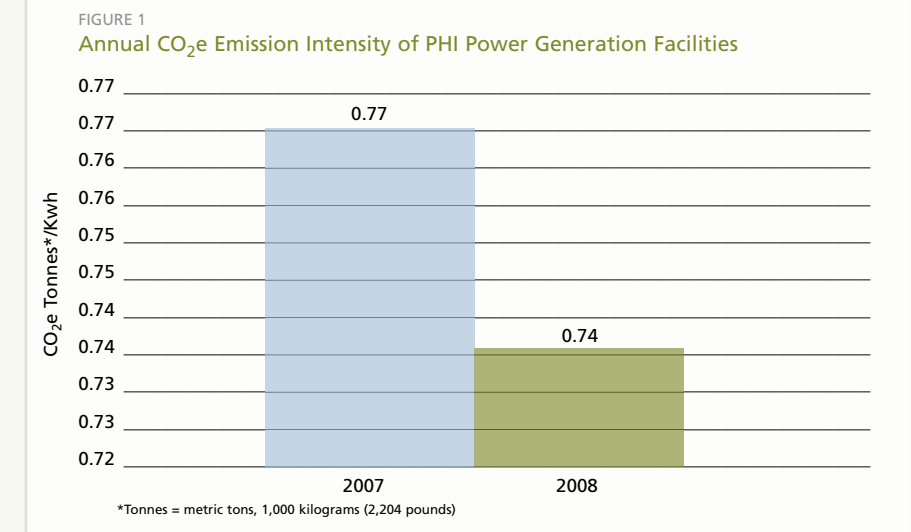
Compliance Is Key

Compliance with environmental and safety requirements is a critical element of our company's business success. All employees are required to understand and comply with the laws, regulations and internal standards that apply to the performance of their job. Employees are expected to ensure that the company's day-to-day operations are conducted in compliance with these requirements. Compliance, together with effective pollution prevention and environmental risk reduction programs, is an important measure of our environmental performance. To make sure that this measure returns positive results, PHI has developed a number of proactive, compliant and sustainable

solutions to the environmental challenges we face. We will continue to work diligently toward ensuring environmental compliance in order to meet the expectations of regulatory agencies and fulfill our environmental responsibilities in the communities we serve.

Climate Change

PHI recognizes the benefits of reducing greenhouse gas (GHG) emissions on a global basis and is taking action to address its carbon footprint. We are working directly with national policymakers to devise solutions to climate change that balance the need to protect the



environment with the need to minimize the economic impacts on American families and businesses.

PHI has many strategies in place to stabilize and gradually reduce our GHG emissions through deployment of cost-effective, emission-reducing technologies throughout our operations, such as:

- Alternative-fueled, hybrid electric and plug-in vehicles;
- Energy-efficient lighting for facilities and grounds;
- Energy-efficient heating, ventilation and air-conditioning systems in our facilities;

- Continued improvements in the performance efficiency of our power generation facilities; and
- Longstanding commitments to waste recycling programs that reduce indirect emission of GHG (from the manufacture of new materials and the decomposition of waste materials).

In 2009, PHI responded for the second time to the voluntary annual GHG emissions benchmarking survey conducted by the Carbon Disclosure Project (CDP). PHI scored 87 of a possible 100 points on the Carbon Disclosure Leadership Index



action. CDP's performance scores help show where risks are being managed and opportunities maximized, and provide investors with insight into how well companies are preparing to compete in a low-carbon environment.

Reducing GHG Emissions

Annual GHG emissions from our business operations and activities—as reported in PHI's CDP filing—are presented in Figures 1 and 2. From 2007 to 2008, PHI registered a downward trend in GHG emissions per number of kilowatt-hours generated by our power generation facilities (emission intensity). From 2007 to 2008, PHI also achieved a reduction in the amount of indirect CO₂ emissions associated with energy consumption at our non-generation facilities (see Figure 2). Over the same time period, GHG emissions associated with our vehicle fleet remained unchanged at 2.07 pounds CO₂e per vehicle-mile driven.

(CDLI), placing it in the top 10 percent of all S&P companies, and in the top tier of all utilities.

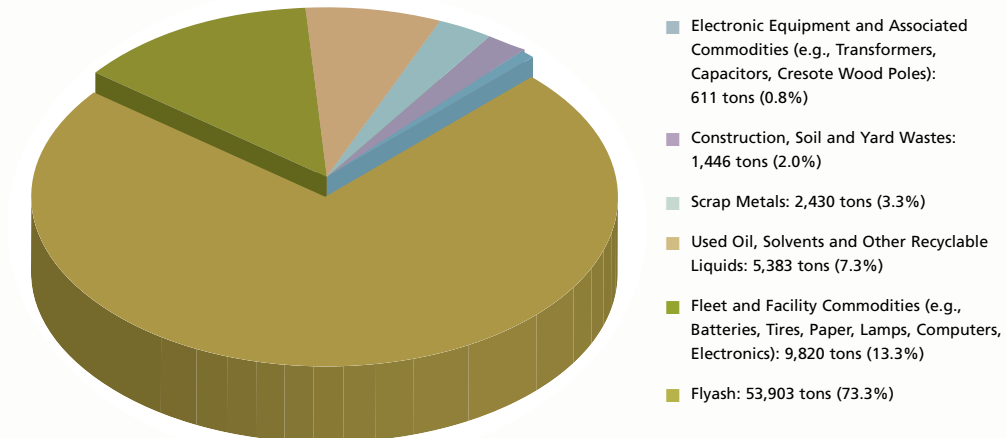
At this year's event, the CDP launched its new performance scoring pilot methodology. The performance scores measure corporations' actual performance in responding to and reducing their contribution to climate change. The scores are intended to complement the CDLI, which rates firms according to the level and quality of their disclosure and reporting on GHG emissions and climate change strategy data. PHI was one of the leaders of all 2009 survey participants in both CDLI and CDP's performance scoring pilot. Incorporating performance into CDP 2009 provided for distinction between observing and rewarding good reporting versus positive

Pollution Prevention – Reduce, Reuse, Recycle

PHI takes a proactive approach in minimizing the generation of waste throughout our entire organization. Waste prevention and recycling efforts are apparent in every aspect of the company through emission reductions, energy conservation and product recycling.

PHI companies are vigilant in recycling electronics, metals, office paper, bulbs, batteries, antifreeze, tires and other commodities, such as creosote wood poles, meters and transformers (see Figure 3). In 2009, for example, PHI offices hosted electronic recycling events in which nearly nine tons (17,700 pounds) of electronics were collected and sent to a recycler.

FIGURE 3
2009 Total PHI Recycled Materials: 73,593 Tons



Innovative Industrial Recycling

In 2009, Delmarva Power completed the demolition and restoration of several small-scale, obsolete generating facilities and decommissioned electrical substations. One such project was the demolition and restoration of the Tasley Generating Station in Tasley, Va. Built in the 1920s and operated until the early 1980s, Tasley was one of the first electrical generation facilities in the Eastern Shore region. In the course of demolition and site restoration, Delmarva Power recycled 480 tons of concrete and brick and 230 tons of steel. Recycling these materials saved approximately 1,500 cubic yards of waste from disposal in a landfill.

In order to continually enhance our recycling efforts, PHI for the last 10 years has been an active participant in the EPA's WasteWise voluntary recycling, reuse and waste prevention program. WasteWise is a successful partnership program that

seeks to reduce municipal solid waste through innovative waste prevention and recycling techniques. Additionally, in September 2008, PHI's corporate headquarters—Edison Place—became a 2008-2010 Regional Recycling Partner with the District of Columbia Department of Public Works. The Edison Place facility was recognized for its recycling efforts that conform to the District of Columbia's municipal recycling regulations.





Environmental, Safety and Health (ESH) Risk Management

PHI identifies, manages, communicates, monitors and prioritizes its environmental and safety risks and opportunities associated with its operations through its environmental management system (EMS) and safety management system (SMS). Our EMS and SMS both are built upon a series of forward-looking corporate policies that provide a comprehensive framework for implementing the environmental and safety vision within all aspects of the

company's business operations and activities. Additionally, PHI's EMS and SMS include corporate procedures and standards that help implement these corporate policies, clarify employee obligations within all lines of business and provide guidance on related topics.

Environmental Compliance

PHI's policy is to conduct its operations in compliance with applicable regulatory requirements and with no violations. As

shown in the chart opposite, PHI's environmental performance—as measured in part by the number of citations issued by regulatory agencies—has shown a pattern of significant improvement every year since the 2003 implementation of our EMS and internal environmental audit program. During 2009, we experienced three formal enforcement actions, down from five in 2008 and nine in 2007.

Environmental, Safety & Health Audit Program

One of PHI's key processes for reducing environmental and safety risks, preventing incidents and fostering continuous improvement of our environmental, safety and health performance is the company's ESH Audit Program, a critical element of both our EMS and SMS. The primary objective of PHI's ESH Audit Program is to provide independent verification and assurance to management that the company's operations are being conducted in accordance with applicable laws, regulations and internal policies and standards. The audit program is a risk-based tool that identifies and promotes best management practices and sustainable solutions that not only support compliance, but also drive continuous improvement in PHI's ESH performance throughout all the company's businesses and facilities.

PHI utilizes an "audit-in-depth" process to ensure compliance with environmental and safety laws and regulations. This process uses a coordinated, multi-level approach to obtain broad coverage of all company activities. It requires each PHI line of business to participate in regularly scheduled risk-based ESH facility- and/or program-specific audits and to perform routine self-assessments of their operations to ensure that day-to-day activities are conducted in compliance with applicable federal, state and local environmental and safety laws and regulations and in conformance with company policies and standards. After any audit or review is completed, findings and recommended areas of improvements are documented by personnel and are submitted to the responsible management team to ensure appropriate resolution of the identified risks or issues.

During 2009, PHI conducted 10 envi-

ronmental and eight safety & health risk-based audits covering a total of 43 facilities, including power plants, substations, regional offices and other subsidiary businesses. PHI continues to identify opportunities for implementing corrective and preventative measures at our facilities and places a high priority on assessing and identifying opportunities for improving ESH performance across the organization.

Supplier Audit Program

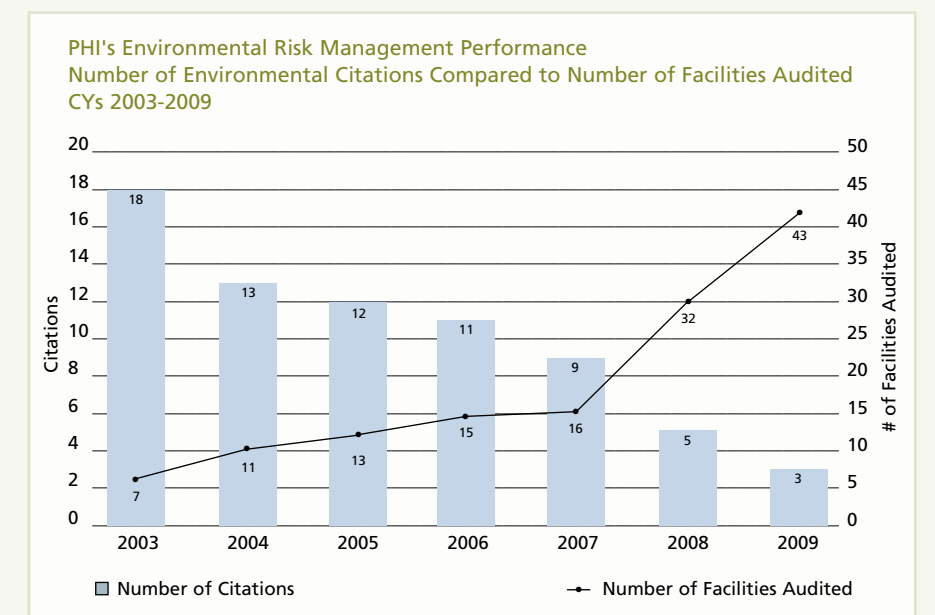
In addition to conducting ESH audits, PHI maintains a Supplier Audit Program that requires comprehensive compliance and management system reviews of current and potential commercial suppliers of waste transportation, storage, treatment, reclamation and disposal, emergency response waste services and other environmental services to any unit of PHI. Our Supplier Audit Program keeps us informed about how well suppliers are being managed, from both an operational



PHI environmental engineers (opposite) help ensure safe and beneficial methods for managing the large number of scrap meters (above) from the installation of new Smart Meters. The meters will be refurbished and sold for reuse by utilities or disassembled for recycling of valuable components.

and fiscal perspective. Such knowledge is essential to making sound waste management decisions and reducing potential risks and liabilities associated with the PHI's use of commercial suppliers of environmental waste services.

During 2009, PHI collaborated with a coalition of industry partners to review a total of 15 suppliers across the United States.



Sustaining Our Workforce

Our employees are our most valuable assets.

At PHI, our most valuable assets walk out the door at the end of every work day. They are our employees, and their knowledge and skills are what makes it possible to operate all aspects of our businesses and continually improve the service we provide our customers. It makes sense, therefore, that recruiting and retaining a high-quality, high-functioning workforce is a top priority for our companies.

A number of elements make up PHI's approach to ensuring workforce sustainability, but three are essential, and together they govern PHI's workforce management: Safety, Diversity and Workforce Planning.

Safety

PHI and its affiliates are committed to excellence in workplace safety. The company believes there is not one job or activity so important that it cannot be accomplished in a safe manner. Safety is our most important corporate value and it is our goal that all employees work accident-free and injury-free every day.

Each PHI employee is responsible for their own safety and the safety of fellow employees, our contractors and the public. All employees are held accountable for implementing the corporate safety policy and knowing the safety requirements that apply to their assigned responsibilities.

PHI aspires to be an industry leader and top-quartile performer in the safety arena. PHI's management team developed a four-year strategic business plan in 2009 that is aligned with this aspiration and identifies multiple key initiatives in order to achieve this top-level safety performance by 2012.

Cultural Transformation

Several initiatives are under way that



support cultural transformation toward improved safety performance across all regional brands and lines of business. These include safety procedure training at the manager, supervisor and crew level, and an emphasis on peer-to-peer observation and support. A new PHI Safety Manual, produced by a cross-company, cross-function team, provides uniform safety standards and procedures across PHI Power Delivery operations. These initiatives are already producing measurable results.

Nothing better demonstrates the progress made than the positive trend in reducing the number of OSHA-recordable injuries and preventable motor vehicle accidents (see Figures 1 and 2). Of significant importance: there were zero OSHA-recordable injuries in Power Delivery and Corporate Services in May 2009, and the 2009 OSHA recordable incidence rate reflects a sustainable reduction over the past five years. A similar downward trend was achieved in reduced motor vehicle accidents.

PHI believes that all accidents and injuries can be prevented and will continue to hold this as our vision: Until every employee returns home safely each and every day. Until every employee completes every work day without experiencing an injury or a preventable motor vehicle accident, there is still work to be done.

Diversity

PHI's overarching diversity goal is to achieve an inclusive work force and maximize the opportunities for diverse suppliers to do business with our company. In order to achieve these goals, PHI continues to attract, hire, develop, motivate and retain a diverse work force, while working within our business communities to identify highly qualified, regional small businesses and inform them of the services and products PHI needs.

Our staffing initiatives include diversity-focused components and work experience programs such as cross-functional development, college engineering internships, engineering co-op and pre-engineering programs. These programs provide work experience to high school and college students while increasing the pool of potential candidates for hard-to-fill positions at PHI. Our external outreach initiatives involve partnering our internal sourcing department with community businesses to increase their awareness of PHI's requirements and related opportunities to do business with PHI.

The Office of Diversity is an integral part of PHI, providing diversity leadership, development and guidance in driving diversity into key decision-making processes of all PHI business strategies. It is our mission to create a competitive advantage that increases value for our shareholders, employees and suppliers by designing and implementing measurable initiatives that maximize PHI's ability to promote an inclusive work environment and increase opportunities to partner with regional businesses.

PHI: Minority "Employer of Choice"

PHI's Legal Department has been awarded the "Employer of Choice" award by the Minority Corporate

Counsel Association, founded in 1997 to advocate for the expanded hiring, retention and promotion of minority attorneys in corporate law departments and the law firms that serve them. The award recognized the department's contributions to the furtherance of diversity in the legal profession. That award comes in the wake of several other recognitions PHI received for its diversity efforts, including: the *Best of the Best* award from Olive Tree Publishing, which publishes a variety of diversity-oriented magazines; a Diversity Elite recognition from *Hispanic Business* magazine; selection by *Black Enterprise* magazine as one of the *40 Best Companies for Diversity*; and selection as one of AARP's *Best Employers for Workers over 50*.

Workforce Planning

PHI has developed an integrated Workforce Planning Process to address the challenges of building and maintaining a top-quality workforce. This process includes integrating our Talent Management initiatives to ensure we have the right people, with the right skills, at the right time to achieve PHI's business objectives.

Foundations of Supervision is a key career development program for front-line PHI employees.

- PHI's *Leadership Development* programs are designed to develop critical knowledge, skills and abilities, retain key talent and prepare leaders for future positions.
- PHI offers several other employee development programs to enrich the employee work experience while enhancing PHI's talent pool. An active, cross-PHI *Employee Mentoring* program enables experienced employees to share their insights and provide one-on-one coaching for newer employees.
- PHI has an integrated *Succession Management* process that identifies key positions and key talent to fill them, thus ensuring business continuity.
- PHI's *Leadership Development* initiatives are not limited to managers and executives. *Leadership Excellence* magazine ranked PHI 18th in 2009 among large U.S. companies for leadership development in recognition of the company's *Foundations of Supervision* program for front-line supervisors. As of year-end 2009, more than 150 PHI employees had graduated from this program.
- PHI is a member of the *Center for Energy Workforce Development*, a consortium of energy companies that is identifying and developing initiatives that address utility industry workforce challenges.
- To address the critical issue of knowledge retention, PHI has developed a pilot knowledge management process to transfer critical knowledge,

FIGURE 1
PHI OSHA Recordable Incidence Rate
(Rate Scale: 0=Best, 5=Worst)

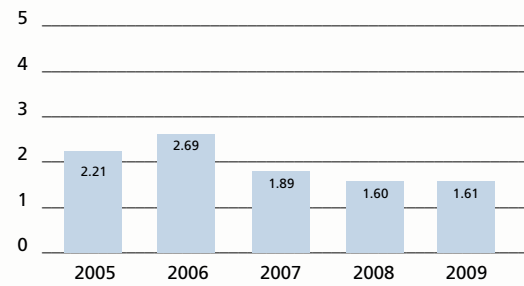
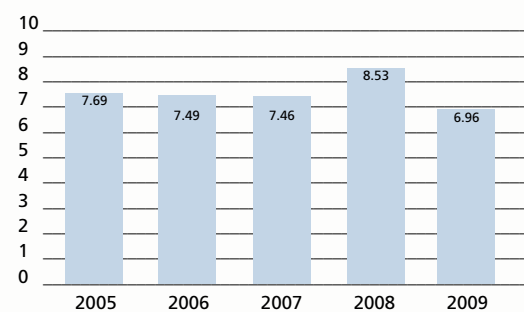


FIGURE 2
PHI Motor Vehicle Accident Rate
(Rate Scale: 0=Best, 10=Worst)



skills and abilities from retirement-eligible employees to the mid-career and newer employees who will succeed them. PHI also has developed relationships with high schools, technical schools and colleges to discuss curriculum and career opportunities.

- PHI has integrated the forecasting of staffing needs into the annual budget process based on anticipated retirements and historical retirement and attrition trends.
- PHI has established ongoing partnerships with community colleges to develop education and training programs that ideally will produce candidates for future employment at PHI.
- Onsite and online training programs are offered in a number of utility and PHI-specific areas. PHI also offers generous tuition reimbursement to employees, as well as online engineering degree programs through university partnerships.



Sustaining Our Communities

Education and Community Outreach

Education and community outreach are key components of promoting superior environmental stewardship. PHI has a passionate commitment to working with community organizations, schools and civic groups to enhance and protect our valuable natural resources. A variety of forums – including public meetings, advisory boards, public outreach events and environmental partnerships with community and other nongovernmental organizations – provide opportunities to encourage environmental sustainability and promote environmental stewardship.

Our corporate giving program includes a special emphasis on improving lives through environmental education, beginning in early childhood. Investing volunteer hours and donating to such activities are important parts of our environmental stewardship.

New Environmental Education Center in Delaware

The new DuPont Environmental Education Center, operated by the Delaware Nature Society,



Delmarva Power sponsored opening weekend activities for the new DuPont Environmental Education Center, which borders Delmarva Power property along the Christiana River in Wilmington, Del. Delmarva employees hosted the event and taught local ecology at exhibits by the river.

is one of many initiatives supported by PHI that provide hands-on environmental education for urban school children. The center is part of the 224-acre Russell W. Peterson Wildlife Refuge on the Christina Riverfront in Wilmington, Del. Delmarva's Gas Operations donated a parcel of company property for the center's construction, and was involved for over 10 years in planning and developing the refuge, marsh restoration and the new center. The center's property includes a pedestrian bridge, walking paths, a marsh pond and observation decks to view the tidal wetlands and the diversity of animal life in the area.

Chesapeake Fund Partnership

In 2009, PHI and the Chesapeake Fund established an innovative partnership with a single goal: improve the water quality of the Chesapeake Bay through a series of small-scale nitrogen mitigation projects. The Chesapeake Fund is a joint partnership among Forest Trends, the Chesapeake Bay Foundation, and the World Resources Institute. Forest Trends is creating the first nitrogen credit financing program, an innovative, non-governmental, market-based approach to reducing nitrogen in the Bay and its watershed from all sources: agriculture, manufacturing and other commercial enterprises and residential communities. The Fund's strategic vision is to create greater awareness of the impact of nitrogen on water resources, provide business partners with comprehensive nitrogen accounting to reduce their nitrogen footprint and encourage business leaders to support water quality restoration by purchasing nitrogen offsets generated from on-the-ground best management practices.

Through a contribution of \$200,000, accompanied by in-kind professional consulting support, PHI has enabled

Forest Trends to solicit proposals for nitrogen mitigation projects in the Choptank River valley, an important Delmarva Peninsula waterway that feeds into the Bay from the Eastern Shore of Maryland. Work on these PHI-sponsored projects is planned to begin in the summer of 2010.

Earth Day/Month

Every day is "Earth Day" at PHI, but every year the company sponsors and participates in many special events during April. In addition to donating tree seedlings, ground cover and dune grasses to schools, parks and organizations for planting, PHI companies and their employees participate in a variety of Earth Month events and work projects: the Anacostia River Cleanup; the Takoma Park Celebration; the City of Bethlehem Earth Day Program; the Salisbury Zoo Earth Day

Students show off their dancing skills and help stomp out "energy wasters" at Pepco's *Captain Kilowatt* exhibit at *National Harbor*.



Celebration; the Clean Ocean Action's Beach Sweep (N.J.); the Nanticoke Shad Festival; the Salisbury (Md.) Zoo's Earth Day Festival & 5k; and several Earth Day and Arbor Day celebrations.

Environmental Expos

Pepco and Pepco Energy Services participated in the Senate Energy Showcase on the Capitol grounds in Washington, D.C. In addition to showcasing Pepco's many successful energy conservation initiatives and Pepco Energy Services extensive energy management services to commercial and government clients, PHI experts demonstrated the company's experimental hydrogen fuel cell and Pepco's state-of-the-art hybrid bucket truck.

Nation's River Bass Tournament

Pepco was one of the lead sponsors of the 2009 Nation's River Bass Tournament held by Living Classrooms of the National Capital Region and the U.S. Fish and Wildlife Service. The Nation's River Bass Tournament connects local, underserved youth from Maryland, Virginia and Washington, D.C., to their local natural resources. The annual event is held at the National Harbor, where bass boats are launched, taking 30 students out for a day of exploration on the Potomac River, and hands-on lessons in fishing and ecology. Each boat has a student, a corporate sponsor and a qualified commercial fisherman. In addition, PHI's Environmental Services was one of 20 educational exhibitors that provided a unique learning experience for the other 300 students who visited the pier at National Harbor to participate in the daylong activities. Many visited the Pepco Captain Kilowatt video game exhibit and received backpacks filled



PHI volunteers taught children attending the 2009 Nation's River Bass Tournament at National Harbor about energy conservation with the interactive *Captain Kilowatt* exhibit.

with energy awareness and environmental educational materials.

Delaware Coastal Cleanup

Delmarva Power co-sponsors the Delaware Coastal Cleanup, the Ocean Conservancy's flagship International Coastal Cleanup, which collects and disposes of marine debris and collects data on trends in shoreline litter and pollution, and educates the public on the effects of littering and waste dumping. During the September 2009 event, Delmarva employees and other volunteers netted nearly 10 tons of waste from 41 different sites across the Delaware's waterways and coastline. Items ranging from an iron blast furnace to a hockey stick were collected for proper disposal.

Clean Ocean Action - Beach Sweeps

Atlantic City Electric employees participated in the 24th Annual Clean Ocean

Action's Beach Sweeps in Southern New Jersey. Atlantic City Electric is a corporate sponsor of the event, and employees join thousands of other volunteers in cleaning up the Jersey Shore every year.

National Building Museum: Green Community Exhibit

Pepco joined other corporate sponsors to support a year-long exhibition called *The Green Community*. The exhibition explored the complex process of creating and sustaining healthy communities. *The Green Community* exhibition was designed to address two main questions: "What kind of community is green?" and "How can we make our communities green?" *The Green Community* looked at how communities large and small are changing their global impact: conserving its land, offering multiple transportation options, providing open spaces and using natural and cultural resources wisely.

The National Building Museum's Green Community exhibition won a 2009

MUSE Award for Interpretive Interactive Installations.

U.S. Dept. of Energy Solar Decathlon

From Oct. 9 to Oct. 18, 2009, a "village" of futuristic homes on the National Mall welcomed visitors from

PHI sponsored *The Green Community*, a year-long exhibition on "sustainable development" at the National Building Museum in Washington, D.C.





Pepco supplied the electric infrastructure and the "net meters" for the Solar Decathlon tiebreaker, and Pepco employees were on hand to ensure the system ran smoothly.

across North America and around the world. The Solar Decathlon, sponsored by the U.S. Department of Energy (DOE), drew applications from 20 international of cross-discipline (engineering, architecture and communications) university student teams that demonstrated creative approaches "to one of the biggest challenges we face – an ever-increasing need for energy," according to the DOE program guide. Pepco, a sustaining partner for the event, provided key leadership and volunteer support to make this year's event a reality.

At the opening ceremony, Joe Rigby, Chairman, President and CEO of Pepco's parent company, Pepco Holdings, Inc. (PHI), shared the stage with DOE Secretary Steven Chu. "I am pleased to be here to help kick off what promises to be an inspiring look at the fulfillment of a promise, the promise of solar power. Throughout the next several days, we will see the tangible results of technology that moves us closer to a more reliable, economic and environmentally sustainable electric grid," he said.

The "tie breaker" category for the competition was "net metering," in which the electricity used by each house was measured, minus any excess solar power produced, for the "net" electricity

used during the completion. PHI supplied the expertise and the net meters, which recorded both the electricity drawn from Pepco's grid and the amount generated by each team's solar power array. PHI engineers oversaw installation of necessary electric infrastructure and of bi-directional meters by Pepco's Meter Services, and supervised power monitoring and distribution testing. PHI also hosted three workshops for customers and building industry professionals: Making Smart Choices to Manage Your Electric Bill; Solar Panels and the Smart Grid; and Benefits of the Smart Grid.

Speakers Bureaus & Online Energy Audits

Throughout the year, employees of PHI utilities accept invitations from schools and community groups to provide educational presentations on energy conservation, energy bill reduction, electric safety and many other topics of interest to customers. Altogether, PHI and PHI employees contribute thousands of man-hours to educate our customers on how to use energy wisely, conserve resources and save on their electric bills.

Online Energy Audits – My Account

Residential customers of Atlantic City Electric, Delmarva Power and Pepco can take advantage of a free online energy audit and account management tool: My Account. Through a comprehensive customer education initiative, including instructional videos and in-person demonstrations at energy expos and community meetings, employees have introduced My Account to customers across PHI's service territory.

My Account allows customers to view and pay their bill; find ways to save energy and manage costs; compare and

analyze current and previous bills; understand why their bill has changed; and see where their electricity dollars go and how their usage compares to that of similar homes. PHI invested in this online tool to provide customers with information about their energy usage and with energy-saving recommendations to help them manage their usage. The tool also provides a carbon calculator. Using information the customer inputs on energy usage, driving, recycling and other activities, the calculator determines the customer's "carbon footprint."

United Way



PHI's family of companies covers a large geographical area, and employs a diverse workforce to serve an extremely diverse customer population. To reach as many organizations as possible that serve that population's varied health, welfare, community and environmental needs, PHI chooses to support United Way's campaigns in each of our service territories and help our employees contribute to their choice among a huge array of nonprofits, from grass-roots local to state-wide and national.

PHI has a long tradition of supporting company-wide United Way campaigns, and boosts employees' generosity by matching 50 cents to every dollar pledged. Employees raise even more money for United Way's General Fund by holding "special events" such as the annual classic car show, talent show and PHI United Way Employee Photo Contest. In addition, PHI's executives have a tradition of lending their corporate expertise to help manage both the local organizations and their fund-raising campaigns, and that service continues today.

2009 PHI United Way Photo Contest



These photos are among many taken in our region by PHI employees who entered them in the 2009 PHI United Way Photo Contest.



Awards and Recognition



Newsweek magazine has published its first “green” rankings of large companies in the United States. PHI ranked number 134 of the 500 companies listed, the second-highest place achieved by a utility company. Scores in three categories determined company rankings: “Policy & Performance” (45 percent), “Environmental Impact” (45 percent) and “Reputation” (10 percent). Companies were assessed by independent research firms that specialize in each area, hired by the magazine for this first edition of a planned annual special report. Key to PHI’s excellent showing is the environmental

commitment of the company’s leadership team and the company’s transparent reporting on all aspects of environmental performance, including its carbon footprint. Proactive self-review processes, participation in reporting mechanisms such as the Carbon Disclosure Project, and publicizing of results through the Environmental Sustainability Report in print and on the Internet, weighed heavily in favor of PHI’s ranking ahead of most industry peers. The Newsweek rankings show that these efforts have gained PHI a growing reputation among knowledgeable observers as a genuinely “green” company.

PHI Named Minority Supplier Leader in Green Initiatives

The Maryland/DC Minority Supplier Development Council (MSDC) awarded PHI its *Leaders in Green Initiatives* award, created in 2009 to recognize corporations that have taken the lead in helping to protect and preserve the environment by PHI and McCormick & Company, the global spice company, were the only two of 29 corporations nominated to receive the awards for excellence in green initiatives.

The MD/DC MSDC is one of 38 councils throughout the country that are part of the National Minority Supplier Development Council. Providing a direct link between corporate America and minority-owned businesses is the primary objective of the Council; its mission is to help increase procurement and business opportunities for minority businesses of all sizes.

PowerCentsDC Program



Pepco, with a team organized under the PowerCentsDC program, was honored by the Association of Energy Service Professionals (AESP) for Outstanding Achievement in Pricing and Demand Response. Sponsored by Smart Meter Pilot Program, Inc., – a nonprofit organization comprising Pepco, the D.C. Consumer Utility Board, the District of Columbia Office of the People’s Counsel, the District of Columbia Public Service Commission and the International Brotherhood of Electrical Workers - the program involved approximately 1,000 Pepco residential customers in the District of Columbia and operated for two summers and one winter.

The pilot offered customers the choice of three dynamic pricing options and real-time data to help them manage their

usage and lower their bills. Sixty-three percent of respondents indicated that the program helped motivate them to use less electricity overall and 68 percent said it made them more aware of the environmental impact of their energy usage. When polled, more than 82 percent of customers cited “saving money” as their primary motivation for participating in the pilot, with 72 percent stating that the difference between hourly prices was large enough to provide incentives for them to shift electrical usage to cheaper, “off-peak” periods.

PHI Utilities Recognized by Tree Line USA®

Atlantic City Electric, Delmarva Power and Pepco were once again named Tree Line USA® utilities by The Arbor Day Foundation in cooperation with



the National Association of State Foresters. The Tree Line USA® program recognizes public and private utilities that demonstrate practices that protect and enhance America’s urban forests. The goal of the program is to promote the dual goals of safe, reliable electric service and abundant, healthy trees in America’s communities. The program fosters best practices in utility arboriculture and public education by promoting three core standards: quality tree care; annual worker training in best practices; and tree planting and public education.

Maryland Green Registry



PHI was granted inclusion in the new Green Registry – a voluntary self-certification program offering guidance and resources to help organizations set and meet their own goals on the path to sustainability – launched in 2009 by Maryland Gov. Martin O’Malley. PHI was notified that the company had successfully demonstrated that its policies and programs met certain standards of environmental disclosure, governance and performance to qualify for membership.

PHI Corporate Headquarters Receives First LEED® Certification in D.C.

PHI’s corporate headquarters, Edison Place, a 400,000-sq. ft. Class A office building in Washington, D.C., has received the first U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED®) for Existing Buildings granted to a building in the District of Columbia. The LEED® certification demonstrates tremendous green building leadership in energy-saving design and facility management.

Leadership Development Magazine – 2009 Best in Leadership Development

PHI was among large companies honored by *Leadership Development Magazine* based on criteria for effective, relevant and comprehensive leadership development programs. Leadership development is a key component of PHI’s approach to workforce sustainability.

Pepco Earns Montgomery Co. (Md.) Green Business Certification

Pepco is among the first companies to be certified under the Montgomery County, Md., Green Business Certification Program. The county’s notification cited Pepco’s “commitment to environmental stewardship, especially through using hybrid vehicles for staff and service transportation, your extensive recycling program and publishing an annual sustainability report.” This recognition from Montgomery County confirms Pepco’s commitment to doing business with care for the environment.

PRNews Platinum PR Awards



Pepco Holdings, Inc’s (PHI’s) *Powering a Sustainable Future-2008 Environmental Sustainability Report* was a runner-up in the External Publication category of the 2009 PR News Platinum PR Awards. The coveted awards set the industry benchmark for excellence across all areas of PR. PHI’s report was one of a handful of entries produced entirely in-house.

Powering a Sustainable Future – 2009 Environmental Sustainability Report

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 Debbi Jarvis, PHI Vice President, Corporate Communications
 Wesley McNealy, Director, PHI Corporate Environmental Services
 Joy Dorsey, Director, PHI Diversity & Supplier Diversity
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Courtesy Devroux & Purnell Architects

In Memoriam

Paul Spencer Devroux, Jr.
1942 - 2010

For more than 30 years, Paul S. Devroux, Jr., FAIA, NOMAC, transformed the cityscape that is today's Washington, D.C. He was a founder and the managing principal of Devroux & Purnell, one of Washington's largest African-American-owned architecture firms. The firm's award-winning work spans the globe, and includes several landmark public and private buildings in Washington. The first of these major D.C. projects was Edison Place, headquarters of Pepco Holdings, Inc. (PHI). Following completion of Edison Place, commissions for other significant D.C. projects followed in quick succession: the Walter E. Washington Convention Center, the Verizon Center, Washington Nationals Park baseball stadium and many others. Edison Place continues to win architectural and environmental awards, including repeated awards from the USEPA, and was the first building in the District to win LEED® certification from the U.S. Green Energy Council. PHI is grateful to be the beneficiary of Mr. Devroux's vision and the exemplary work of Devroux & Purnell. We offer our condolences to his family and the members of his firm.

On March 22, 2010, Mr. Devroux died at his home in the District. He was 67 years old.

(Credit: Courtesy Devroux & Purnell Architects)

"The earth is what we all
have in common."

WENDELL BERRY, FARMER & AUTHOR