

Dominion Virginia Power
P.O. Box 26666, Richmond, VA 23261-6666



July 13, 2007

Mr. David R. Eichenlaub, Assistant Director
Division of Economics and Finance
Virginia State Corporation Commission
P.O. Box 1197
Richmond, VA 23218-1197

Ex Parte: In the matter of determining a recommended mix of programs, including demand side management (DSM), conservation, energy efficiency, load management, real-time pricing, and consumer education, to be implemented in the Commonwealth to cost-effectively achieve the energy policy goals set in § 67-102 of the Code of Virginia to reduce electric energy consumption

Case No. PUE-2007-00049

Dear Dave:

Attached for consideration by the State Corporation Commission Staff and other participants in the workgroup is input from Dominion Virginia Power. In your letter, dated June 13, 2007, you suggested that anyone submitting comments could also provide specific information to be included in the main body of the Staff's report. We have included a section at the end of the comments which contains a summary of the key points which we would request be included in the Staff's report to be filed with the Virginia Commission.

We look forward to actively participating in the workgroup starting July 19 and to supporting the Staff's efforts to prepare a report for the Commission by November 9. Further, the Company will be happy to host any future workgroup meetings in one of the large rooms at either our One James River Plaza office or our Innsbrook facility if the Staff determines that this would help facilitate the discussion with the workgroup participants.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Burnette", written over a white background.

Robert H. Burnette
Director- Energy Conservation & Key Accounts

Case No. PUE-2007-00049
Initial Comments of Dominion Virginia Power
July 13, 2007

Preface

- Dominion Virginia Power (“DVP” or the “Company”) strongly supports an increasing emphasis on the efficient use of energy resources in the Commonwealth. We recognize that this effort will not be easy, but we plan to devote substantial resources to making the effort successful. The capped rates imposed in 1999 by the Virginia Electric Utility Restructuring Act and the subsequent DVP fuel factor freeze from 2004 through 2007 have benefited consumers as electric rates have remained low. However, with the benefit of low electric rates, most consumers have had insufficient economic incentives to conserve or to use electricity more efficiently. In the residential sector alone, the average annual kWh use has steadily increased over time as consumers bought larger homes and equipped their houses with more electric-powered devices such as computers and wide screen televisions.
- PJM Interconnection (“PJM”) has projected that Virginia’s growing economy will require an additional 4,000 MW of capacity over the next decade. To meet this mounting energy deficit, Virginia must use a multi-pronged approach, including conservation, renewable energy, and new baseload generation. For conservation to be a meaningful part of this effort, initiatives must be designed to help customers understand their energy usage patterns, the cost of their choices, and what it will take to achieve sustainable energy savings.
- With the passage of Senate Bill 1416/House Bill 3068 (chapter 933/chapter 888), the 2007 General Assembly and the Governor sent a strong message that Virginia’s economic future was dependent on the development of new base load power plants and that renewable energy and conservation were to be an important part of the long-term solution. New conservation and demand side management (“DSM”) efforts undertaken in the near-term cannot delay or eliminate the need for new power generation plants or transmission lines in the next several years. However, as conservation is embraced by consumers in Virginia and dependable DSM solutions are put in place and sustained, it is possible that major infrastructure additions can be deferred or even, in some cases, eliminated in the long-term.
- DVP has not attempted to independently determine if the 10% consumption reduction target (relative to the amount of electric energy consumed by retail customers in 2006) can be achieved in a cost-effective manner. DVP does observe that given the Commonwealth’s population growth and consistently increasing electricity consumption, the goal is extremely aggressive. It would require an annual consumption reduction of approximately 10 million MWh (7 million MWh of which would apply to DVP customers) in less than 15 years to meet the current target by 2022. The Company is committed to doing all it can to support the process by providing the resources, expertise,

experience, and data to the Staff and the other workgroup participants as this extremely important study is undertaken.

- Ultimately, the Commonwealth's energy conservation policy needs to be part of the Virginia Energy Plan, and should include increased efficiency standards and regulations for building codes in the areas of insulation and windows, and in minimum appliance efficiency standards, for example. An excellent place to start would be to educate Virginia consumers about the benefits of purchasing high efficiency ENERGY STAR appliances. The 2007 Virginia General Assembly recognized the merits of ENERGY STAR-rated appliances this year in enacting two bills – one that created an “Energy Conservation Awareness Week” the first week in October (House Joint Resolution No. 575), and the other that designated an “ENERGY STAR sales tax holiday” in mid-October (House Bill 1678, Chapter 176). Educating the public about these incentives and other benefits of energy efficiency products should be a key component of the Commonwealth's conservation strategy. This will require a long-term commitment from policy makers, as well as from all Virginians.
- Finally, much work in this area is already being done around the country by individual states and in several national forums. As discussed below, this includes policy guidance on demand side management issues that are being developed by organizations such as the National Association of Regulatory Utility Commissioners (“NARUC”) and the National Action Plan for Energy Efficiency (“NAPEE”), and work to develop standards for measuring demand side management impacts by the North American Energy Standards Board (“NAESB”). Additionally, innovative energy efficiency and load management initiatives are being implemented around the country. Many states are taking advantage of the advances in “smart” meter technologies to automate energy conservation and peak load reduction solutions. Virginia should draw heavily from these sources as the energy conservation policy in the Commonwealth is developed.

Input and Ideas for Consideration

As the Staff-led workgroup begins its deliberations, DVP would like to offer input on the following issues:

1. Clarification of 10% Reduction Goal

The 10% goal is stated in terms of a conservation target and it is defined as a reduction in electricity consumption relative to retail customers' electric energy usage in 2006. The statute goes on, however, to list load management and demand side management programs as a means to achieve the target. Programs of this type can be very effective at controlling peak loads and reducing peak capacity requirements of the system, but they may not reduce overall consumption. DVP recommends that the Commission Staff's report to the General Assembly include recognition of the value of both conservation and peak load reduction programs, and include a separately stated target for each.

2. Measurement and Verification

Once targets are set for conservation and peak load reduction, it will be extremely important to have in place a standard technique for measuring and verifying results. In April 2007, NAESB initiated a project to define national standards or model business practices for measuring and verifying load and energy consumption reductions achieved through DSM actions at the retail and wholesale levels. Significant progress is being made and DVP believes that it would be prudent for the workgroup to review the work being done in that forum. The Company is taking a leadership role in the NAESB project, and the Commission Staff and others participating in this workgroup are involved as well. After NAESB has established a standard measurement and verification methodology, Virginia should carefully consider either adopting it or modifying it, if necessary, for application in the Commonwealth. More detailed information on the NAESB DSM project can be found at <http://www.naesb.org/dsm-ee.asp>.

DVP also supports using statistical sampling as a way to measure and verify energy reductions. Such sampling allows a utility to test the results of implementing a DSM program by evaluating the energy savings that were estimated to be achieved through use of the program against a sampling of the actual energy savings once the program has been initiated.

3. Incentives for Utility Investment

DVP believes that it is extremely important from a policy perspective that utility expenditures on DSM options and expenditures on supply side resources be on equal footing. Utilities are uniquely positioned to help customers better understand their consumption patterns and electricity usage. Changing customer consumption behavior, and coordinated efforts at the national, state and local levels to improve efficiency standards in buildings, appliances and energy management systems, are critical to creating sustainable energy savings.

The 2007 General Assembly provided for an enhanced return on equity, in § 56-585.1.A.6, as an incentive for utilities to invest in constructing new generation. The Company recommends that a similar incentive for investment in DSM programs be considered.

Also, on the national level, NAPEE, in an effort which is co-led and endorsed by NARUC, has recommended a number of principles and guidelines for state legislatures, public utility commissions, and electric utilities to use to meet the nation's growing demand for energy by delivering cost-effective demand side options. DVP has endorsed the NAPEE recommendations, including the recommendation that states should "review and adopt policies to align utility incentives with the delivery of cost-effective energy efficiency and modify ratemaking practices to promote energy efficiency investments." A summary of NAPEE's Action Plan is included as Attachment A to these comments. More information on the NAPEE initiative can be found on the Environmental Protection Agency's website at <http://www.epa.gov/cleanrgy/actionplan/report.htm>.

4. Cost-effectiveness

The Virginia Administrative Code (“VAC”) currently contains a section addressing the minimum guidelines for data input and modeling assumptions for utilities to use in developing an application seeking Commission approval of DSM programs. This section, 20VAC5-304-20, also specifies that a utility is to analyze the cost-effectiveness of a proposed DSM program from the perspective of four different cost/benefit measures:

- Participants Test
- Utility Cost Test
- Ratepayer Impact Measure (“RIM”) Test
- Total Resource Cost Test

DVP recommends that the workgroup assess whether these four different cost/benefit measures are still relevant or if there are other measures that should be considered. Also, the workgroup should assess if any one test should be given greater weight by the Staff as it determines the cost-effectiveness of DSM programs.

5. Rate Design

DVP recommends that rate design issues be examined in depth as part of the workgroup effort. The legislation contemplates such an examination through the inclusion of “real-time pricing” (Chapter 933, § 3(ii)) in a list of programs to be considered as a potential tool, when appropriate. The design of the rate structures applicable to DVP’s customers has been static for many years. Due largely to the capped rate provisions of the 1999 Restructuring Act, the Company’s base rate design has not been addressed in a proceeding before the Commission since the 1990’s. Since that time, much has changed in the industry, especially with respect to the transparency of wholesale market prices and the fact that marginal costs are now greater than average embedded costs. DVP’s rate structures need to be re-evaluated and modified, with the goal of sending effective price signals to consumers. Some of the specific issues that need to be considered include:

- Should retail rates provide better price signals to align with marginal costs that DVP experiences in the wholesale market?
- Should such price signals reflect how the cost of electricity varies by season, time of day, and weather conditions?
- Are declining block rates appropriate and consistent with a policy directive to promote cost-effective conservation?
- Should Virginia adopt a policy that all customers should be on time-of-usage rates?
- Can dynamic “critical peak pricing” rates be effective for residential and small business customers, especially if they are voluntary?

6. Technology

Tremendous strides recently have been made in metering technology and in load control devices placed within the home. Advanced Metering Infrastructure (“AMI”) is being

considered by utilities and state commissions across the country as the foundation upon which to build a viable and sustainable DSM initiative. The so-called “smart meters” have two-way communication capability and provide a portal into the home to provide dynamic pricing signals and to “communicate” with devices including thermostats, appliances, and load management control equipment.

In February 2007, NARUC adopted a “Resolution to Remove Regulatory Barriers to the Broad Implementation of Advanced Metering Infrastructure,” which is included as Attachment B to these comments. DVP encourages the Staff and the workgroup to consider this resolution and explore its potential application in the Commonwealth. Several of those filing to participate in the DSM workgroup are currently involved in this technology, and the Company recommends that these participants be given an opportunity during one of the workgroup meetings to update the workgroup on the DSM capabilities of the equipment.

7. Administration of Demand Side Management Programs

Senate Bill 1416/House Bill 3068 acknowledged that some entity other than the utility may be better positioned to administer some aspects of the Commonwealth’s DSM and conservation efforts. Specifically, the legislation states that programming activities by “electric utilities, public or private organizations, or both” may be used to promote the Commonwealth’s energy policy goals. (Chapter 933, § 3) Further, the Commission is tasked with determining, “the entity or entities that could most efficiently deploy and administer various elements of the plan.” (Chapter 933, § 3(iv)) Thus, the legislation suggests that the Commission could determine that public and private organizations other than utility companies may be best suited to carry out aspects of energy conservation and efficiency programs. Further, the Commission has the latitude to consider a public benefit fund to support an entity other than the utility to administer work to support implementation of the programs.

DVP believes that electric utilities are best positioned to develop, implement, and administer DSM programs that involve load management equipment and communication protocols, including but not limited to: (1) direct load control (switches to cycle or turn off electric equipment such as air conditioners or water heaters); (2) distributed generation; and (3) demand response programs, such as AMI coupled with time-of-use rates, critical peak pricing or appliances capable of receiving information from the meter.

Conversely, DVP believes energy efficiency and conservation programs that involve initiatives such as consumer education, rebates and incentives to encourage the adoption of higher efficiency equipment, and market support functions (such as technical assistance to HVAC dealers and contractors; technical assistance to builders, developers and business owners; and residential and small business energy audits) are best administered through a non-utility third party such as a state agency or private sector organization. Having such programs and offerings available on a uniform basis throughout the Commonwealth under one organization will insure that all customers will be given an equal opportunity to participate in any program, regardless of whether that customer is served by an investor-owned utility or by a cooperative. Several states have

utilized non-utility organizations that perform some or all of the activities noted above, including Vermont, New York, and North Carolina. All are supported by ratepayers through a form of public benefit fund. For example:

- Efficiency Vermont is a third party provider of energy efficiency services that is operated by an independent, non-profit organization under contract with the Vermont Public Service Board. It was created in 2000 by the Vermont legislature and the Vermont Public Service Board to help consumers save energy, reduce energy costs, and protect the environment. It is tasked with providing the technical advice, financial assistance, and design guidance to make homes and businesses in Vermont more energy efficient.
- New York has a similar organization, the New York State Energy Research and Development Authority (“NYSERDA”), which administers the New York Energy Smart program. This program is designed to support certain public benefit programs that provide energy efficiency services, including those directed toward the low-income sector, research and development, and environmental protection activities. NYSERDA was created in 1975 by the New York State legislature.
- Advanced Energy is a non-profit entity that was founded by the North Carolina Utilities Commission in 1980 to investigate and implement new technologies for distributed generation, load management, conservation, and energy efficiency. The organization also develops programs and services to benefit customers of utilities.

DVP believes that the Commonwealth and its energy consumers would greatly benefit from establishing an independent entity to perform functions such as these. The Company recommends that representatives from each of these three organizations be invited to attend a workgroup meeting to discuss their knowledge and experiences of energy efficiency technology and programs, as well as consumer awareness and acceptance of such programs.

It should also be noted that regardless of the entity responsible for administering load management, conservation, or energy efficiency programs, the Commonwealth should rely on the private sector to deliver the programs. There are many companies operating both regionally and nationally that have gained tremendous “real world” experience and can provide turn-key solutions, including customer recruitment, rebate administration, hardware installation, and call center support. The Commonwealth should take advantage of the scope and scale, efficiency, and cost-effectiveness available through companies currently delivering these programs.

8. PJM’s Demand Response Program

DVP’s customers have been eligible to participate in PJM’s demand response programs since the company joined PJM in May 2005. The Company currently has 16 customers registered to participate in PJM’s load response program through a curtailment service

provider, with registration for an additional seven customers currently pending. Indications are that the number of participants in this program could be expanding significantly in the near future. Customers participating in the load response program "self-select" the times in which they will remove their load from the grid in response to hourly prices posted by PJM, either by running their own standby generator or by curtailing load. The program is designed on the premise that customers are paid for their load response in the same manner that a generator would be paid for supply. Ultimately, the cost of the program is charged back to the load serving entities in the zone in which the load response occurred. Beginning in 2009, the legislation allows electric utilities in the Commonwealth to implement a rider to pass through the costs of the program to its retail customers. (Va. Code § 56-585.1 (A)(4))

The Company is actively working through the PJM Demand Side Response Working Group to address concerns with the current design and administration of the program and to bring about modifications we believe are necessary.

The Commission and Staff may well determine that the Commonwealth can launch its own cost-effective demand response initiative. Therefore, the Company recommends that the workgroup address the coordination that will be necessary for the two programs to co-exist without causing customer confusion.

A general understanding of the PJM Demand Response Program and the way in which it is currently administered is also important. DVP recommends that experts on the PJM Demand Response program be invited to discuss the program at a workgroup meeting, and that interested and affected parties be encouraged to get involved in PJM's working group process.

Next Steps

The Commission and Staff have many complex issues to address as they gather comments from a variety of interested stakeholders and develop a conservation and demand side management plan for the Commonwealth. We anticipate that much progress can and will be made by December when the Commission reports back to the General Assembly. However, it is clear that it will take additional time to fully design and implement a sustainable long-term strategy. DVP believes that meeting the targeted energy reduction goals will require a long-term commitment. With that in mind, the Company is currently developing several new pilot program offerings, and, where applicable, will soon file with the Commission for its approval. These programs will provide several thousand customers with the opportunity to be part of a process to gather information from exciting new initiatives, including energy audits, smart metering technologies coupled with dynamic pricing options, air conditioning load control, and distributed generation.

These pilot programs will complement the Commission's efforts by providing meaningful data on technology and equipment, as well as customer acceptance of new initiatives. DVP will request the Commission to expedite any necessary approval of the pilots before year-end so that customers can be enrolled, equipment can be deployed, and the pilot programs can be fully operational before the summer of 2008. This timely

deployment will allow future decisions on the critical topic of conservation and energy efficiency to be based on the best possible information.

Summary of Key Points

The Company offers the following key points that have been addressed in the comments and requests that the Commission Staff include these points in the main body of its report to the Commission.

- DVP strongly supports an increasing emphasis on the efficient use of energy resources in the Commonwealth.
- Changing customer consumption behavior, and coordinated efforts at the national, state and local levels to improve efficiency standards in buildings, appliances and energy management systems, are critical to creating sustainable energy savings. Consequently, new conservation and demand side management efforts undertaken in the near-term should not be expected to delay or eliminate the need for new power generation plants or transmission lines in the next several years. However, as conservation is embraced by consumers in Virginia and dependable demand side management solutions are implemented and sustained, it is possible that major infrastructure additions can be deferred or, in some cases, even eliminated in the long-term.
- Ultimately, the Commonwealth's energy conservation policy needs to be part of the Virginia Energy Plan, and should include increased efficiency standards and regulations for building codes in the areas of insulation and windows, and in minimum appliance efficiency standards.
- Virginia should draw from work that is being done in other states and national forums, such as NARUC, NAPEE, and NAESB, as the energy conservation policy in the Commonwealth is developed.
- It is extremely important from a policy perspective that utility expenditures on DSM options and supply side resources be placed on an equal footing.
- Electric utilities are best positioned to develop, implement, and administer DSM programs that involve load management equipment and communication protocols. However, energy efficiency and conservation programs that involve such initiatives as consumer education, rebates and incentives to encourage the adoption of higher efficiency equipment, and market support functions, are best administered through a non-utility third party such as a state agency or private sector organization.



National Action Plan for Energy Efficiency

Summary

The National Action Plan for Energy Efficiency (Action Plan) presents policy recommendations for creating a sustainable, aggressive national commitment to energy efficiency through gas and electric utilities, utility regulators, and partner organizations. The recommendations, if fully implemented, could save Americans billions of dollars in energy bills over the next decade, contribute to enhanced energy security, and improve the environment. Leading organizations across the country are taking specific actions to make the Action Plan a reality.

Leadership Group

The Action Plan was developed by a Leadership Group of more than 50 leading privately, publicly, and cooperatively owned electric and gas utilities, utility regulators, state agencies, large energy users, consumer advocates, energy service providers, and environmental and energy efficiency organizations. The group is co-chaired by Marsha Smith, Commissioner of the Idaho Public Utilities Commission and 1st Vice President of the National Association of Regulatory Utility Commissioners, and Jim Rogers, President and Chief Executive Officer of Duke Energy. The U.S. Department of Energy and U.S. Environmental Protection Agency facilitate the work of the Leadership Group.

Recommendations

1. Recognize energy efficiency as a high-priority energy resource.
2. Make a strong, long-term commitment to implement cost-effective energy efficiency as a resource.
3. Broadly communicate the benefits of and opportunities for energy efficiency.
4. Promote sufficient, timely, stable program funding to deliver energy efficiency where cost-effective.
5. Review and adopt policies to align utility incentives with the delivery of cost-effective energy efficiency and modify ratemaking practices to promote energy efficiency investments.

Accomplishments

During its first year, the Leadership Group reviewed and identified barriers limiting greater investment in cost-effective energy efficiency; issued a comprehensive report that explores policies, practices, and efforts to overcome these barriers; and developed five key recommendations for increasing investment in energy efficiency. The Leadership Group released its recommendations on July 31, 2006, as part the National Association of Regulatory Utility Commissioners Summer Meeting in San Francisco, California.

In addition, the Leadership Group and other participants are committing to aggressively pursue energy efficiency and advance the recommendations in their own spheres of influence. As of March 2007, more than 90 organizations have announced public statements and commitments to advance energy efficiency across 47 states. These organizations include utilities, state agencies, consumer advocates, large energy users, environmental groups, trade associations, and others.

Next Steps

During 2007, the Leadership Group is focusing on implementation, outreach, and development of additional guidance materials identified as important to implementing the Action Plan.

Key efforts include:

- Assisting organizations in meeting their commitments
- Reaching out across the country through Regional Implementation Meetings
- Engaging more organizations through an end-use Sector Collaborative on Energy Efficiency
- Creating a longer-term vision and set of goals for achieving all cost-effective energy efficiency

Resources

The Action Plan now provides or will provide the following resources by end of 2007:

National Action Plan for Energy Efficiency Report.

This report includes the Action Plan recommendations and details the key barriers to energy efficiency in utility ratemaking and revenue requirements, energy resource planning processes, rate design, and energy efficiency program best practices. The report also reviews and presents a variety of policy and program solutions that have been used to overcome these barriers.

Guidebooks. Four how-to guidebooks are being developed to assist in the implementation of the Action Plan recommendations.

1. Methods for measuring and verifying energy savings and load reductions from energy efficiency programs
2. Effective energy planning and procurement processes that treat energy efficiency as a resource
3. Energy efficiency potential studies
4. Mechanisms and options for aligning utility incentives with energy efficiency investment

Sector Collaborative on Energy Efficiency. This collaborative engages utilities and end-users to help them capture the benefits of energy efficiency and pursue new commitments and partnerships. Participating sectors include commercial real estate, grocery, hospitality, retail, and cities. The Collaborative is working to identify tools needed for implementing cost-effective energy efficiency

measures; explore strategies to increase the use of energy efficiency, including bulk purchasing, creative financing, emerging technologies, and benchmarking; and document how energy savings are valuable investments for participating sectors.

Regional Implementation Meetings. During 2007, regional meetings will be held to bring together key stakeholders in the Mid-Atlantic, New England, Midwest, West, and Southeast. The meetings will include expert presentations on regional trends affecting investment in energy efficiency and peer-to-peer exchange on regional implementation of the Action Plan recommendations. The meetings will also help additional organizations think through options to advance energy efficiency with an eye toward taking action and making an aggressive commitment under the Action Plan.

Energy Efficiency Benefits Calculator. This calculator can be used to help educate stakeholders on the broad benefits of energy efficiency. It provides a simplified tool to demonstrate the business case for energy efficiency from the perspective of the consumer, the utility, and society and can be adapted for a variety of utility types, policies, and cases.

Outreach and Resource Materials. An energy efficiency resource database, sample utility commission dockets, sample energy efficiency workshop materials, and educational presentations will help stakeholders pursue the recommendations of the Action Plan. In addition, two fact sheets will address consumer benefits of energy efficiency programs and energy efficiency in building codes.

Background

Energy efficiency is already a key component in the nation's energy resource mix in some parts of the country. Utilities, states, and others have decades of experience in bringing energy efficiency to their customers upon which more states, utilities, and others can build. Experience shows that energy efficiency programs can lower customer energy bills, cost less than and help defer new energy production,

provide energy savings to consumers, provide environmental benefits, and spur local economic development.

Energy efficiency will continue to be available in relevant quantities and at low costs in the future. Many state and regional studies have found that adoption of economically attractive, but as yet untapped, energy efficiency could yield more than 20 percent savings in total electricity demand nationwide by 2025. These savings could help cut load growth by half or more compared to current forecasts. Savings in direct use of natural gas could simi-

larly provide a 50 percent or greater reduction in natural gas demand growth.

Across the nation, however, stakeholders do not have the programs and policies in place to capture the full benefits of cost-effective energy efficiency. The current underinvestment in energy efficiency is due to a number of barriers, including those present in the policies used to govern electric and natural gas utilities such as market, customer, public policy, utility, state, and regional energy planning; and program design and implementation barriers.

Leadership Group Members and Observers

Leadership Group

Alliance to Save Energy	New Jersey Natural Gas
Ameren Services	New York Power Authority
American Council for an Energy-Efficient Economy	New York State Public Service Commission
American Electric Power	North Carolina Air Office
Arkansas Public Service Commission	North Carolina Energy Office
Austin Energy	Office of the Ohio Consumers' Counsel
Baltimore Gas and Electric	Pacific Gas and Electric
Bonneville Power Administration	Pepco Holdings, Inc.
California Energy Commission	PJM Interconnection
California Public Utilities Commission	PNM Resources
Connecticut Consumer Counsel	Puget Sound
Connecticut Department of Environmental Protection	Sacramento Municipal Utility District
Connecticut Department of Public Utility Control	Santee Cooper
District of Columbia Public Service Commission	Seattle City Light
Duke Energy	Servidyne Systems, LLC
Entergy Corporation	Southern California Edison
Environmental Defense	Southern Company
Exelon	State of Maine
Food Lion	Tennessee Valley Authority
Great River Energy	Texas State Energy Conservation Office
Idaho Public Utilities Commission	The Dow Chemical Company
ISO New England Inc.	Tristate Generation and Transmission Association
Johnson Controls	USAA Realty Company
Keyspan	Vectren Corporation
MidAmerican Energy Company	Vermont Energy Investment Corporation
Minnesota Public Utilities Commission	Wal-Mart Stores, Inc.
National Grid	Washington Utilities and Transportation Commission
Natural Resources Defense Council	Waverly Light and Power
New Jersey Board of Public Utilities	Xcel Energy

Leadership Group Members and Observers *(continued)*

Observers

American Gas Association
American Public Power Association
Business Council for Sustainable Energy
Consortium for Energy Efficiency
Council of Energy Resource Tribes
Demand Response Coordinating Committee
Edison Electric Institute
Electric Power Research Institute
Energy Programs Consortium
Gas Appliance Manufacturers Association

Gas Technology Institute
National Association of Energy Service Companies
National Association of Regulatory Utility Commissioners
National Association of State Energy Officials
National Council on Electricity Policy
National Electrical Manufacturers Association
National Rural Electric Cooperative Association
North American Insulation Manufacturers Association
Steel Manufacturers Association

Facilitators

The U.S. Department of Energy (DOE)

DOE, through a number of voluntary programs, works with building owners, industry, state public utility commissions, regional bodies, and state policymakers on energy efficiency technology and policies. Programs include the Electric Markets Technical Assistance Program, ENERGY STAR, Building America, Federal Energy Management Program, Weatherization, State Technical Assistance, and Industrial Technologies. Current program initiatives also include "Save Energy Now" and the Secretary's "Easy Ways to Save Energy" campaign.

The U.S. Environmental Protection Agency (EPA)

EPA, through a number of voluntary programs, works with businesses, organizations, governments, and consumers to reduce emissions of the greenhouse gases that contribute to global climate change by promoting greater use of energy efficient and other cost-effective technologies. One of these voluntary programs, ENERGY STAR® (operated with DOE; see www.energystar.gov), has helped utilities and others over the past decade to implement low-cost energy efficiency programs that deliver energy bill savings to their customers. In 2005, with the help of ENERGY STAR, Americans have reduced national electricity demand by more than 4 percent, saving about \$12 billion and avoiding the greenhouse gas emissions equivalent to the emissions of 23 million vehicles.¹

For More Information

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Or visit www.epa.gov/eeactionplan

¹ ENERGY STAR and Other Climate Protection Partnerships 2005 Annual Report (2006)

Resolution to Remove Regulatory Barriers To the Broad Implementation of Advanced Metering Infrastructure

WHEREAS, The Energy Policy Act of 2005 amended the State ratemaking provisions of the Public Utilities Regulatory Policies Act of 1978 (PURPA) to require every State regulatory commission to consider and determine whether to adopt a new standard with regard to advanced metering infrastructure (AMI); *and*

WHEREAS, Advanced metering, as defined by Federal Energy Regulatory Commission (FERC), refers to a metering system that records customer consumption hourly or more frequently and that provides daily or more frequent transmittal of measurements over a communication network to a central collection point; *and*

WHEREAS, The implementation of dynamic pricing, which is facilitated by AMI, can afford consumers the opportunity to better manage their energy consumption and electricity costs through the practice of demand response strategies; *and*

WHEREAS, Effective price-responsive demand requires not only deployment of AMI to a material portion of a utility's load, but also implementation of dynamic price structures that reveal to consumers the value of controlling their consumption at specific times; *and*

WHEREAS, AMI deployment offers numerous potential benefits to consumers, both participants and non-participants, including:

- greater customer control over consumption and electric bills;
- improved metering accuracy and customer service;
- potential for reduced prices during peak periods for all consumers;
- reduced price volatility;
- reduced outage duration; and,
- expedited service initiation and restoration; *and*

WHEREAS, The use of AMI may afford significant utility operational cost savings and other benefits, including:

- automation of meter reading;
- outage detection;
- remote connection/disconnection;
- reduced energy theft;
- improved outage restoration;
- improved load research;
- more optimal transformer sizing;
- reduced demand during times of system stress;
- decreased T&D system congestion; and,
- reduced reliance on inefficient peaking generators; *and*

WHEREAS, Sound AMI planning and deployment requires the identification and consideration of tangible and intangible costs and benefits to a utility system and its customers; *and*

WHEREAS, Cost-effective AMI may be a critical component of the intelligent grid of the future that will provide many benefits to utilities and consumers; *and*

WHEREAS, It is important that AMI allow the free and unimpeded flow and exchange of data and communications to empower the greatest range of technology and customer options to be deployed; *and*

WHEREAS, The deployment of cost-effective AMI technology may require the removal and disposition of existing meters that are not fully depreciated and may require replacement of, or significant modification to, existing meter reading, communications, and customer billing and information infrastructure; *and*

WHEREAS, Regulated utilities may be discouraged from pursuing demand response opportunities by the prospect of diminished sales and revenues; *now, therefore, be it*

RESOLVED, That the Board of Directors of the National Association of Regulatory Utility Commissioners, convened at its February 2007 Winter Meetings in Washington, D.C., recommends that commissions seeking to facilitate deployment of cost-effective AMI technologies consider the following regulatory options:

- pursue an AMI business case analysis, in conjunction with each regulated utility, in order to identify an optimal, cost-effective strategy for deployment of AMI that takes into account both tangible and intangible benefits;
- adopt ratemaking policies that provide utilities with appropriate incentives for reliance upon demand-side resources;
- provide for timely cost recovery of prudently incurred AMI expenditures, including accelerated recovery of investment in existing metering infrastructure, in order to provide cash flow to help finance new AMI deployment; and,
- provide depreciation lives for AMI that take into account the speed and nature of change in metering technology; *and be it further*

RESOLVED, That the Federal tax code with regard to depreciable lives for AMI investments should be amended to reflect the speed and nature of change in metering technology; *and be it further*

RESOLVED, That NARUC supports movement toward an appropriate level of open architecture and interoperability of AMI to enable cost-effective investments, avoid obsolescence, and increase innovations in technology products.

*Sponsored by the Committee on Energy Resources and Environment
Adopted by NARUC Board of Directors February 21, 2007*