powering the people innovations for a better world

March 21, 2013 The Newseum • Washington, D.C.



it



#PTP13



A More Engaging Customer Experience.

With its industry-leading Consumer Engagement Solutions, Aclara delivers clear analytics for electricity, gas, and water, enabling consumers to easily understand and reduce consumption to save money and protect the environment. The result?

- Engaged and informed consumers
- Sustainable resource savings
- Enhanced adoption of Smart Grid solutions

Aclara is a market leader that provides comprehensive smart grid solutions for over 500 electric, gas and water utilities. Aclara's best-in-class communications technology platforms include over 21 million endpoints and 60 million consumer engagement touchpoints. **To learn more about Aclara solutions for utilities, contact 1.800.297.2728 or visit Aclara.com.**

Create Your Intelligent Infrastructure™

powering the people

12:00 – 1:00 pm

Registration

11:30 am – 2:00 pm

Electric Avenue Open (Outside)

12:00 – 7:00 pm Innovation Alley Exhibits

1:00 – 5:30 pm

Conference Proceedings

1:00 – 1:40 pm

Welcome

Lisa Wood Executive Director, IEE Vice President, Edison Foundation

Introduction to Powering the People

Thomas F. Farrell II Chairman, President, & CEO Dominion Chairman, The Edison Foundation

Vital Role of Energy & Electricity in the U.S. Economy

Senator Ron Wyden Chairman, U.S. Senate Committee on Energy & Natural Resources

1:40 - 2:00 pm

Electric Power Industry Challenges & Opportunities

Bob Rowe

President & CEO NorthWestern Energy Co-Chair, IEE 2:00 – 3:00 pm

Powering Transportation

Electric cars have arrived. But electrification of the transportation sector goes beyond electric cars. Learn more about the economic and environmental factors driving the electrification of transportation; new applications of electric drive technologies for corporate fleets, for trucks, and at airports and seaports; and why electric transportation—both on road and off road—makes business sense.

Introduction:

Tom Kuhn President Edison Electric Institute

Moderator:

Tony Earley Chairman, CEO, & President PG&E Corporation

Panelists:

Alan Perriton President & COO VIA Motors

Dale Bryk Director, Energy & Transportation Program Natural Resources Defense Council

Debbie Korenek

Division Vice President, Marketing & Sales CenterPoint Energy

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Wireless internet access is available to event attendess. Please use the following information for access:

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agenda (continued)

3:00 – 3:30 pm Networking/Coffee Break

3:30 – 3:55 pm

Powering Everyday Life—the 2nd Digital Decade

Shawn DuBravac

Chief Economist & Senior Director of Research Consumer Electronics Association

3:55 - 4:15 pm

Powering the World

Andrew Vesey

Executive Vice President & COO AES Corporation

4:15 – 5:15 pm

Technology is a Game Changer: Future Trends in Electricity

Dramatic challenges demand dramatic responses. Today, the electric utility industry is transforming itself through innovative technologies and ideas to meet the economic, political, environmental, and security challenges of the 21st century. Technology will change the power sector and our nation over the next 25 years.

Listen in on this conversation to discover how new technologies, the digitization of the electric grid, renewable energy, distributed power, and today's regulatory challenges and opportunities are transforming the electric power sector and the future of electricity.

Moderator:

Jim Rogers Chairman, President, & CEO Duke Energy

Discussants:

Mike Balhoff Managing Partner Balhoff & Williams, LLC

Ron Binz

Principal Public Policy Consulting

5:15 – 5:30 pm

Closing Remarks

Joe Rigby

Chairman of the Board, President, & CEO Pepco Holdings, Inc.

5:30 - 7:00 pm

Reception in Innovation Alley

Be Part of the Conversation!

Share your Powering the People experience & feedback with the world on Facebook & Twitter at @IEEInnovation, #PTP13.

Be Sure to Stop by Electric Avenue,

a super-charged look at the wide variety of electric vehicles driving the future of transportation, downstairs, outside the Newseum entrance.

Check your inbox for an exclusive Electric Perspectives e-edition.

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Only Itron.

We understand that every utility is unique. That's why Itron has the industry's broadest portfolio of software, communications and measurement technology. We're ready to deliver the most advanced IPv6 mesh network, the industry's leading direct connect cellular communications, and true AMR migration – in one Itron solution.

Only Itron has the complete breadth of talent and technology that's adaptable to your every network need, today and well into the future.

Come see what we've got brewing.

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powering the people

A super-charged look at the wide variety of electric vehicles driving the future of transportation.

Audi Vorsprung durch Technik

Based on the award-winning Audi A3, currently sold to U.S. consumers in gasoline-powered and clean diesel TDI configurations, the Audi A3 e-tron features a fully electric powertrain with a 26kw lithium-ion battery, and zero driving emissions. Providing a sporty driving dynamic, the Audi A3 e-tron has 199 lb-ft of torque, and the permanent magnet synchronous motor in the A3 e-tron supplies a continuous output of 82

hp and a peak output of 114 hp. On a single battery charge, the A3 e-tron can cover around 87 miles. It powers the car from zero to 62 mph in 11.2 seconds and on to a top speed of 90 mph. The driver of an A3 e-tron can decide how sporty or economical driving should be by switching among three modes of operation – dynamic, auto and efficiency – as well as four settings, which adjust using paddle shifters on the steering wheel, the degree of energy recovery during braking and coasting phases.

Focus Electric

Focus Electric, Ford's first all-electric vehicle, is one of America's most fuel-efficient cars and offers the equivalent of 110 mpg (MPGe) city while traveling up to 76 miles on a single charge. The all-electric Focus is capable

of fully recharging in four hours at home using the available wall-mounted 240-volt charge station and works with the MyFord[®]Mobile App to provide unprecedented connectivity between driver and vehicle using a smartphone or computer.

Fusion Energi

Fusion Energi, Ford's newest plug-in hybrid and most fuel-efficient sedan, delivers an EPA-estimated 100 MPGe combined - beating the Toyota Prius plug-in hybrid by at least five MPGe while taking customers farther with a 620-mile overall range and up to 21 miles in all-electric range - more than triple the Prius plug-in hybrid's and double the new Honda Accord's all-electric range. Fusion Energi also offers the latest innovative EV technologies like MyFord® Mobile, SmartGauge with EcoGuide and EV+, as well as the most complete array of advanced con-

nectivity and driver assist features of any mainstream sedan, including Lane-Keeping System, Driver Alert System and active park assist. Beyond its leading fuel efficiency and smart technologies, Fusion Energi offers the power and performance of a "real car" with 188 net HP, without compromising great design and functionality.

Fit EV

The 100-percent electric Fit EV is the newest offering in Honda's evolving range of alternatively fueled vehicles. Currently available for lease in selected markets in CA, CT, MA, MD, NJ, NY and OR, the Fit EV boasts a gasoline miles per gallon equivalent of 118 MPGe, with a 82-mile EPA adjusted range in combined city/highway driving. The FIT EV utilizes an efficient powertrain with a 20kWh lithium-ion battery and a compact 92-kW AC synchronous electric motor, and is capable of recharg-

ing fully in less than three hours with a 240-volt AC power supply. Based on its vision of "Blue Skies for our Children," Honda is working to help advance technologies that can help address society's environmental and energy concerns.

i-MiEV

The 100 % electric Mitsubishi i-MiEV is designed for performance in the urban environment, and for the benefit of the global environment. It's got superior efficiency, surprising agility,

and loads of personality. Powered by Mitsubishi innovative Electric Vehicle (MiEV) technology, the rear-wheel drive vehicle's drive system includes a 49 kW (66 bhp) AC

synchronous electric motor; an 88 cell, 330V lithiumion battery pack for a peak storage of 16 kWh; and a single fixed reduction gear transmission. This electric motor is capable of producing its peak torque of 145 lb. ft. almost instantaneously when accelerating from a standstill; the vehicle has a top speed of approximately 80 mph.

Be Part of the Conversation!

Share your Powering the People experience & feedback with the world on Facebook & Twitter at @IEEInnovation, #PTP13.

And be sure to check out Electric Avenue, a super-charged look at the wide variety of electric vehicles driving the future of transportation, downstairs, outside the Newseum entrance.

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LEAF

After more than 100 years of automotive history, it's time for something radically new. A car with no oil, no gas tank, no transmission, no tailpipe. A car that runs on 100% electricity, an energy source that can be made locally, cheaply and ecologically. A car that charges while you sleep, while you shop, while you work. A car that embraces recycled materials. A car so vastly origi-

nal, it will change the way we build, drive and think about cars for years to come. Meet the new car. Nissan LEAF.

Tesla Motors - Model S

Introducing a car so advanced it sets the new standard for premium performance. At the heart of the vehicle is the proven Tesla powertrain, delivering both unprecedented range and a thrilling drive experience. With no tailpipe to spew harmful emissions, Tesla vehicles liberate their owners from the petroleum-burning paradigm. The Tesla Model S won Motor Trend's 2013 Car of the Year Award by unanimous vote.

ΤΟΥΟΤΑ

Prius Plug-in

The hybrid you love, now with a plug: As part of Toyota's Prius Family, which consists of the popular thirdgeneration Prius Liftback, the Prius v, and the Prius c, the Toyota Prius Plug-in combines the benefits of the standard Prius model's hybrid vehicle operation with extended electric vehicle (EV) driving and more affordable pricing than pure electric or range-extender type vehicles. The Toyota Prius Plug-in gives you two ways to get amazing mileage. EV Mode is EPA-rated at 95 mpge with an 11 mile range, and should you run out of electric charge, Prius Plug-in seamlessly shifts to hybrid mode, giving you an equally remarkable EPA combined mileage rating of 50 mpg.

VTRUX

The electric VTRUX from VIA Motors is made for the way you drive: after batteries are depleted, a gaspowered generator makes electricity for continued driving. With 15 kW of power export for work sites, events, and emergencies, it's not just a truck, it's a powerhouse.

E-Golf

The E-Golf is driven by an electric motor that delivers a strong 199 pound-feet of torque: power for the electric motor comes from a lithium-ion battery with an energy capacity of

Das Auto.

26.5 kilowatt-hours. The battery itself consists of 180 cells. The E-Golf has an estimated driving range of 93 miles; however, the specific range will depend on driv-

ing style and factors such as the use of air conditioning and heating. The vehicle has a number of features that help ensure energy is preserved while driving: the vehicle can coast whenever the driver releases the accelerator pedal; there are three driving modes; and there are three settings for regenerative braking, where kinetic energy is recaptured into the battery. Charging is accomplished via a plug connector behind the gas cap on the right rear fender.

Zero Motorcycles is the next step in motorcycle evolution. By combining the best aspects of a traditional motorcycle with today's most advanced technology, Zero produces high performance electric motorcycles that are lightweight, efficient, fast off the line and fun to ride. Each motorcycle is optimized from the ground up to leverage the revolutionary Z-Force[™] electric powertrain and uses a specially designed rigid, aircraft-grade aluminum frame to minimize weight.

ecova® total e

total energy and sustainability management

Get a real-time look into how we're growing results and saving resources at Ecova.com

COPPER Is Essential To Sustainable Energy

Reliable – Copper's high quality, long life, and proven performance ensure long-term reliability of energy systems and equipment.

Efficient – Copper's conductivity, plus its ability to create high-quality, low-resistant connections is the basis for highly efficient electrical equipment and lower energy losses.

Sustainable – Copper plays a vital role in sustainable electric energy, increasing the efficiency and reliability of wind and solar installations and their related power transmission systems.

Recyclable – Copper can be easily and effectively recycled over and over again without degradation of its properties.

Copper Development Association Inc. Copper Alliance

www.copper.org

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innovation alley

An exciting showcase of the high-tech innovations that are transforming the grid and powering our electric future.

Aclara is a market leader that provides comprehensive smart grid solutions for 500 electric, gas and water utilities. Aclara's best-in-class communications technology platforms include 21 million AMI endpoints and 60 million consumer engagement touch points. At Powering the People, Aclara will be featuring its Cellular AMI and Consumer Engagement solutions for investor owned utility companies.

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AmericanEfficient

American Efficient delivers web/mobile products and transactional solutions that encourage consumers and businesses to purchase sustainable products and services. You can find us at Innovation Alley displaying our newest technology, Dreamstreet, a visually compelling, one-stop-shop for discovering the best prices, expert reviews, and online and local availability of thousands of energy efficient products, like lighting, consumer electronics, appliances, building materials, and more.

ARPA-e AutoGrid - AutoGrid Systems (www.autogrid.com) organizes the world's energy data by bringing internet-scale cloud-computing to process the petabytes of energy data produced from an increasingly networked and automated grid. AutoGrid employs big data analytics to generate real-time predictions and implement programs, creating actionable information for electricity generators, providers, grid operators, and their customers to improve the utilization of the grid and manage costs through a comprehensive Energy Data Platform (EDP). AutoGrid's Demand Response Optimization and Management System (DROMS) application enables electricity providers and consumers of all sizes to forecast generation, consumption, and control grid conditions at unprecedented granularities – optimizing demand and cost through flexible demand management programs.

ARPA-e SmartWire Grid: SmartWire Grid (SWG) technology provides congestion relief by redistributing power flows, optimizing system operations autonomously or with full operator control, and provides line sensing and monitoring. SWG improves grid reliability, congestion management infrastructure investment and facilitates efficient electricity markets with integrating renewables. System analysis indicates that our Distributed Series Reactors can improve ATC by up to 30% and increase utilization of existing infrastructure from 60% to above 90% of thermal rating during highest congestion periods.

Half the planet cooks on smoky open fires, causing nearly 4 million premature deaths each year and contributing to climate change. The BioLite HomeStove is a biomass cookstove that, by converting waste heat into electricity, reduces smoke emissions by up to 90% while simultaneously providing users with the capability to charge mobile phones and LED lights.

BuildingIQ will be demonstrating the only building energy management software that can learn and forecast a building's energy requirements and continuously optimize BMS settings to increase energy efficiency. Based on BuildingIQ's Predictive Energy Optimisation[™] technology, the demonstration will showcase how BuildingIQ's solutions adjust to variables – such as weather, occupancy, utility rates and demand response events – to reduce peak and ongoing energy cost and consumption. powering the people

C3 Energy

C3 Energy offers smart grid analytics SaaS solutions that enable utilities to realize the full promise of their investments in the smart grid – securely, reliably, and rapidly. The C3 Energy Analytics Platform integrates massive amounts of disparate data, applies sophisticated multi-layered analytics, and provides highly usable portals that generate actionable, realtime insights. C3 Energy provides utilities with endto-end system visibility across their supply-side and demand-side smart grid operations.

Comverge delivers a comprehensive suite of intelligent energy management solutions that enable utilities, grid operators, and commercial and industrial organizations to optimize their energy usage in order to reduce costs, meet regulatory requirements, and support sustainability initiatives.

DTE Energy will be demonstrating in-home technologies that are currently being evaluated under its Smart-Currents Pilot Program. The technologies include an AMI meter, in-home energy display, and programmable communicating thermostat that communicate with a nucleus so customers can monitor their electric use and make choices that save energy. Customers participating in this pilot also take advantage of DTE Energy's Experimental Dynamic Peak Pricing Rate.

Duke Energy will be showcasing their cutting edge approach to innovation by highlighting key focus areas for technology development. This includes spotlights on projects they are currently testing in the areas of energy storage, microgrids, carbon capture & sequestration, electric vehicles, and the Duke Energy test lab. Come by the Duke Energy booth to learn more about Duke Energy's strategic focus in these areas and how they are moving innovation forward by putting technology to the test in the field and in the lab.

Edison International demonstrates the integration of new technologies for improving electric energy efficiency, reliability, and environmental protection with an augmented reality display from its utility subsidiary, Southern California Edison (SCE). The Virtual Energy Explorer is an iPad application that triggers an interactive experience when SCE's residential booth display is scanned by the iPad's camera. The application will proceed by "augmenting" the display, revealing specific areas for energy savings. Once an area is selected, you will be provided with the relevant program and rebate options we offer to our customers as well as the ability to email yourself additional information and stay in touch with SCE in the future on your specific areas of interest. Experience the Virtual Energy Explorer for yourself at the Edison International booth during Powering the People.

ENBALA Power Networks continuously connects large electricity users to the grid to deliver grid-balancing flexibility to electricity system operators and utilities. ENBALA's Grid Balance platform captures and then intelligently aggregates inherent demand-side storage from connected loads to respond to the real-time needs of the power system, increasing its reliability, efficiency, and reducing greenhouse gases.

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powering the people

Energate

Energate's Consumer Connected Demand Response (CCDR) solution allows utilities to immediately address residential energy demand and empowers consumers to more effectively manage their energy use. Energate's thermostats, in-home energy manager, mobile applications, load management system, and consumer portal seamlessly connect to the Smart Grid to deal with supply and demand challenges, the increased use of renewables, and dynamic rate structures.

EnerNe🗙

EnerNex will be showcasing our premier Smart Grid concept design, pre-certification testing, and interoperability evaluation facility—Smart Grid Labs. Attendees will have the opportunity to take a special look inside the technologies and innovation of the Lab's testing infrastructure. Smart Grid Labs offers multi-faceted assessment services for communications, security, standards compliance, technology/vendor maturity, and implementation assistance across many Smart Grid domains.

EnerNOC's Utility Solutions offerings include a comprehensive portfolio of DSM program implementation and consulting services that address the evolving needs of utility demand response and energy efficiency initiatives. Our expertise spans the full spectrum of DSM activities and is focused on designing, delivering, and evaluating cost-effective DR and EE programs for the commercial, industrial, institutional and agricultural market segments.

FIRSTFUEL BUILDING ENERGY ANALYTICS

FirstFuel Software is an energy information services company. The company will be showcasing its Remote Building Analytics (RBA) Platform, an end-toend commercial energy efficiency solution for utilities, government agencies, and building owners and operators—delivered in a 'zero-touch' model through an online web portal.

Come see what's brewing at Itron, and enter to win a cool giveaway! As a global technology company, we build solutions that help utilities measure, manage, and analyze energy and water. Our broad product portfolio includes electricity, gas, water, and thermal energy measurement and control technology; communications systems; software; and professional services. We will be demonstrating the Adaptive Grid Router in Innovation Alley. The Adaptive Grid Router is Itron's next generation smart grid product supporting multiple communication networks and connectivity to almost any smart grid device.

The company's exhibit features its subsidiaries— Florida Power & Light Company, the largest investor-owned electric utility in Florida; and NextEra Energy Resources, LLC, which together with its affiliated entities is the largest generator in North America of renewable energy from the wind and sun.

NextEra Energy Resources is showcasing wind generation. As of year-end 2012, NextEra Energy ►

had more than 10,000 MW of wind in operation in 19 states and four Canadian provinces. As wind technology continues to improve and wind energy continues to get more economical, it is likely that this renewable energy source will become an even greater part of utilities' generation portfolios and therefore even more accessible to even more Americans in the future.

FPL's exhibit illustrates how the utility is using advanced technologies and tools to better prevent outages and, when they do occur, restore power faster. For example, FPL developed custom iPad applications specifically for restoration specialists in the field that provide situational awareness views of the grid. This application also enables them to communicate directly with each meter to determine whether the meter is receiving electric current or not. This allows the restoration specialist to quickly and accurately determine who has power around them and who does not.

UTILITIES

Your investment in infrastructure has enabled you to amass large amounts of data. More information means smarter decision making, right? It takes more than data. It takes a technology that leverages all that data—transforming it into actionable business intelligence. Oracle Utilities' DataRaker is that technology platform—Cloud-based analytics delivered.

Pepco Holdings Inc

Pepco Holdings (PHI) is committed to help meet the nation's energy and environmental challenges through a combination of energy efficiency programs and new technologies. This commitment charts a course that will transform the way power is delivered, managed and used. New technologies offer customers more control over their energy use, and our proposed energy efficiency programs will provide additional choices that help customers manage their energy costs. We have substantially completed the installation of "smart meters" that will help customers track and manage their electricity use, we are transforming our fleet to more environmentally friendly technologies, and we are working to develop a smart grid that will improve reliability. By using the latest technology and offering our customers energy efficiency options, we are protecting the environment, enhancing reliability and helping our customers better manage their energy use and costs.

Pulse Energy will demonstrate its Energy Intelligence Software which helps utilities engage their entire commercial customer base to achieve energy efficiency targets and improve customer satisfaction. Featured will be Pulse Energy's customized mailers for small businesses, one part of the multi-channel communications enabled by the software. These reports include personalized tips specific to each customer's own profile and consumption.

SIEMENS

Siemens Smart Grid will simulate an outage situation, similar to this year's Super Bowl outage, demonstrating how distribution network applications can enhance fault management. Siemens will also feature a solution that manages cyber security threats in a utility's control center. Siemens control center technologies allow utilities to react in real time, improving operator and dispatch efficiency, reducing costs, and increasing response times.

innovation alley

Join Silver Spring Networks to experience a high definition custom Google Earth tour of our global deployments, featuring outage and recovery, high rise mesh demo, DA, Voltage, and much more. Stop by to learn why Silver Spring Networks is the leading networking platform and solutions provider for smart energy networks.

SimpleEnergy

Simple Energy's Customer Engagement Platform engages utility customers to provide measurable and verifiable results in energy efficiency, smart grid, and demand response / dynamic pricing programs. We do this by providing customers compelling motivation leveraging leading behavioral science and social game mechanics delivered across the technology platforms people use most—social networks, web, email, and mobile.

New York City-based ThinkEco, Inc. is a leading provider of cloud-based energy efficiency (EE) and demand response (DR) solutions for residential and commercial applications. To enable connectivity to multiple load types, ThinkEco offers a patented technology platform with intelligent algorithms and an attractive customer user interface that technology partners and utilities can integrate with. The company also markets a suite of its own energy-saving products to help make EE and DR more intuitive for end users, including the modlet[®] and modletsmartAC.

Utility, Inc. manufactures mobile resource management hardware and software as a service that allows utilities to effectively command, control, and support mobile field operations. Utility's solutions deliver real-time access to virtually any mobile asset, providing a unified operating picture for safely locating, tracking and managing all aspects of mobile field operations. Utility brings it all together in one cost-effective, enterprise-level view, showing the location and status of all mobile assets to personnel.

We Care Solar brings reliable electricity and lighting to maternal health facilities in developing countries to reduce maternal and infant mortality. The awardwinning We Care Solar Suitcase is an economical, easy-to-use, portable solar electric system that provides health workers with highly efficient medical lighting and power for mobile communication, computers and medical devices. It enables timely and appropriate emergency care, 24 hours-a-day.

Zero Motorcycles is the next step in motorcycle evolution. By combining the best aspects of a traditional motorcycle with today's most advanced technology, Zero produces high performance electric motorcycles that are lightweight, efficient, fast off the line, and fun to ride. Each motorcycle is optimized from the ground up to leverage the revolutionary Z-Force[™] electric powertrain and uses a specially designed rigid, aircraft-grade aluminum frame to minimize weight.

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Mike Balhoff

Managing Partner Balhoff & Williams, LLC

Michael J. Balhoff, CFA, is managing partner at Balhoff & Williams, LLC, a professional services firm that provides financial-regulatory consulting and advisory services to companies, investors, and policymakers in the communications and energy industries.

Previously, Mr. Balhoff headed for 16 years the Telecommunications Equity Research Group at Legg Mason, and covered equities of incumbent local exchange carriers. Prior to joining Legg Mason in 1989, Mr. Balhoff held posts as a graduate and undergraduate professor. He has a doctorate in Canon Law and four master's degrees, including an M.B.A., concentration in finance, from the University of Maryland. A Chartered Financial Analyst and a member of the Baltimore Security Analysts Society, Mr. Balhoff has been named on six occasions as a Wall Street Journal All-Star Analyst for his recommendations in the Telecommunications industry. His coverage of telecom, and especially rural telecommunications, was named by Institutional Investor as the top telecommunications boutique in the country in 2003.

Mr. Balhoff is also a Senior Partner and Co-Founder of Charlesmead Advisors, LLC, a professional services firm that specializes in services to the regulated industries, including telecommunications and energy, as well as media and technology. The firm provides advice concerning strategic alternatives, including mergers, acquisitions, divestitures, leveraged buyouts, spinoffs, recapitalizations, and restructurings.

Mr. Balhoff is a Registered Representative of, and Securities Products are offered through, BA Securities, LLC.

Balhoff & Williams, LLC is a specialized professional services organization focused on providing financial and regulatory advice regarding the communications and energy industries. The Principals of the firm have more than forty years of combined experience in advising investors, companies, and policymakers on complex investment, transactional, and policy issues. The Principals of Balhoff & Williams have extensive experience serving the telecommunications industry, including RBOCs, incumbent LECs, competitive carriers, and wireless operators, with particular expertise related to rural telephone providers. Additionally, they specialize in energy and other utility services industries, and are experts in non-U.S. regulatory practices. The firm offers an unparalleled combination of experience, credibility, strategic insight, and access in a rapidly changing environment.

Ron Binz

Principal Public Policy Consulting

Ron Binz is a Principal at Public Policy Consulting, specializing in energy and telecommunications economics and policy. His clients include Dow Solar, Lawrence Berkeley National Laboratory, Ceres, the Energy Regulatory Commission of Mexico, the U.S. Department of Energy, Environmental Defense Fund, the Future of Privacy Forum, and American Efficient, among others. He is also a Senior Policy Advisor at the Center for the New Energy Economy at Colorado State University.

Until April 2011, Ron was the Chairman of the Colorado Public Utilities Commission, appointed in 2007 by Colorado Governor Bill Ritter. As Chairman, Ron led the Colorado PUC in implementing the many policy changes championed by the Governor and the Legislature to bring forward Colorado's "New Energy Economy."

Ron was an active member of the National Association of Regulatory Utility Commissioners, serving as Chair of NARUC's Task Force on Climate Policy. He is a member of the Harvard Electricity Policy Group, the Keystone Energy Board, and recently served on the Advisory Council to the Electric Power Research Institute (EPRI).

Binz has testified before Congressional committees fifteen times.

He received a B.A. in Philosophy from St. Louis University in 1971 and an M.A. in Mathematics from the University of Colorado in 1977. Ron also completed course work for a master's degree in Economics from the University of Colorado.

Prior to his appointment to the Colorado PUC, Ron was President of Public Policy Consulting, specializing in policy and regulatory issues in the telecommunications and energy industries. His clients include state agencies, business associations, consumer organizations, renewable energy advocates, and telecommunications carriers.

Ron also served from 1996 to 2003 as President of the Competition Policy Institute (CPI), based in Washington, D.C. CPI was a non-profit organization dedicated to bringing competition to telecommunications and energy markets in ways that benefit consumers.

From 1984 to 1995, Ron directed the Colorado Office of Consumer Counsel, the state's utility consumer advocate. His office represented residential, small business, and agricultural utility consumers before the Colorado Public Utilities Commission, federal regulatory agencies, and the courts. While Consumer Counsel, Ron served as President of the National Association of State Utility Consumer Advocates (NASUCA).

Public Policy Consulting is the consulting practice of Ron Binz (www.rbinz.com). His clients include cleantech companies, energy trade associations, universities, state and federal agencies, and environmental NGOs, among others.

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powering the people

Dale Bryk

Director, Energy & Transportation Program Natural Resources Defense Council

Dale Bryk is the Director of the Energy & Transportation Program and a Senior Attorney with the Natural Resources Defense Council, where she oversees a team of 60 lawyers, scientists, and technology experts working to develop policy solutions that will dramatically improve energy efficiency in buildings, appliances, and industry; expedite commercialization of emerging renewable energy technologies; increase vehicle efficiency; drive investment in low-carbon fuels; and reduce vehicle

miles traveled. Her expertise is in the area of energy and climate policy, including utility regulation and energy efficiency and renewable energy programs. She was integrally involved in the development of the Regional Greenhouse Gas Initiative, the cap-and-invest program launched by 10 Northeast states in January 2009.

Dale joined NRDC in 1997, prior to which she practiced corporate law at Davis Polk & Wardwell in New York. From 2002-2010 she also taught the Environmental Law Clinic at Yale Law School. Dale has a J.D. from Harvard Law School, a master's degree in International Law and Policy from the Fletcher School of Law and Diplomacy and a B.A from Colgate University.

Natural Resources Defense Council is a national, non-profit organization of scientists, lawyers, and environmental specialists dedicated to protecting public health and the environment. Founded in 1970, NRDC has over 1.2 million activists and members nationwide, served from offices in New York, Washington, Chicago, Los Angeles, San Francisco, and Beijing. More information is available through NRDC's website at www.nrdc.org.

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Shawn DuBravac

Chief Economist & Senior Director of Research Consumer Electronics Association

Shawn DuBravac is the Chief Economist and Senior Director of Research for the Consumer Electronics Association (CEA®). DuBravac provides crucial economic analysis to association and industry leaders regarding future economic activity and the relative health of the technology industry. He also contributes research into technology trends that underpin the industry and was the primary driver of the industry's new smartphone index, developed in partnership with NASDAQ, and the CE consumer confidence index, in partnership with CNET.

DuBravac has been widely published on the topics of finance, economics, and technology. His keen insights regarding the economic drivers of the global consumer electronics industry have made him a highly sought-after speaker and commentator. DuBravac travels both internationally and domestically to meet with tech industry leaders and make presentations about technology and the economy. In addition, his analysis has appeared in the Wall Street Journal, the New York Times, the Financial Times, the Los Angeles Times, Barron's, CNN, MSNBC and other media outlets.

DuBravac is also an adjunct professor in George Washington University's MBA program and has taught at the University of Mary Washington and in George Mason University's MBA program. Prior to joining CEA, Du-Bravac was head research analyst in the Economic Analysis Group of the Department of Justice's Antitrust Division. He holds economic degrees from Brigham Young University and George Mason University. Follow DuBravac on Twitter at @twoopinions.

The Consumer Electronics Association (CEA) unites 2,000 companies within the consumer technology industry. Members tap into valuable and innovative members-only resources: unparalleled market research, networking opportunities with business advocates and leaders, up-to-date educational programs and technical training, exposure in extensive promotional programs, and representation from the voice of the industry.

PG&E Corporation.

Tony Earley

Chairman, CEO, & President PG&E Corporation

Anthony F. Earley Jr. is Chairman, Chief Executive Officer, and President of PG&E Corporation. Earley joined PG&E in September 2011 after 17 years at Detroit-based DTE Energy, where he served as Chairman and Chief Executive Officer for 12 years before becoming Executive Chairman of the Board in September 2010.

As former Chairman of the Edison Electric Institute, the trade association of investor-owned utilities, Earley was directly involved in the development of national policies on energy, the environment and climate change issues. Earley also served as Chair of the Nuclear Energy Institute and worked to revitalize the nuclear industry in the United States.

Earley earned a Bachelor of Science degree in Physics, a Master of Science degree in Engineering, and a law degree at the University of Notre Dame, where he serves on the Advisory Council of the College of Engineering. After graduating from Notre Dame, Earley went on to serve as an officer in the United States Navy nuclear submarine program, where he was qualified as a Chief Engineer Officer. He joined DTE Energy as President and Chief Operating Officer in March 1994. Prior to joining DTE Energy, Earley served in various capacities of increasing responsibility at Long Island Lighting Co., including President & Chief Operating Officer and Executive Vice President & General Counsel.

Earley serves on the Executive Committees of the Edison Electric Institute and the Nuclear Energy Institute and is a Board Member of the Electric Power Research Institute. He is on the Board at Ford Motor Company and serves on the Listed Member Advisory Board for the New York Stock Exchange. In the past, he has served on the Boards of Masco Corporation, Comerica Bank, and Mutual of America Capital Management.

His commitment to the community includes memberships on the Boards of United Way Bay Area and The Exploratorium, a science, arts, and human perception museum based in San Francisco. His community service has also been recognized by The Detroit News, and in 2003 he was selected as one of several Michiganians of the Year.

PG&E Corporation (NYSE: PCG) is a Fortune 200 energy-based holding company, headquartered in San Francisco. It is the parent company of Pacific Gas and Electric Company, California's largest investor-owned utility. PG&E serves more than 15 million Californians throughout a 70,000 square-mile service area in northern and central California. For more information, visit the web site at http://www.pgecorp.com.

Thomas F. Farrell II

Chairman, President, & CEO Dominion Chairman, The Edison Foundation

Tom Farrell is Chairman, President and Chief Executive Officer of Dominion, a Fortune 200 energy company headquartered in Richmond, Virginia. He also serves on the Board of the Edison Electric Institute and was Chairman from 2011-2012. He also serves as Chairman of the Institute of Nuclear Power Operations, the Virginia Business Council, and the Colonial Williamsburg Foundation, and is the Presiding Director of Altria Group, Inc.

Since assuming his current position at Dominion in 2007, Mr. Farrell has emerged as a leading industry expert on national energy issues and is a strong advocate of comprehensive national energy policy. He has appeared on CBS, CNBC, Fox Business News, and other national networks; testified before Congress; and spoken at numerous major industry forums.

Under Farrell's guidance, Dominion has become a private-sector leader in helping veterans and their families find employment in the civilian workforce. The company's efforts have been recognized by a number of publications serving the military, including GI Jobs, Military Times and Military Spouses magazines. Dominion also has been awarded the Secretary of Defense "Employer Support Freedom Award," the highest recognition given to employers who support their employees serving in the National Guard and Reserve. The company was one of five utilities nationwide that partnered in the "Troops to Energy Jobs" pilot program linking future job openings in the energy business with troops leaving military service.

Mr. Farrell holds both a bachelor's degree in Economics and a law degree from the University of Virginia.

Dominion [NYSE: D] is among the nation's largest electricity and natural gas companies, serving about 6 million utility and retail customers in 15 states in the energy-intensive Midwest, Mid-Atlantic, and Northeastern regions of the country. Powering Dominion's energy network are about 27,400 megawatts of nuclear, fossil, and renewable generating capacity. The company's transportation and delivery systems include about 6,300 miles of electric transmission lines and 11,000 miles of natural gas transmission, gathering, and storage pipeline.

Dominion also operates the nation's largest natural gas storage system, with almost 950 billion cubic feet of storage capacity. The company's gas pipeline and storage business lies in the heart of the prolific Marcellus and Utica Shale production regions. In addition, Dominion owns and operates the Cove Point liquefied natural gas terminal on the Chesapeake Bay. For more information about Dominion, visit the company's website at www.dom.com.

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powering the people

Debbie Korenek

Division Vice President, Marketing & Sales CenterPoint Energy

Debbie Korenek is Division Vice President of Marketing & Sales for CenterPoint Energy, where she is responsible for marketing and sales across all of CenterPoint Energy's regulated electric and gas LDC jurisdictions. In that role, she is responsible for implementation of the company's energy efficiency programs for both the electric and gas markets, as well as the economic development and clean air technology programs for the company's electric business unit in the Houston metro area.

Ms. Korenek was previously the Division Vice President of Customer Service Operations for CenterPoint Energy's Regulated Gas & Electric Operations, which included oversight of the company's competitive transaction management operations, working directly with ERCOT, Competitive Retailers, and the PUC on Texas market issues. She spent three years at Reliant Energy working in the newly deregulated Texas electric market as the Director of Marketing. Prior to that, she spent 22 years at Houston Lighting & Power (now CenterPoint), most of those years in Service Area offices managing utility operations, in addition to being responsible for Market Research and Planning for over 6 years.

Korenek currently serves as Chairman of the Power Utilization Sector Council for the Electric Power Research Institute; is a member of EEI's Retail Energy Services Executive Advisory Committee; and is on the Strategy Committee for IEE, an Institute of The Edison Foundation. She has also been active in community and business organizations in the Houston/Gulf Coast area. She currently serves as Chairman of the Board of the Houston Downtown Alliance and is on the Development Committee for Sheltering Arms Senior Services.

Korenek is a graduate of Texas A&M University with a bachelor's degree in Marketing.

CenterPoint Energy, Inc., headquartered in Houston, Texas, is a domestic energy delivery company that includes electric transmission and distribution, natural gas distribution, competitive natural gas sales and services, interstate pipelines and field services operations. The company serves more than five million metered customers primarily in Arkansas, Louisiana, Minnesota, Mississippi, Oklahoma, and Texas. Assets total more than \$22 billion. With 8,800 employees, Center-Point Energy and its predecessor companies have been in business for more than 135 years. CenterPoint Energy's electric transmission and distribution unit serves more than 2 million customers in a 5,000 square-mile area that includes Houston. As a regulated "wires" utility, it neither generates nor sells power to end-use customers; instead it owns, operates, and maintain the poles, wires, and substations that make the delivery of electricity from power plants to customers safe and reliable. With more than 3,700 miles of transmission lines and 47,000 miles of distribution lines, CenterPoint Energy's electric operations business delivers electricity on behalf of more than 85 retail electric providers. In July of 2012, the company completed the installation of more than 2 million smart meters and is currently modernizing its electric distribution system with intelligent grid technology.

For more information, visit www.centerpointenergy.com.

Tom Kuhn

President Edison Electric Institute

Mr. Kuhn is president of the Edison Electric Institute, the association of shareholderowned electric companies. Mr. Kuhn joined the Institute in 1985 as executive vice president, was named chief operating officer in 1988, and elected president in 1990.

Prior to joining the Institute, Mr. Kuhn was president of the American Nuclear Energy Council, which subsequently merged with the Nuclear Energy Institute. The Council represented virtually all of the companies in the commercial nuclear power industry. He joined the Council in 1975 as vice president, government affairs, and became president in 1983.

From 1972 to 1975, he headed the energy section of the investment banking firm, Alex Brown and Sons. Prior to that, from 1970 to 1972, Mr. Kuhn was White House Liaison Officer to the Secretary of the Navy.

Mr. Kuhn received a BA in Economics in 1968 from Yale University, served as a Naval Officer following his graduation, and completed a Masters in Business Administration in 1972 from George Washington University. He completed the Stanford University Graduate School of Business Senior Executive Program in 1989.

Mr. Kuhn served on the Secretary of Energy Advisory Board and the Board of the U.S. Chamber of Commerce. He currently serves on the Boards of the United States Energy Association, the Alliance to Save Energy, the Electric Drive Transportation Association, and the American Council for Capital Formation. He is Chairman-Emeritus of the Committee of 100 of the U.S. Chamber of Commerce, Chairman-Emeritus of the American Society of Association Executives and past-chairman of ASAE/Key Industry Association Committee and of the Trade Association Liaison Council.

Mr. Kuhn was chosen as Association Executive of the Year 2000 by Association Trends magazine. He was the recipient of The Energy Daily's 2000 Public Policy Leadership Award. He received the Alliance to Save Energy's 2004 Chairman's Award. Mr. Kuhn also received the 2009 ASAE/The Center for Association Leadership's Key Award.

He is Chairman-Emeritus of the National Multiple Sclerosis Society, and currently serves on the Board of the National Capital Chapter. He also serves on the Board of the U.S. Navy Memorial Foundation. From 2006 to 2008, Mr. Kuhn served on the Board of the National Park Foundation. Mr. Kuhn was awarded the Bess Goodman Humanitarian Award in 2000. He served as 1992 and 1997 chairman of the Associations Division, United Way Campaign, and chairman of the 1996 through 1998 National Alliance to End Homelessness Awards dinners.

The Edison Electric Institute (EEI) is the association of U.S. Shareholder-Owned Electric Companies. Our members serve 95 percent of the ultimate customers in the shareholder-owned segment of the industry, and represent approximately 70 percent of the U.S. electric power industry. We also have more than 80 international electric companies as Affiliate Members, and more than 240 industry suppliers and related organizations as Associate Members.

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powering the people

Alan Perriton

President & COO VIA Motors

Alan G. Perriton is President and Chief Operating Officer of VIA Motors, Inc., an electric vehicle development and manufacturing company.

Mr. Perriton recently retired from a 34-year career with General Motors, where he held many senior executive positions. In that time, he launched the NUMMI manufacturing facility in Fremont California, a joint venture with GM and Toyota, and served as a member of the board of Directors at NUMMI. Mr. Perriton previously served as Vice President of Materials Management for GM's Saturn Division and headed GM's Automotive Purchasing for North America and headed North American Production Control and Logistics; he was the Senior Executive responsible for GM's Mergers & Acquisitions and New Business Development in Asia; and was President of GM Korea from 1996 to 2001. While at GM, Mr. Perriton served as a member of General Motors Corporation's UAW Board of Governors. Mr. Perriton also led GM's Hydrogen Fuel Cell business development.

More recently, Mr. Perriton served on the Board of Directors of Raser Technology, Inc., a renewable energy company. He also served on the Advisory Boards of the Kellogg Business School at Northwestern University and the Stanford Business School, and continues to serve on the National Advisory Council of the Brigham Young University Marriott Business School.

Mr. Perriton holds a master's degree in Business from Stanford University and a bachelor's degree in Business from Brigham Young University.

Born and raised in New Zealand, Mr. Perriton is a proud husband, the father of 5 children, and the grandfather of 8 grandchildren.

VIA Motors is a privately held electric vehicle development and manufacturing company. VIA has developed a proprietary 650-volt eREV drive system technology designed for full size trucks and SUVs called the VIA VDrive[™]. VIA employs a streamlined second stage manufacturing process to integrate its proprietary eREV powertrain technology into new OEM vehicles it calls VTRUX[™]. VIA VTRUX deliver up to 40-mile EV range and up to 400-mile extended range, averaging over 100 mpg in typical daily driving. VIA plans to sell directly to fleets, and then later to consumers.

More information on VIA Motors may be found at www.viamotors.com.

Pepco Holdings, Inc

Joe Rigby

Chairman of the Board, President, & CEO Pepco Holdings, Inc.

Joseph M. Rigby is Chairman of the Board, President, and Chief Executive Officer of Pepco Holdings, Inc. (PHI), a regional energy holding company that provides utility service to about 2 million customers. PHI is the parent company of Potomac Electric Power Company, an electric utility serving Washington, D.C., and suburban Maryland; Delmarva Power, an electric and gas utility serving Delaware and the rest of the Delmarva Peninsula; and Atlantic City Electric, an electric utility serving southern New Jersey.

Rigby joined Atlantic City Electric in 1979 and advanced through a number of management positions. His responsibilities have included accounting, financial services, treasury operations, business transformation, human resources, and the Atlantic City Electric/Delmarva Power, merger transition team. Following the merger that formed Conectiv, he was Vice President/General Manager of Gas Delivery, then Vice President/General Manager of Electric Delivery. He was elected President, Conectiv Power Delivery in 2002. From May 2004 to September 2007, he served as Senior Vice President and Chief Financial Officer of PHI and was responsible for all financial activity as well as investor relations.

From September 2007 to March 2008, Rigby served as Executive Vice President and Chief Operating Officer. He was responsible for the day-to-day operations of Pepco, Delmarva Power and Atlantic City Electric Company, along with information technology and corporate communications. In March 2008, Rigby was elected President and Chief Operating Officer, adding responsibility for the competitive energy businesses (Conectiv Energy and Pepco Energy Services). Rigby was elected President and Chief Executive Officer effective March 1, 2009. He was elected Chairman of the Board on May 15, 2009.

Rigby earned a bachelor's degree in Accounting from Rutgers University and an MBA from Monmouth University. He is also a licensed Certified Public Accountant in the state of New Jersey.

Rigby is Chairman of the United Way of the National Capital Area. As a past Chairman, he is a member of the Senior Council of the Greater Washington Board of Trade. He also serves on the Boards of the U.S. Chamber of Commerce, the Edison Electric Institute, the Federal City Council, the Greater Washington Initiative, and the Economic Club of Washington. He is a member of the Rutgers-Camden School of Business Executive Advisory Board. Rigby is a member of the New Jersey Society of CPAs and the American Institute of CPAs.

Pepco Holdings, Inc. (PHI) is one of the largest energy delivery companies in the Mid-Atlantic region, serving about 2 million customers in Delaware, the District of Columbia, Maryland, and New Jersey. PHI subsidiaries Pepco, Delmarva Power, and Atlantic City Electric provide regulated electricity services; Delmarva Power also provides natural gas service. PHI provides energy efficiency and renewable services through Pepco Energy Services.

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powering the people

Jim Rogers

Chairman, President, & CEO Duke Energy

Jim Rogers has served as Chairman, President and CEO of Duke Energy since 2007, which is now the largest U.S. electric utility. He has nearly 25 years of experience as a CEO in the electric utility industry. Over that period, he has delivered an average total shareholder return of more than 12 percent per year by focusing on stakeholders and finding business solutions to environmental challenges. Rogers has served more than 50 cumulative years on the Boards of Directors of eight Fortune 500

companies, and has served on numerous nonprofit Boards, including current participation on the Boards of the Asia Society and the World Business Council for Sustainable Development. In 2012, he assumed the Chairmanship of the Global Sustainable Electricity Partnership, a nonprofit organization composed of the world's leading electric utilities. He earned his bachelor's and law degrees from the University of Kentucky, and lives in Charlotte, North Carolina, where Duke Energy is headquartered.

Duke Energy is the largest electric power holding company in the United States with more than \$100 billion in total assets. Its regulated utility operations serve approximately 7.1 million electric customers located in six states in the Southeast and Midwest. Its commercial power and international business segments own and operate diverse power generation assets in North America and Latin America, including a growing portfolio of renewable energy assets in the United States.

Headquartered in Charlotte, N.C., Duke Energy is a Fortune 250 company traded on the New York Stock Exchange under the symbol DUK. More information about the company is available at: www.duke-energy.com.

powering the people

Bob Rowe

President & CEO NorthWestern Energy Co-Chair, IEE

Mr. Rowe is President and Chief Executive Officer of NorthWestern Energy since August 13, 2008. Formerly Co-Founder and Senior Partner at Balhoff, Rowe & Williams, LLC, a specialized national professional services firm providing financial and policy advice to clients in the energy and telecommunications industries, Mr. Rowe served as Commissioner and Chairman of the Montana Public Service Commission

from 1993-2004. He has also served as President of the National Association of Regulatory Utility Commissioners (NARUC). Mr. Rowe has testified frequently before Congress and has consulted with and trained U.S. and non-U.S. energy and telecommunications regulators. He is Chairman of the Western Energy Institute and Co-Chair of IEE, an Institute of The Edison Foundation.

Mr. Rowe resides in Helena, Montana. He holds a B.A. from Lewis and Clark College in Portland, Oregon, a JD from the University of Oregon; completed the Senior Executives Program at Harvard's Kennedy School of Government; and is active in various legal and professional organizations.

NorthWestern Energy is one of the largest providers of electricity and natural gas in the Upper Midwest and Northwest, serving approximately 673,200 customers in Montana, South Dakota, and Nebraska. More information on NorthWestern Energy is available on the company's website at www.northwesternenergy.com.

powering the people

Andrew Vesey

Executive Vice President & COO AES Corporation

As Chief Operating Officer and Executive Vice President at the AES Corporation, Andrew Vesey leads the company's Global Operations portfolio in 25 countries. Mr. Vesey has over 30 years of experience in the electric and gas utility industry including generation, transmission, distribution, customer service, retail sales, international project development, business start-up, product development, and process re-engineering. Prior to his current assignment, Mr. Vesey served as Chief Operat-

ing Officer, Global Utilities from 2011 to 2012 and Executive Vice President and President for Latin America and Africa from 2008 to 2011. Prior to this, Mr. Vesey worked as Chief Operating Officer for Latin America; Vice President and Group Manager for AES Latin America, DR-CAFTA Region; and Vice President of the Global Business Transformation Group, where his responsibilities encompassed enabling best in class performance at all AES' existing assets. Mr. Vesey joined AES from FTI Consulting, Inc., where he was a Managing Director of the Utility Finance and Regulatory Advisory Practice. He is a member and Chairman of the Board of Directors of several AES companies. He also serves on the Board of Directors of the Organization of American States' Trust for the Americas, the Corporate Council on Africa, and the Institute of the Americas. Prior to that, Mr. Vesey was a Partner in the Energy, Chemicals, and Utilities Practice of Ernst & Young LLP; CEO & Managing Director of Citipower, Pty of Melbourne, Australia; and served in several senior leadership roles at Entergy and Niagara Mohawk Power Corporation. Mr. Vesey received his B.A. (Economics) and B.S. (Mechanical Engineering) from Union College in Schenectady New York and his M.S. from New York University.

The AES Corporation is a Fortune 200 power company that owns and operates a diverse and growing portfolio of electricity generation and distribution businesses, which provide reliable, affordable energy to customers in 25 countries. AES understands that a reliable, affordable supply of electricity is essential to human progress, economic growth, public health, and security.

Our power plants encompass a broad range of technologies and fuel types, including coal, diesel, hydropower, gas, oil, wind, and biomass. Our utilities power several diverse markets, from São Paulo to Indianapolis to Douala.

Combining deep local insight with a global presence and more than 30 years of experience, AES' workforce of 25,000 people is committed to operational excellence and improving the lives of more than 100 million people by safely delivering reliable and sustainable energy solutions.

Lisa Wood

Executive Director IEE Vice President, The Edison Foundation

Lisa Wood is the Vice President of The Edison Foundation and Executive Director of IEE, an Institute of The Edison Foundation focused on *Innovation, Electricity, and Efficiency*. IEE works with the electric utility industry and the regulatory community to advance electricity innovation, new technologies, energy efficiency, and customer-side solutions.

Wood launched IEE after more than two decades consulting with electric utilities on retail customer issues. In that role, she directed economic, financial, and market analysis studies for leading electric utilities nationwide. Prior to joining IEE, Wood was a Principal with The Brattle Group and Director of the Washington, DC office. Prior to that, she was a Principal with PHB Hagler Bailly and a Program Director at Research Triangle Institute.

Through numerous articles, dialogues, and speaking engagements, Wood contributes to the conversation on innovation in the power sector, smart technology, smart pricing, energy efficiency, distributed power, and customer-side issues. She is a member of the Board of Directors for Energate, Inc., a smart grid technology firm and on the Advisory Board for American Efficient, a high technology efficiency firm.

Wood also serves on the Board of Directors for the National Energy Foundation, the Board of Directors for the Midwest Energy Efficiency Alliance, the Executive Leadership Group for the State Energy Efficiency Action Network, and is a member of the International Association for Energy Economics. She also serves as an advisor to Johnson Controls' Institute for Building Efficiency, and previously served on the Energy Efficiency Advisory Council for American Electric Power.

Wood is an Adjunct Professor at Georgetown University, where she teaches *Energy in a Low Carbon World*, and is a Fellow in the Energy Security Initiative at the Brookings Institution. She holds a Ph.D. in Public Policy and Management from the Wharton School of the University of Pennsylvania and an M.A. from the University of Pennsylvania.

IEE is an Institute of The Edison Foundation focused on advancing the adoption of innovative and efficient technologies among electric utilities and their technology partners that will transform the power grid. IEE promotes the sharing of information, ideas, and experiences among regulators, policymakers, technology companies, thought leaders, and the electric power industry. IEE also identifies policies that support the business case for adoption of cost-effective technologies. IEE's members are committed to an affordable, reliable, secure, and clean energy future.

IEE is governed by a Management Committee of 23 electric industry Chief Executive Officers. IEE members are the investor-owned utilities who represent about 70% of the U.S. electric power industry. IEE has a permanent Advisory Committee of leaders from the regulatory community, federal and state government agencies, and other informed stakeholders. IEE has a Strategy Committee of senior electric industry executives and 33 smart grid technology company partners.

Visit us at: www.edisonfoundation.net/IEE.

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powering the people

Senator Ron Wyden

Chairman U.S. Senate Committee on Energy & Natural Resources

Oregonians know Ron as a senator who listens. Always citing the need to "throw open the doors of government for Oregonians," he holds an open-to-all town hall meeting in each of Oregon's 36 counties each year. Thus far he has held more than 600 meetings. Wyden's dedication to hearing all sides of an issue and looking for common sense, non-partisan solutions has won him trust on both sides of the aisle and put him at the heart of nearly every debate. In 2011, the Almanac of American Politics described Wyden as having "displayed a genius for coming up with sensible-

sounding ideas no one else had thought of and making the counter-intuitive political alliances that prove helpful in passing bills." The Washington Post's Ezra Klein wrote: "The country has problems. And Ron Wyden has comprehensive, bipartisan proposals for fixing them."

Wyden believes the nation's biggest challenges can only be solved by what he calls "principled bipartisanship," solutions that allow all parties to stay true to their respective principles and celebrate agreements. Following that approach has helped him author more than 150 bipartisan bills and assemble unprecedented bipartisan coalitions on issues such as health care, infrastructure, and tax reform.

When principles are at stake, however, Wyden has never shied from standing alone, even when it means taking on powerful interest groups or his own party. His lone stand against the PROTECT IP Act (PIPA) and its predecessor, the Combating Online Infringement and Counterfeit Act (COICA), put a spotlight on the problematic legislation being fast tracked through Congress and served as a rallying point for the historic Internet protests that ultimately toppled the bills. He stood alone on the floor of the Senate to block right wing efforts to overturn Oregon's Death with Dignity law; a law that Oregon voters have passed twice. He went head-to-head with the E.P.A. to reduce cancer-causing benzene in gasoline sold in Oregon, and key elements of Wyden's Kinship Care Act were included as part of major reforms improving the nation's foster care system. Wyden's provisions recognized and strengthened support for kinship care, the full-time care and protection of children by relatives.

His relentless defiance of the national security community's abuse of secrecy forced the declassification of the CIA Inspector General's 9/11 report, shut down the controversial Total Information Awareness program, and put a spotlight on both the Bush and Obama Administrations' reliance on "secret law." To protect hard-working folks in the intelligence community and ensure informed public debate on national security issues, Wyden successfully fought to have controversial anti-leaks provisions removed from the latest intelligence authorization bill.

Wyden has taken the lead on policies that are helping to grow the economy in areas like improved infrastructure through his Build America Bonds program, micro and nano-technology, e-commerce, and through incentives for cleaner sources of energy.

He has won countless awards for his pioneering role in establishing a free and open Internet; is known for his commitment to an open government, having authored the "Stand By Your Ad" law and the resolution ending Senate Secret Holds; and he has been routinely recognized as one of the Senate's foremost health policy thinkers.

Wyden serves on the Committees on Finance, Budget, Aging, Intelligence, and Energy and Natural Resources. He is Chairman of the Senate Energy and Natural Resources Committee and chairs the Senate Finance Subcommittee on International Trade, Customs, and Global Competitiveness.

IEE is an Institute of The Edison Foundation focused on advancing the adoption of innovative and efficient technologies among electric utilities and their technology partners that will transform the power grid. IEE promotes the sharing of information, ideas, and experiences among regulators, policymakers, technology companies, thought leaders, and the electric power industry. IEE also identifies policies that support the business case for adoption of cost-effective technologies. IEE's members are committed to an affordable, reliable, secure, and clean energy future.

The Edison Foundation is a 501(c)(3) charitable organization dedicated to bringing the benefits of electricity to families, businesses, and industries worldwide. Furthering Thomas Alva Edison's spirit of invention, the Foundation works to encourage a greater understanding of the production, delivery, and use of electric power to foster economic progress; to ensure a safe and clean environment, and to improve the quality of life for all people. The Edison Foundation provides knowledge, insight, and leadership to achieve its goals through research, conferences, grants, and other outreach activities.

IEE: Innovation, Electricity, Efficiency 701 Pennsylvania Avenue, N.W. Washington, D.C. 20004-2696 202-508-5440

www.edisonfoundation.net/iee