Hintergrundinformationen der US Unternehmen

United States Department of Energy

http://www.energy.gov/

The US Department of Energy's overarching mission is to advance the national, economic, and energy security of the United States; to promote scientific and technological innovation in support of that mission; and to ensure the environmental cleanup of the national nuclear weapons complex. The Department's strategic goals to achieve the mission are designed to deliver results along five strategic themes:

- Energy Security: Promoting America's energy security through reliable, clean, and affordable energy
- Nuclear Security: Ensuring America's nuclear security
- Scientific Discovery and Innovation: Strengthening U.S. scientific discovery, economic competitiveness, and improving quality of life through innovations in science and technology
- Environmental Responsibility: Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production
- Management Excellence: Enabling the mission through sound management

Office of Electricity Delivery and Energy Reliability

http://www.oe.energy.gov

The mission of the Office of Electricity Delivery and Energy Reliability is to lead national efforts to modernize the electric grid; enhance security and reliability of the energy infrastructure; and facilitate recovery from disruptions to energy supply.

OE efforts are multifaceted and forward-looking. It helps secure the Nation's energy infrastructure against attack and natural disasters and facilitate repairs and restoration when it is damaged or services disrupted. The Infrastructure Security and Energy Restoration (ISER) office is at the front line of efforts to protect national and economic security by ensuring a diverse supply and dependable delivery of affordable electricity and fuel.

Effective policies and regulatory planning are also extremely important to the efficient delivery of electricity. OE's office of Permitting, Siting and Analysis (PSA) examines the regulatory and institutional barriers that hinder the efficient and secure operation of electric transmission and distribution systems. PSA also coordinates with national, regional, state, and local organizations and utilities to develop effective solutions to increasing the reliability and efficiency of electric market operations.

The R&D office facilitates the creation, advancement and deployment of the new technologies that will ensure a truly modern and robust grid capable of meeting the demands of the 21st century.

Whether it is on the supply side, to enable the delivery of clean energy sources such as renewables, clean coal, and nuclear power, or on the demand side, in developing a new smart grid and plug-in hybrid electric vehicles, OE is working to ensure our grid retains its standing as the most effective and efficient in the world.

Office of Electricity Delivery and Energy Reliability, Smart Grid Task Force

http://www.oe.energy.gov/smartgrid.htm

The Federal Smart Grid Task Force was established under Title XIII of the Energy Independence and Security Act of 2007 (EISA) and includes experts from seven different Federal agencies. The Department of Energy is represented by the Office of Electricity Delivery and Energy Reliability which is the Task Force lead, as well as the Office of Energy Efficiency and Renewable Energy and the National Energy Technology Laboratory. Other members include representatives from the Federal Energy Regulatory Commission, the Department of Commerce, the Environmental Protection Agency, the Department of Homeland Security, the Department of Agriculture, and the Department of Defense.

Energy Efficiency & Renewable Energy, Office of the Industrial Technology Program

http://www1.eere.energy.gov/industry/

The Industrial Technologies Program (ITP) helps industry save energy and money, increase productivity, and decrease carbon emissions and leads national efforts to improve industrial energy efficiency and environmental performance. ITP is part of the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy and contributes to its efforts by partnering with U.S. industry in a coordinated program of research and development, validation, and dissemination of energy efficiency technologies and operating practices.

ITP works with industry to save energy and money, increase productivity, and reduce environmental impacts by:

- Conducting R&D on new energy efficient technologies

- Supporting commercialization of emerging technologies

- Providing plants with access to proven technologies, energy assessments, software tools, and other resources

- Promoting energy and carbon management in industry

The White House, Office of Science & Technology Policy

http://www.whitehouse.gov/administration/eop/ostp

Congress established the Office of Science and Technology Policy (OSTP) in 1976 with a broad mandate to advise the President and others within the Executive Office of the President on the effects of science and technology on domestic and international affairs. The 1976 Act also authorizes OSTP to lead interagency efforts to develop and implement sound science and technology policies

and budgets, and to work with the private sector, state and local governments, the science and higher education communities, and other nations toward this end.

The mission of the Office of Science and Technology Policy is threefold; first, to provide the President and his senior staff with accurate, relevant, and timely scientific and technical advice on all matters of consequence; second, to ensure that the policies of the Executive Branch are informed by sound science; and third, to ensure that the scientific and technical work of the Executive Branch is properly coordinated so as to provide the greatest benefit to society.

Strategic Goals and Objectives are:

- to ensure that Federal investments in science and technology are making the greatest possible contribution to economic prosperity, public health, environmental quality, and national security

- to energize and nurture the processes by which government programs in science and technology are resourced, evaluated, and coordinated

- to sustain the core professional and scientific relationships with government officials, academics, and industry representatives that are required to understand the depth and breadth of the Nation's scientific and technical enterprise, evaluate scientific advances, and identify potential policy proposals

- to generate a core workforce of world-class expertise capable of providing policy-relevant advice, analysis, and judgment for the President and his senior staff regarding the scientific and technical aspects of the major policies, plans, and programs of the Federal government

American Council on Renewable Energy (ACORE)

http://www.acore.org/front

ACORE is an organization of member companies and institutions that are dedicated to moving renewable energy into the mainstream of America's economy, ensuring the success of the renewable energy industry while helping to build a sustainable and independent energy future for the nation. It is a nonprofit organization based in Washington D.C., and was founded in 2001 to bring together leading proponents and innovators in all facets of the renewable energy sector for the purpose of moving renewable energy into the mainstream of America's economy. In mid 2008 ACORE had 500 members, including renewable energy industry associations, utilities, end users, professional service firms, financial institutions, educational institutions, nonprofit groups and government agencies.

ACORE serves as a forum through which diverse parties work together on common interests. The primary vehicle for sharing information is convening: ACORE organizes and holds major annual conferences attended by hundreds of industry leaders. They established committees and working groups which meet regularly to work on specific industry issues and since 2007 ACORE has organized and hosted monthly webinars on the legal issues faced by the industry.

On an annual basis since 2003, ACORE has convened conferences in New York and Washington to focus on the three major areas that shape and advance renewable energy innovation and development in America: Policy, Markets and Finance.

Honeywell

http://www.honeywell.com/

Honeywell is a Fortune 100 company that invents and manufactures technologies to address tough challenges linked to global megatrends such as safety, security, and energy. Honeywell approximately has 122,000 employees worldwide, including 19,000 engineers and scientists, who focus on quality, delivery, value, and technology.

Honeywell is a leading global supplier of aircraft components, engines, avionics, and related products and services for commercial airlines, business and regional aircraft, and spacecraft. It makes homes, buildings, industrial sites, and airport facilities more efficient, safe and comfortable. Their products, solutions, and services are prominent in growth areas such as sensors, wireless technology, and real-time data management.

Honeywell produces high-performance specialty materials such fluorocarbons, specialty films, advanced fibers, customized research chemicals and intermediates for applications as diverse as telecommunications, ballistic protection, pharmaceutical packaging, and counterfeiting avoidance.

As a leading automotive supplier, Honeywell enhances vehicle performance, efficiency, and appearance through state-of-the-art technologies, world-class brands, and global solutions to their customers' needs.

Verizon Business Smart Grid Security Consulting

http://www.verizonbusiness.com

http://www.verizonbusiness.com/solutions/utility/smartgrid/

Verizon Communications Inc., headquartered in New York, is a global leader in delivering broadband and other wireless and wireline communications services to mass market, business, government and wholesale customers. Verizon Wireless is a joint venture of Verizon and Vodafone and operates a wireless network, serving more than 92 million customers nationwide. Verizon also provides converged communications, information and entertainment services over an advanced fiber-optic network, and delivers innovative, seamless business solutions to customers around the world.

For enterprises and government agencies around the world, Verizon Business a leading provider of global IT, security, and communication solutions, with one of the world's most connected IP networks. Verizon Business has added security consulting to its portfolio of security services to help utilities working with Smart Grid technologies meet infrastructure protection standards.

GridWise Alliance

http://www.gridwise.org/

The GridWise Alliance, founded in 2003, has developed into an organization that represents a broad range of the energy supply chain from utilities to large tech companies to academia to venture capitalists to emerging tech companies. This variety of stakeholders gives the Alliance a unique diversity of perspectives which enables interactive dialogue between members. Being a consensus based organization; the assortment of opinions produces deliberate and highly reflected upon resolutions to key issues.

The mission of GridWise Alliance is to transform the electric grid to achieve a sustainable energy future.

Federal Energy Regulatory Commission

http://www.ferc.gov/

http://www.ferc.gov/industries/electric/indus-act/smart-grid.asp

The Federal Energy Regulatory Commission, or FERC, is an independent agency that regulates the interstate transmission of electricity, natural gas, and oil. FERC also reviews proposals to build liquefied natural gas (LNG) terminals and interstate natural gas pipelines as well as licensing hydropower projects.

As part of that responsibility, FERC:

- Regulates the transmission and wholesale sales of electricity in interstate commerce;

- Reviews certain mergers and acquisitions and corporate transactions by electricity companies;

- Regulates the transmission and sale of natural gas for resale in interstate commerce;

- Regulates the transportation of oil by pipeline in interstate commerce;

- Approves the siting and abandonment of interstate natural gas pipelines and storage facilities;

- Reviews the siting application for electric transmission projects under limited circumstances;

- Ensures the safe operation and reliability of proposed and operating LNG terminals;

- Licenses and inspects private, municipal, and state hydroelectric projects;

- Protects the reliability of the high voltage interstate transmission system through mandatory reliability standards;

- Monitors and investigates energy markets;

- Enforces FERC regulatory requirements through imposition of civil penalties and other means;

- Oversees environmental matters related to natural gas and hydroelectricity projects and other matters;

- Administers accounting and financial reporting regulations and conduct of regulated companies.

The Energy Policy Act of 2005 gave FERC additional responsibilities as outlined in FERC's Top Initiatives and updated Strategic Plan. Top Initiatives include efforts related to industries regulated by the Commission, and actions that are being taken to improve Commission services for the public and focus on Smart Grid, Demand Response and Integration of Renewables.

Office of Energy Policy and Innovation

http://www.ferc.gov/about/offices/oepi.asp

The Office of Energy Policy and Innovation (OEPI) provides leadership in the development and formulation of policies and regulations to address emerging issues affecting wholesale and interstate energy markets. The Office will undertake significant outreach to other regulators and industry, will conduct studies and prepare reports, and will recommend policy reforms to the Commission for consideration. The Office will work in close coordination with other offices within the Commission to develop proposals and effectuate change. OEPI will focus, among other things, on the following areas to bring about reforms that advance the goals of the Commission, taking into account energy and environmental concerns.

OEPI issues, coordinates, and develops proposed policy reforms to address emerging issues affecting wholesale and interstate energy markets, including such areas as climate change, the integration of renewable resources, and the deployment of demand response and distributed resources, smart grid and other advanced technologies.

Office of External Affairs

http://www.ferc.gov/about/offices/oea.asp

The Office of External Affairs (OEA) responsible for all external communications with the public and media for the Commission and is led by Acting Office Director Mary O'Driscoll and Acting Deputy Director Leonard Tao. The OEA is the Commission's primary contact point with the Congress, the public, international, federal, state, and local government offices, interest groups, and the news media. It is responsible for developing public relations and other outreach strategies for the Commission.

The Office of External Affairs is comprised of:

- Public & Consumer Affairs Division

- State, Regional & International Affairs Division

- Governmental Affairs Division

- Media Relations Division

- Administration & Operations Staff

Pepco Energy Services

http://www.pepcoenergy.com/

Pepco Holdings, Inc. (PHI) is the energy holding company formed as a result of the merger between Pepco and Conectiv. The company delivers a combined 50,000 gigawatt hours of power to nearly 1.9 million customers in Delaware, the District of Columbia, Maryland and New Jersey, making it one of the largest electricity delivery companies in the Mid-Atlantic region.

Pepcos mission is to help energy and facility managers maximize their energy resources by providing a complete suite of cost-effective integrated energy solutions to achieve significant overall cost savings. These include energy assessments, Internet-based energy information systems, heating,

ventilation and cooling systems, lighting, project financing and energy operations and maintenance services.

Since 1995, Pepco Energy Services has successfully evolved to become one of the leading providers of energy-saving and sustainable energy products and services for a wide range of energy users, including: large commercial; institutional; industrial; and government users. A wholly owned, separately managed subsidiary of PHI, Pepco Energy Services provides both energy suppliers and large energy users such as utilities, municipalities, cooperatives and aggregators with an array of energy management services including the management of power generation assets.

National Institute of Standards and Technology

http://www.nist.gov/index.html

Founded in 1901, NIST is a non-regulatory federal agency within the U.S. Department of Commerce. NIST's mission is to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life.

NIST carries out its mission in four cooperative programs:

- the NIST Laboratories, conducting research that advances the nation's technology infrastructure and is needed by U.S. industry to continually improve products and services;

- the Baldrige National Quality Program, which promotes performance excellence among U.S. manufacturers, service companies, educational institutions, health care providers, and nonprofit organizations; conducts outreach programs and manages the annual Malcolm Baldrige National Quality Award which recognizes performance excellence and quality achievement;

- the Hollings Manufacturing Extension Partnership, a nationwide network of local centers offering technical and business assistance to smaller manufacturers; and

- the Technology Innovation Program, which provides cost-shared awards to industry, universities, and consortia for research on potentially revolutionary technologies that address critical national and societal needs.

NIST's core competencies compile of measurement science, rigorous traceability and the development and use of standards.

Smart Grid Interoperability Standards Project

http://www.nist.gov/smartgrid/

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Under the Energy Independence and Security Act (EISA) of 2007, the National Institute of Standards and Technology (NIST) has "primary responsibility to coordinate development of a framework that

includes protocols and model standards for information management to achieve interoperability of smart grid devices and systems…"

As specified in the American Recovery and Reinvestment Act (ARRA), NIST will receive $10 million through the Department of Energy (DOE) to carry out responsibilities assigned under EISA. In addition, NIST is allocating $5 million in ARRA funding for this purpose. The funding supports collaborative efforts to develop a comprehensive framework for a nationwide, interoperable Smart Grid for the U.S. electric power.

The Smart Grid will be key to national efforts to further energy independence and curb greenhouse gas emissions, and NIST is carrying out its responsibilities with a sense of urgency. With industry, government, and consumer stakeholders, NIST is expediting identification and development of standards critical to achieving a reliable and robust Smart Grid.

NIST is well-suited for this role. The agency has earned a reputation as an "honest broker"—an impartial, technically knowledgeable third party with a long history of working collaboratively with industry and other government agencies. These partners include DOE and the Federal Energy Regulatory Commission (FERC).

Boeing Company

http://www.boeing.com/

Boeing is the world's largest aerospace company and leading manufacturer of commercial jetliners and defense, space and security systems. A top U.S. exporter, the company supports airlines and U.S. and allied government customers in more than 90 countries. Boeing products and tailored services include commercial and military aircraft, satellites, weapons, electronic and defense systems, launch systems, advanced information and communication systems, and performance-based logistics and training.

Boeing has a long tradition of aerospace leadership and innovation. The company continues to expand its product line and services to meet emerging customer needs. Its broad range of capabilities includes creating new, more efficient members of its commercial airplane family; integrating military platforms, defense systems and the warfighter through network-enabled solutions; creating advanced technology solutions; and arranging innovative customer-financing options.

With corporate offices in Chicago, Boeing employs more than 159,000 people across the United States and in 70 countries.

Boeing is organized into two business units: Boeing Commercial Airplanes and Boeing Defense, Space & Security. Supporting these units are Boeing Capital Corporation, a global provider of financing solutions; the Shared Services Group, which provides a broad range of services to Boeing worldwide; and Boeing Engineering, Operations & Technology, which helps develop, acquire, apply and protect innovative technologies and processes.

Smart Grid Demonstration Project

http://www.smartgrid.gov/project/boeing-company-smart-grid-demonstration-project

http://boeing.mediaroom.com/index.php?s=43&item=976

The Boeing Company Smart Grid Demonstration Project is a United States Department of Energy Smart Grid Demonstration Project which is based in St. Louis, Missouri.

The project demonstrates an advanced Smart Grid software technology with military-grade cybersecurity for improving regional transmission system planning and operation. The project includes Regional Transmission Operators (RTOs) and utilities that collectively serve all or part of 21 states and more than 90 million people. The Boeing Smart Grid Solution (SGS) software is designed to be scalable, secure, and compatible with multiple systems to help RTOs and utilities improve grid reliability and efficiency.

On November 24, The Boeing Company was selected to receive federal stimulus funds from the U.S. Department of Energy as part of a three-year study to improve the efficiency and reliability of the United States' power grid.

"For years, Boeing has developed secure, networked systems vital to our nation's defense, and bringing this capability to the development of a smart power grid for energy security and efficiency is no less important for America's future," said Dennis Muilenburg, president and CEO of Boeing Integrated Defense Systems (IDS). "Working with the Department of Energy and our industry partners to apply proven technology and systems engineering to energy solutions opens up new opportunities for innovation and growth at Boeing and new jobs across the country."

Boeing received an $8.5 million grant to lead one project team and is a subrecipient on two others -- one led by Consolidated Edison of New York, and one by Southern California Edison. Each grant will fund a smart grid prototype in a different region of the United States. The projects are designed to achieve the following goals:

- increase grid reliability

- reduce system demands and costs

- increase energy efficiencies

- rapidly allocate energy when and where it is needed

- provide greater network security and flexibility to accommodate new energy technologies.