IN THE MATTER OF **APPLICATION AND PETITION OF ATLANTIC CITY ELECTRIC COMPANY'S "BLUEPRINT FOR THE FUTURE," ESTABLISHING AN ADVANCED METERING INFRASTRUCTURE PROGRAM, UTILITY-PROVIDED DEMAND RESPONSE PROGRAMS, AND OTHER PROGRAMS AND REQUESTING BPU APPROVAL OF COST RECOVERY MECHANISMS RELATED THERETO**	**STATE OF NEW JERSEY** **BOARD OF PUBLIC UTILITIES** **EXHIBIT A**

Dated: November 19, 2007

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I. INTRODUCTION

This document contains the details of the Atlantic City Electric Company's ("ACE", "the Company") Blueprint for the Future Plan ("Blueprint Plan," "Plan"), which is being introduced across all of Pepco Holdings Inc.'s ("PHI") electric distribution companies and their various jurisdictions.[1] The purpose of the Company's Blueprint for the Future is to set forth ACE's comprehensive vision of the future to achieve the following:

- To support the New Jersey Energy Master Plan and to assist the Board of Public Utilities ("Board"), Governor Corzine, and other New Jersey state policymakers achieve their publicly articulated aggressive energy efficiency and renewable electricity generation goals.
- To assist ACE's customers to reduce and manage their energy costs.
- To continue to reliably distribute electricity to ACE customers.
- To increase transmission import capability into southern New Jersey to meet current and projected needs and to support additional renewable generators.
- To improve the operation of the electric distribution system through the deployment of new technology that provides increased monitoring of both the distribution system and each customer's electric service.
- To improve electric distribution service quality.
- To reduce electric distribution operations and maintenance expense.

[1] PHI is the holding company of Atlantic City Electric Company, Delmarva Power & Light Company, and Potomac Electric Power Company. Collectively these companies deliver electricity to customers in New Jersey, Delaware, Maryland, the District of Columbia, and Virginia. In addition, Delmarva delivers natural gas to customers in Delaware. The Delmarva Power & Light Company is selling its Virginia service territory to A&N Electric Cooperative and Old Dominion Electric Cooperative, subject to receipt of regulatory approval.

- To reduce power plant air emissions by reducing overall electricity use.
- To increase the installation of photovoltaic renewable generators and to maintain their long-term reliability.
- To support customer adoption of new, environmentally friendly, plug-in vehicles, by supporting dynamic pricing to permit vehicles to be charged during less costly night time hours.
- To increase job opportunities within New Jersey.
- To work collaboratively with the Board of Public Utilities and other New Jersey electricity market stakeholders to establish the regulatory framework necessary to make these initiatives a reality.

The critical components of ACE's Blueprint Plan are: 1) cost-effective demand response programs designed to reduce electricity demand during periods of high market prices;[2] 2) utility provision of energy efficiency and conservation programs directly to ACE customers to either augment or in lieu of the programs currently administered by the Board's Office of Clean Energy; 3) deployment of an advanced metering infrastructure system for all ACE customers; 4) ACE ownership and installation of photovoltaic systems directly connected to Company facilities; 5) ACE provided financing, installation, and maintenance of New Jersey residential and commercial photovoltaic installations; 6) proposed cost recovery mechanisms that permit ACE to make the substantial utility investments necessary to implement the Blueprint Plan; and

[2] The Company's and competitive suppliers' ability to offer new time differentiated rates, such as critical peak pricing, will be supported by the deployment of an AMI System. These pricing options are expected to significantly support appropriate demand response activities.

7) ACE's willingness to work collaboratively with the Board and New Jersey electricity market stakeholders to make these proposals a reality as rapidly as possible.

In addition to providing direct customer savings, over time the resulting reductions in peak electricity demand are expected to help the Company maintain the reliable supply of electricity in southern New Jersey to serve demand. New Jersey's increasing reliance on limited regional transmission system capabilities for imports of electricity is a significant concern of the Company. As a result, PHI has designed and proposed a major new transmission line into southern New Jersey. Additional energy efficiency improvements and increasing reliance on renewable electricity generation are expected to help reduce power plant air emissions and associated greenhouse gases.

On September 27, 2007 former President Bill Clinton announced on behalf of the Clinton Global Initiative[3] ("CGI") the commitment of PHI and seven other U.S. utilities[4] to work to reduce over 29 million tons of greenhouse gas emissions, equivalent to the emissions of 6 million cars or 25,000 MW of peak demand over the next ten years. The eight utilities are committed to working with state regulators to enable them to make the required substantial investments in energy efficiency related products and services to achieve these air emissions reductions and to improve the productivity of the electricity sector. PHI and the other companies, together with the Edison Electric Institute, have agreed to form the Institute for Electric Efficiency ("IEE").

[3] CGI is a non-partisan catalyst for action lead by former President Bill Clinton, bringing together a community of global leaders to devise and implement innovative solutions to some of the world's most pressing challenges. CGI has approximately 1,000 members, diverse and influential leaders from all over the world, who make tangible commitments to take action to address specific global challenges.

[4] The eight electric utilities are Pepco Holdings, Inc., Consolidated Edison, Inc., Duke Energy Corporation, Edison International, Great Plains Energy, Inc., PNM Resources, Inc., Sierra Pacific Resources, and Xcel Energy, Inc.

IEE will promote the sharing of information, ideas, and experiences on effective means of delivering energy efficiency.

Each year, ACE conducts an extensive customer satisfaction survey of its residential customers. This survey outlines key drivers of customer satisfaction. Through the implementation of the technologies and programs contained in this filing, many of the key drivers of customer satisfaction can be positively impacted. For example, primary and secondary customer satisfaction drivers that will be positively impacted include Reliability and Restoration performance, Energy Information, Overall Customer Service, and a number of related areas. Company annual survey findings also indicate that customer satisfaction is driven by ACE's ability to address customer problems, offer energy information/conservation solutions, demonstrate environmental stewardship, offer billing options and have customer service representatives who are knowledgeable about energy management and related solutions. Implementation of our Blueprint will enhance customer experience when interacting with ACE.

Over the past several years the rising cost of energy has affected ACE's customers. Recently, the Company has provided its customers with options to more efficiently manage their energy use. Last year PHI and ACE launched the "Energy Know How" campaign. PHI and ACE invested over $1,000,000 to implement state of the art energy auditing software. This investment now enables ACE's residential and commercial customers to go on the internet and view data about their monthly bills to better understand how they use energy and what changes might reduce their overall costs.

New metering technology that supports time differentiated pricing options is expected to improve customers' ability to manage their electricity use so that overall energy reductions can be readily obtained. In addition, these pricing options will provide electricity market financial

incentives for the installation of renewable generation technologies capable of producing energy during periods of high electricity demand and accelerate customer adoption of plug-in vehicles. The new metering technology will help ACE integrate these technologies into the grid effectively. The increasing use of plug-in vehicles and renewable generation technologies will help to reduce the nation's dependence upon foreign sources of energy, improve regional air quality, and reduce future quantities of greenhouse gas emissions.

An important element supporting ACE's recommended demand response programs is the deployment of an Advanced Metering Infrastructure ("AMI") System capable of providing hourly energy consumption data for all customers that can support voluntary pricing options, whereby electricity prices for customers more closely track wholesale electric energy and capacity prices. In this manner, customers will be incented to reduce their electricity consumption during high priced periods. In addition to helping participating customers manage their electricity bills, the optional rate structures will help to place significant downward pressure[5] on regional wholesale electric energy and capacity prices during peak load periods, thereby reducing future electricity supply costs for all New Jersey consumers.

ACE has designed the rollout of its proposed remotely controllable smart thermostat deployment to be integrated into the deployment of its proposed AMI System for the following reasons: First, the advanced metering system and the smart thermostats ("smart stat") can be designed in a manner whereby the communications infrastructure is shared by both systems –

[5] A recent study issued on January 29, 2007, entitled "Quantifying Demand Response Benefits in PJM," which was prepared by The Brattle Group on behalf of the PJM Interconnection, LLC and the Mid-Atlantic Distributed Resources Initiative ("MADRI"), has quantified the significant reduction in regional wholesale electricity market prices that occur as a result of a 3 percent reduction in electricity load. The study found that curtailing 3 percent of the BGE, Pepco, PECO, Delmarva, and PSEG load during the highest 133 to 152 load hours would reduce energy prices during those hours by 5 to 8 percent or $8 to $25 per MWh. The price benefits for the MADRI states are estimated to be $101.9 million annually under normal weather conditions for a three percent reduction.

helping to reduce the total cost of the system. Second, it may be possible to install a system where the advanced meter and the smart thermostat can communicate directly with one another to enhance future program opportunities. Third, a critical problem with existing air conditioner cycling programs, including ACE's Peak Savers Club Program, is the inability to determine remotely whether cycling equipment is functioning properly – a problem that is remedied by the integration of a smart thermostat system with the planned AMI System. Fourth, the value to an individual customer of a smart thermostat is significantly enhanced if the consumer receives an hourly market based price signal that directly rewards the participating customer for achieved load reductions. Any delay in deploying an advanced metering system in ACE's service territory will delay ACE's ability to create the optimal smart thermostat program to manage residential and small commercial customer air conditioner load – the primary driver of summer peak electricity demand.

It is important to note that the deployment of an advanced metering system will help to support all demand-side management ("DSM") program efforts. Customers will learn when and how they use electricity, DSM program administrators will be able to refine DSM program design for individual customers, DSM evaluators will have greater certainty that savings have been achieved, and electricity suppliers will be able to reduce their hedge premium required to serve customers without interval data. Adoption of optional or default innovative pricing options for ACE customers will help customers directly capture the benefits of reducing their electricity demand during high priced periods through energy efficiency improvements, demand response, and the installation of distributed generation. Additionally, the availability of hourly consumption data for all customers greatly improves the Company's ability to optimally design and operate the electric distribution system.

ACE looks forward to implementing its Blueprint Plan over the coming years and to working collaboratively with the Board and New Jersey electricity market stakeholders on its implementation of the Blueprint initiatives. The Company's leadership and employees are strongly committed to this initiative that is designed to assist our customers to manage and reduce their electricity use, reduce future air emissions from power plants, and help achieve New Jersey policy makers' energy consumption reduction and renewable generation goals.

II. ADVANCED METERING AND RELATED TECHNOLOGY[6]

ACE plans to deploy an AMI system[7] and the associated meter data management system for all of its New Jersey electric customers as part of an overall PHI AMI deployment plan to better serve its electric and gas distribution customers. ACE's affiliated electric distribution company, Potomac Electric Power Company ("Pepco"), submitted a similar plan to the District of Columbia Public Service Commission on April 4, 2007. Pepco submitted a similar plan to the Maryland Commission on March 21, 2007 that is expected to result in the installation of AMI equipment for all Pepco Maryland electric distribution customers. ACE's affiliated electric distribution company, Delmarva Power & Light Company ("Delmarva Power"), submitted a similar plan to the Delaware Commission on February 6, 2007 and to the Maryland Commission

[6] The Board initiated a Transitional Rate Design Working Group on March 14, 2006 to examine issues related to rate design and smart metering as a result of the U.S. Energy Policy Act of 2005. ACE filed its comments on March 29, 2006.

[7] ACE agrees with the electric AMI system definition developed by the Federal Energy Regulatory Commission Staff:

> Advanced metering is a metering system that records customer consumption [and possibly other parameters] hourly or more frequently and that provides for daily or more frequent transmittal of measurements over a communication network to a central collection point. (Federal Energy Regulatory Commission Staff Report entitled "Assessment of Demand Response & Advanced Metering," August 2006, p. 17.)

on March 21, 2007 that will result in the installation of AMI equipment for all of Delmarva's Maryland and Delaware electric distribution customers and Delmarva's Delaware gas distribution customers. ACE recognizes that the costs of such a deployment are significant; however, the resulting benefits to ACE's New Jersey electric customers will exceed those costs.

Due to the magnitude, complexity, and importance of this project, ACE recommends that the Commission establish an ACE AMI Advisory Group comprised of representatives of ACE, the Board Staff, the Division of Rate Counsel ("Rate Counsel") and any other parties the Board deems appropriate. ACE will share its AMI project plans with the AMI Advisory Group and provide a copy of its detailed AMI project plan to the Board. ACE's technical staff will be responsible for the evaluation, vendor negotiations, and final vendor selection. After vendor selections are made, ACE will share its detailed implementation plan and refined project cost estimates with the Advisory Group. The detailed implementation plan will also be shared with the Board.

Due to the significant utility costs expected to be incurred and the type of utility asset, ACE recommends that the Board establish an AMI specific cost recovery mechanism in the near-term. Approval of the proposed cost recovery mechanism will permit the Company to recover its prudently incurred AMI capital expenditures over an appropriate time period that is fair to both ACE customers and PHI shareholders.

The significant benefits of AMI deployment have recently been recognized by other utilities and state regulatory commissions. Pennsylvania Power & Light Company completed the installation of 1.3 million electric meters in 2004 for all of its electric distribution customers. Southern Company (4.5 million electric meters) and Detroit Edison (3 million electric meters) have received Commission approval to replace all of their meters with an AMI system and are

currently in the vendor RFP phase of this work. The Pacific Gas & Electric Company has received California Commission approval for universal deployment of an AMI system and is currently deploying 5.2 million electric meters and 4.1 million gas meters. Southern California Edison Company (5.1 million electric meters for an estimated cost of $1.3 billion) submitted a filing on December 21, 2006 to the California Commission proposing to initiate AMI pre-deployment activities leading to full deployment beginning in early 2008. San Diego Gas & Electric Company has agreed to revise its AMI deployment plan for all of its customers (1.3 million electric meters and 800,000 gas meters) and is awaiting approval of a settlement agreement. On January 23, 2006, the Baltimore Gas & Electric Company filed with the Maryland Commission for approval of the deployment of an AMI system beginning in 2007. The Maryland Commission Order No. 81637, Formal Case No. 9111, issued on September 28, 2007 recognized several of the important benefits of AMI: "Of course, we also recognize that the peak load reductions occasioned by AMI and an appropriate rate structure will provide significant benefits in terms of maintaining reliable service, as well as reductions in capacity and energy costs." (Order, p. 4).

ACE has prepared a detailed financial business case supporting its AMI System deployment. A copy of the business case, entitled "Advanced Metering Business Case Including Demand-Side Management Benefits" is provided as **Exhibit B**. The financial benefits of AMI that have been estimated by the Company are monetized distribution utility operational savings and expected reductions in electricity commodity costs for ACE consumers. Consumers receive additional benefits through improvements in electric distribution service. The value of these improvements has not been estimated by ACE due to their non-pecuniary nature. ACE retained

the Brattle Group[8] to estimate the peak demand reduction resulting from AMI deployment through AMI supported dynamic pricing, such as critical peak pricing, and AMI enabled reduction in New Jersey customer electricity commodity costs. A copy of the Brattle report, entitled "Quantifying Customer Benefits from Reductions in Critical Peak Loads from PHI's Proposed Demand-Side Management Programs," is attached as **Exhibit C**. ACE's business case indicates that the deployment of an AMI System is expected to result in no additional total electricity costs to ACE's customers under conservative assumptions and is reasonably likely to result in financial benefits if significant numbers of customers are placed on dynamic prices. The New Jersey state-wide net present financial benefits achieved by ACE's AMI enabled demand response are expected to range between $102 million to $218 million if dynamic pricing is widely adopted by ACE customers.[9] ACE believes that these estimates of financial benefits are conservative and therefore, reasonably likely to be exceeded. The Brattle Group projects that additional peak demand response capability will exceed 145 MW if dynamic pricing enabled by AMI deployment is widely adopted within the ACE service territory.

The Company plans to deploy an AMI System within the ACE service territory for the following reasons: 1) the cost of electricity has risen significantly within the Mid-Atlantic region in recent years thereby greatly increasing the need for detailed consumption data for all ACE New Jersey electricity customers; 2) AMI deployment will provide significant ACE New Jersey electricity customer benefits and overall New Jersey customer benefits; 3) AMI equipment is

[8] The Brattle Group was also retained by PJM Interconnection, LLC and the Mid-Atlantic Distributed Resources Initiative ("MADRI") during 2006 to estimate the financial benefits related to the introduction of additional demand response within the PJM Mid-Atlantic electricity market.

[9] The net present value benefits to ACE's customers alone range between $100 million to $126 million. *See* Table A.1, PHI Brattle Report, Exhibit C, p. 64.

currently available from vendors at a reasonable cost, but availability may become more limited in the future as additional utility AMI deployments are initiated; and 4) metering technology has evolved sufficiently to make this practicable.[10]

A. AMI Infrastructure

The Company intends to implement an AMI System and the associated MDMS for all of its New Jersey electric customers as part of an overall PHI-wide deployment beginning with the planning phase during 2007. The Company's adoption of this approach is based upon its recent completion of a multi-year effort to examine the technical and operational aspects of AMI Systems, further development of AMI technology and supporting systems, and the increasing benefits associated with providing New Jersey consumers with additional information about their electricity consumption in order to help to manage energy bills.

The near-term tasks for ACE's New Jersey AMI project include the following:

- Assess Customer/Utility Requirements;
- Establish Recommended Systems Capabilities;
- Review Available Technology and Communications Systems;
- Participate in Vendor ACE RFP Development;
- Develop Detailed Project Plans;

[10] ACE's affiliated company, Pepco is currently working with the Smart Meter Pilot Program, Inc. to implement a smart metering pilot program in the District of Columbia during 2007. This pilot was initiated as the result of the Pepco/Conectiv merger settlement agreement, whereby the Company agreed to contribute $2 million towards a smart metering pilot initiative. A portion of pilot program participants will receive a smart thermostat to help them to reduce their summer air conditioning load during high priced periods. The purpose of the District of Columbia pilot is to test customer response to different rate options and billing statements rather than to test any AMI or smart thermostat technology. The pilot is designed to test residential customer response to three rate options based upon Pepco Zonal day-ahead PJM Locational Marginal Prices: 1) hourly pricing, 2) critical peak pricing, and 3) critical peak rebates. The results gathered from the study will be used by PHI to develop appropriate rate options for customers that will be supported by the Company's universal AMI deployment plan.

- Identify Project Risks;
- Refine Project Cost Estimates;[11]
- Prepare Detailed ACE New Jersey AMI Implementation Plan; and
- Install Information Technology Systems and Associated Interfaces;

B. AMI Project Timeline

PHI is developing an AMI implementation timeline applicable for all of its electric distribution companies that will result in completion of all AMI meter installations by 2012.[12] At this time, ACE New Jersey AMI meter installations are expected to begin during 2011 and be completed by 2012. PHI will optimize the installation of AMI equipment in a manner that helps to minimize capital and labor related installation costs and that is achievable with the expected availability of required labor and AMI equipment. ACE anticipates that as AMI metering equipment is installed some of the benefits related to AMI will be available to each customer that receives the new metering equipment.

C. AMI Implementation Cost

The Company estimates that the cost of a universal deployment of AMI for all of its approximately 540,000 New Jersey electric distribution meters will be approximately $128 million, depending upon system capability and configuration. The major components of this cost include new smart meters with household communication links, communication equipment, and the build out of the local area network ("LAN") and the wide-area network ("WAN"), and supporting software systems. It is important to recognize that ACE will not be able to provide

[11] Final project cost estimates will be available after vendor selection and negotiations have been completed.

[12] A limited number of meters may require additional installation time due to access or location problems.

refined project cost estimates until vendor selection and contract negotiations have been completed. The purchase and installation of a MDMS will be required to process the significant quantities of meter data collected through the AMI System. Based upon full PHI AMI implementation, the ACE New Jersey allocated cost for the MDMS is estimated to be $2.8 million.[13] Potential additional expenses that are not included would be incurred for interfaces to Control Center outage management software, upgrades to the utility settlement system, future customer information system upgrades or replacement, customer educational materials, utility personnel training, and any deployed demand response technology.

ACE's demand-side management response program proposals contained in this filing include preliminary cost estimates for the installation of remotely controllable programmable thermostats for residential and small commercial customers. These smart thermostats will permit ACE to install state of the art technology designed to reduce residential and small commercial customer air conditioning load during periods of high electricity demand. The smart thermostats will serve as an easy mechanism for customers to control both their overall annual electric cooling and gas or electric heating costs.

D. AMI Communication Technology

The primary component of an AMI System is the communication system. At this time, five alternative communication methods exist: power line carrier, broadband over power line, fixed radio, cellular, and landlines. Under power line carrier, data pass through the electric distribution network and are gathered at electric distribution substations for transmittal back to the utility. Broadband over power line ("BPL") permits an even greater quantity of digital data

[13] The total cost of MDMS is estimated to be $10 million. Ultimately, PHI proposes to spread this cost across all of its electric distribution companies and the jurisdictions that adopt the Blueprint for the Future.

to be passed through the electric distribution network; however the data are effectively blocked by distribution transformers necessitating the installation of additional equipment to bypass each transformer. BPL systems are more expensive to install than other AMI communication systems due to the additional required equipment. PHI has participated in a BPL test in Montgomery County, Maryland for several years.

Radio based systems directly communicate with individual meters. Mesh systems permit meters that are unable to directly communicate with the radio tower due to insufficient signal strength, to communicate with nearby meters that have the capability of passing data to the towers. Alternative radio communication techniques for difficult to communicate with meters include the installation of additional antennas or special data collectors that have the capability of communicating with the towers. (An existing radio communication system was selected for the advanced meter pilot program in the District of Columbia.) Cellular or landline systems typically rely on available communication networks established by cellular telephone companies and hard-wired telephone systems. The limitations of these systems include monthly access fees, rapidly changing cellular communication protocols, and cellular service coverage limitations. (PHI has piloted a hybrid Cellnet AMI System since 2005 to evaluate the capabilities of this communication system for the purposes of outage detection, AMI, and distribution automation.) Any deployment of AMI could include one or more of these communication systems.

ACE plans to deploy a two-way AMI system versus a one-way system due to the numerous operational advantages of doing so. The advantages of two-way communications include the following capabilities to support advanced applications related to: the ability to send price signals directly to customers, the ability to verify power outages and restoration, the ability to verify directly connected demand response enabling technology and remote turn on/off.

ACE will improve the Company's communications network to accommodate the increased flow of customer and distribution system data to and from ACE's operational centers. A fixed communications backbone based on optical fiber and licensed microwave communications provides a robust and secure communications platform to backhaul AMI and Distribution Automation (DA) as well as enhance the overall efficiency and reliability of its electric system. These networks will be leveraged with advanced wireless communications to provide secure communications to ACE's distribution substations, AMI data concentrators and various DA devices. Presently many of ACE's transmission substations are served by fiber and the Company has plans to install fiber and microwave to the balance of those stations as well as select distribution substations. It is important to leverage these networks across all of ACE's technology investments, as it will support all applications if they share a common communications network**.**

E. Overview of AMI Benefits

ACE has identified the following major benefits that could be derived from the universal deployment of an AMI System in its service territory. These benefits are also examined in the Company's AMI business case.

1. Remote Meter Reading

- Enables Remote Meter Reading: A permanent AMI communication network can exchange data with meters and virtually eliminate the need for any utility employee or utility contractor to access the meters on a monthly basis for meter reading. Customer benefits include increased customer security, minimized billing anomalies (misread, estimated read etc.), elimination of meter reading access issues, and the immediate

availability of energy consumption data to permit rapid utility response to bill inquiries. Together these customer benefits are expected to greatly enhance ACE New Jersey customer service and to increase ACE customer service satisfaction.

- Permits more frequent readings: An AMI System creates customer benefits by enabling meter reading on a daily basis, thereby collecting hourly electricity readings. This supports the provision of additional energy consumption data to customers to improve their ability to control energy costs. An AMI System's ability to collect interval data on a daily basis creates a valuable database. This rich database, in conjunction with an internet accessible energy services portal, enables customers to readily determine how and when they use energy and to develop strategies for lowering their bills.

- Supports enhanced customer service capabilities: Resulting customer service improvements are expected to include customer selectable billing dates, improved utility response to bill inquiries, the ability to readily obtain meter readings that coincide with customer requested move dates, and the rapid utility notification of customer outages.

- Improves reading accuracy: An AMI System improves the accuracy of meter readings and, thereby, the calculation of all customer bills.

- Discovers malfunctioning meters: An AMI System includes numerous processes to verify that the meter is recording properly. Each meter

includes software designed to detect meter and communication malfunctions that can be directly reported to the utility.

- Provides additional customer specific load research data: AMI Systems are designed to support customer specific load research by compiling interval data for all customers. The data can be used by ACE's distribution and transmission system planners to optimize the design of the electric system. Competitive electricity suppliers can use the data to refine their price offers to customers. Wholesale electricity suppliers participating in the Basic Generation Service auction process can improve their price bids based on the data. Additionally, the interval data support the evaluation of the impact of both energy efficiency and demand response programs.

2. Demand Response

- Integrates AMI System with demand response enabling technology: AMI Systems can support the installation of demand response technology, such as remotely controllable programmable thermostats, to directly reduce customer electricity demand during periods of high electricity demand. In the future, other electricity end-uses may be installed that have the capability to automatically reduce electricity demand during periods of high electricity prices.

- Supports demand response through pricing options that more closely track wholesale electricity market supply conditions: Examples of effective

voluntary rate options that directly reflect existing electricity market conditions include: hourly pricing, critical peak pricing, and critical peak load reduction rebates. These alternative rate mechanisms can be designed to reflect either day-ahead or real-time PJM ACE Zonal Locational Marginal Prices. Participants in these rate options can reduce their monthly electricity bills by reducing their electricity consumption during high priced periods and thereby place significant downward pressure on regional electricity energy and capacity prices – benefiting all ACE New Jersey electricity customers.[14] These rate options combined with the availability of direct load control technology are a powerful tool for reducing the overall peak electricity demand in New Jersey, in a customer friendly manner.

- Enhances customer control over monthly bills through additional billing information regarding electricity consumption: As discussed above, AMI enables utilities to empower better customer control over energy costs in ways as simple as showing the customer on their monthly billing statements when they use energy.

[14] A study released on January 29, 2007 and commissioned by the Mid-Atlantic Distributed Resources Initiative ("MADRI") and the PJM Interconnection, LLC, found that electricity day ahead prices would be reduced by 5 to 8 percent or by $57 to $182 million assuming a 3 percent peak demand reduction in the Mid-Atlantic area. These saving figures will be significantly greater if price impacts on the following PJM market components are included: real time energy market prices, capacity prices, and PJM ancillary market prices.

3. Distribution System Monitoring

- Improves distribution system design, reliability and performance: Smart Grid concepts are now available that permit the utility to deploy an array of sensors and control devices supported by an AMI System to provide additional near real-time monitoring. Examples include transformer load management, feeder load analysis, recloser control, fault indicator monitoring, voltage and phase monitoring, and capacitor bank switch control.

4. Distribution System Asset Management

- Enhances Outage Reporting: Supports more rapid customer restoration time: An AMI System can detect outages without customer calls. This enables ACE to respond to outages as quickly as possible and often before the customer even knows an outage has occurred. AMI Systems are also capable of reporting momentary outages that could indicate a loose conductor coupling, loose neutral or other service issues including a rubbing tree branch.

- Dispatches Repair crews with improved accuracy: AMI data allow utilities to dispatch repair crews in a more efficient manner. The data permit the utility to acquire outage data within minutes of an event -- permitting ACE to determine the location of repair likely to restore power most quickly to the greatest number of customers. Customer benefits from this include minimization of outage inconvenience, reduction in lost

revenues, and minimization of lost product (restaurants, manufacturing etc).[15]

5. Remote Service Disconnect

- Reduces utility service visits: AMI coupled with remote Service Connect and Disconnect ("SCD") enables the utility to remotely disconnect customers. This enables the utility to disconnect service for a departing customer and thereby lessening disagreements over departing/arriving customer energy use. Additionally the utility can turn on service for a new customer virtually in real time rather than the customer having to wait for a utility crew to perform the task. This increases customer satisfaction while reducing utility costs especially for locations with high levels of SCD activity. This technology is currently available for services rated up to 200 amps. AMI enables a future vision of self service for many activities allowing customers greater flexibility and increased satisfaction.

  Similarly, AMI can reduce service calls and outages attributable to a customer based outage event such as a circuit breaker opening during a storm. Most customers assume the problem is utility based and the normal process is for the utility to dispatch a field crew. Conceptually, an AMI system could be used by a customer service representative for a real time meter service audit to determine if power is being supplied and if the

[15] Pennsylvania Power and Light claims that its Hurricane Isabel efforts were substantially aided by its AMI system resulting in an estimated 10% reduction in restoration costs and a 6 hour improvement in system wide recovery.

meter is operational and has not lost supply to a meter leg. In response to many of these events, ACE can assist customers to restore service in minutes without the need or expense of a field crew visit.

6. Tamper Detection

- Informs utility of possible meter tampering: AMI systems are designed to support revenue assurance and the minimization of meter tampering. This is accomplished with sensors that can detect some of the major methods of tampering to detect anomalous patterns of energy use that are otherwise difficult or expensive to detect. This helps to ensure that other customers are not unfairly burdened.

7. Supports New Rate Options

- Renewable Generators: Pricing tariffs that reward renewable generators (or other distributed generation resources) for their production of electricity during periods of high energy prices will be supported. This is particularly valuable for resources such as photovoltaic systems, which supply energy during summer weekdays. Additionally, utility monitoring of the production of all distributed generators can be accomplished remotely to ensure the adequate supply of electricity and to provide the data necessary for these resources to participate in the regional Renewable Energy Credit ("REC") market.

- Plug-In Vehicles: Rate designs that support the expected surge in the use of plug-in vehicles through pricing that is substantially lower during nights

and weekends can be readily accommodated. These electricity rates will encourage greater numbers of customers to purchase these vehicles by helping to reduce their operating costs. All ACE customers will benefit through reductions in vehicle air emissions – a major source of air pollution in the State. Simultaneously dependence on foreign sources of energy will be lessened.

- Time Differentiated Pricing Options: Electricity rate pricing options that include critical peak pricing, critical peak rebate, and/or hourly prices related to day ahead or real time wholesale energy market prices can be offered by the utility and competitive suppliers. Customers electing these rates will have the opportunity to reduce their electricity bills by reducing their use of electricity during high priced hours. These rates will result in lowered demands for electricity during high priced periods, thereby lowering regional market electric energy and capacity prices and costs for ACE and all New Jersey consumers. These dynamic rates will encourage customer participation in demand response programs, including the Company's proposed smart thermostat program.

III. DEMAND-SIDE MANAGEMENT INITIATIVES

The Board's Office of Clean Energy has assumed responsibility for designing, implementing, administering, and evaluating all publicly funded electric related energy efficiency and conservation programs since July 1, 2007, with the exception of the low income (Comfort Partners) program. ACE is prepared to work closely with the Board to design and

implement utility provided energy efficiency and conservation programs beginning immediately that would augment or supplant the Office of Clean Energy's programs. ACE notes that direct utility involvement in the design and implementation of these programs will be an essential component of the activities needed to help meet the aggressive energy consumption reductions desired by New Jersey policymakers and expected in the final version of the pending New Jersey Energy Master Plan. ACE's affiliated utilities, Pepco and Delmarva Power, have submitted comprehensive DSM program proposals for every customer segment. Pepco and Delmarva Power have recommended that they be responsible for designing, implementing, and managing these programs within their respective service territories.[16]

ACE is in the best position to develop, design, implement and manage energy efficiency, conservation, and demand response programs (collectively, demand-side management programs) and to provide comprehensive demand-side management programs for its electric distribution customers for numerous reasons, including the reasons described below.

A. Experience Providing Demand-Side Management Programs

ACE and its affiliated utility distribution companies have significant experience providing cost-effective demand-side management programs. ACE has more than fifteen years of experience in the provision of such programs directly to New Jersey consumers. In New Jersey, ACE achieved energy efficiency and conservation improvements in all customer segments through utility sponsored demand-side management programs impacting individual end-uses and building envelopes. ACE continues to operate a residential air conditioner/heat pump, water heater, and electric motor control program, the Peak Savers Club Program. During

[16] The Delaware Legislature has approved the establishment of an independent Sustainable Energy Utility ("SEU") within Delaware. Delmarva Power is working with representatives of the SEU to work cooperatively to implement DSM programs in Delaware.

the summer of 2007, more than 24,000 residential and small commercial New Jersey customers participated in the Peak Savers Club Program, providing more than an estimated 17 MW of peak electricity demand reduction. ACE's total lifetime energy efficiency savings achieved by historic utility energy efficiency and conservation programs from 2001 through 2006 exceeded over 300,000 MWh.

Historically, each of Pepco Holdings, Inc.'s electric distribution companies, ACE, Delmarva Power, and Pepco, have offered their customers a wide array of energy efficiency, conservation, and demand response related programs, ranging from direct control peak demand reduction programs to extensive energy efficiency loan, audit, and rebate programs. These programs were subject to the oversight of the Mid-Atlantic state and District of Columbia commissions and funded through various nonbypassable rate surcharge mechanisms. For example, Pepco's aggressive demand-side management programs achieved nearly 790 MW of peak demand reduction and over 1.9 million MWh of annual energy savings by 2001. PHI is able to apply its collective experience with DSM to implement aggressive and successful programs in New Jersey.

B. Customer Information System

ACE maintains a detailed customer information system containing specific customer address and telephone contact information, monthly electric usage data, and monthly electric billing amounts for every electricity customer it serves. This invaluable data set provides the data necessary to successfully design, implement, market, and evaluate demand-side management programs the utility provides to its New Jersey electric customers.

C. Financial Accounting System

ACE maintains a detailed financial accounting system to track all expenditures in a manner sufficient to satisfy internal budgetary requirements, meet Sarbanes Oxley and standard accounting requirements, meet regulatory Commission requirements, and fulfill Federal and State reporting requirements. The availability and careful maintenance of a detailed financial accounting system is critical to ensuring that demand-side management program funds are accounted for and spent appropriately.

D. Monthly Customer Contact

ACE communicates with each of its customers on a monthly basis through its billing system. Additionally, the Company has extensive customer contacts through its customer service and call centers. These extensive customer contacts provide the Company with significant opportunities to educate customers about demand-side management programs and to directly market demand-side management programs to customers. Existing Federal "do not call" requirements have significantly hampered the ability of entities without pre-existing customer relationships to market demand-side management programs directly to consumers.

E. Brand Awareness

ACE is a widely recognized and respected brand in New Jersey. Consumers are significantly more likely to listen and believe in messages from a known, knowledgeable, and respected entity. Other lesser known entities within New Jersey would need to spend considerable additional funds to provide energy efficiency, conservation, and demand response related information to consumers.

F. Utility Professional Staff

ACE's staff and those of its related companies have expertise and significant experience in each of the areas required to implement demand-side management programs successfully. This expertise ranges from skilled call center representatives, marketers, program managers, engineers, economists, and a skilled and committed leadership team. It is important to recognize that a skilled staff is required to implement large scale demand-side management programs requiring comprehensive planning, design, marketing, administration, and evaluation efforts.

If additional staff is needed to implement demand-side management programs, the Company has the ability to readily hire staff and/or contractors. The Company typically selects contractors through a competitive bid process, helping to ensure contractor costs are minimized, quality is maintained, and that contracting opportunities are open to all.

G. Distribution System Planning

Integrating demand-side management programs into electric distribution system planning and operation is essential to capturing all of the benefits available from demand-side management. This is particularly important for the proper implementation of demand response programs. ACE is the only entity within its service area that has this critical capability.

H. Control Center Operations

ACE operates a control center on a 24/7 basis. The Control Center interfaces directly with the PJM Interconnection, L.L.C. and monitors the flow of electricity on a real time basis in New Jersey. ACE dispatchers currently work with PJM dispatchers to operate demand response resources in the most economic and beneficial manner for the electric grid. No other entity maintains this capability for ACE's electricity customers. This capability is essential for the

provision of demand response programs in New Jersey, such as the Company's proposed remotely controllable smart thermostat system program.

I. Announced Demand-Side Management Program Plans In Other Jurisdictions

ACE's affiliate utility, Delmarva Power has announced plans to provide similar demand-side management programs to its customers in Maryland and Delaware. PHI's affiliate utility, Pepco has announced plans to provide similar programs to its customers in the District of Columbia and Maryland. Operating and offering similar demand-side management programs across multiple jurisdictions offers significant economies of scale for the Company and advantages to our more than 500,000 New Jersey customers. For example, a demand-side management customer awareness campaign conducted in Maryland will have positive spill over affects in Delaware and the costs of administering one program across multiple jurisdictions will be significantly less per participant than doing so for one jurisdiction alone. The Maryland Commission has recently approved PHI's first Delmarva Power and Pepco Blueprint proposed DSM programs – a three year residential efficient lighting campaign and accompanying customer awareness campaigns. (Commission Order No. 81618, Formal Case No. 9111, issued on September 20, 2007)

The types of DSM programs recently recommended by ACE's affiliated electric distribution utilities, Pepco and Delmarva Power, for utility implementation include the following:

1. General Energy Awareness Campaign

- Customer DSM Education/Marketing Effort

2. Residential Programs

- Home Performance w/ENERGY STAR® Program – Home Audit Based Program;
- High Efficiency Central Air Conditioner/Heat Pump Rebate/Installer Training Program – Promotes Proper Sizing/Installation of High Efficiency Units;
- High Efficiency Window Air Conditioner Rebate Program – Promotes Selection of High Efficiency Modes at Point of Purchase;
- Residential High Efficiency Lighting Program[17] – Promotes use of Compact Fluorescent Lighting through Participating Retailers through a Mid-Market Campaign;
- Residential New Construction Program – Promotes Installation of Energy Efficient Equipment and Measures at Time of Construction;
- Smart Thermostat Program – Remotely Controllable Thermostats to Reduce Peak Electricity Demand and Provide Cooling and Heating Related Energy Savings (linked with AMI deployments).

[17] ACE, Delmarva Power, and Pepco are active participants in the national ENERGY STAR® "Change a Light Change the World" campaign.

3. Non-Residential Programs

- Building Commissioning and O&M Program – Consulting/ Engineering Services to Improve Energy Efficiency of Existing Buildings and to Identify Peak Demand Savings Opportunities**;**
- New Construction Program – Consulting/Engineering Services to Improve the Design of Energy Efficient Buildings Prior to and During their Construction;
- HVAC Efficiency Program – Promotes Installation of High Efficiency HVAC Equipment up to 30 Tons through Rebates, Education, and Contractor Training;
- Prescriptive Program – Energy Efficiency Measure Incentives for Electric Motors and Lighting;
- Custom Incentive Program – Provides Rebates for Installation of Site Specific Energy Efficiency Measures;
- Smart Thermostat Program – Remotely Controllable Thermostats to Reduce Peak Electricity Demand and Provide Cooling and Heating Related Energy Savings (linked with AMI deployments);
- Internet Platform – Internet Based Platform to Facilitate Participation in PJM Demand Response Market.

Detailed program descriptions are contained within the Delmarva Power Maryland and Delaware Blueprint filings and within the Pepco Maryland and District of Columbia Blueprint related

filings.[18] ACE proposes to build upon the successful elements of the existing DSM programs within its service territory to ensure that additional energy savings opportunities are captured. PHI anticipates that its DSM implementation experiences across its distribution company footprint will significantly improve program design and implementation in all of its service territories.

J. Regulatory Oversight by the Commission

Board oversight of ACE operations, together with the participation of the Division of Rate Counsel, ensures that utility demand-side management related expenditures are prudently made and that consumers benefit from funded programs. Similar comprehensive regulatory oversight is not provided over demand-side management expenditures made by other entities and therefore, there is little assurance that ACE customer are receiving the benefits they are paying for.

K. Commitment of Senior Leadership

ACE's senior leadership team is strongly committed to the provision of demand-side management programs and is prepared to dedicate the necessary resources to make the programs a success. The Company's leadership believes that providing demand-side programs to its customers will help them reduce their monthly energy costs, place downward pressure on energy commodity prices, mitigate generator market power, lessen power plant air emissions, and help lessen future constraints on the regional transmission system. Succinctly stated, the Company's leadership team believes that providing demand-side management programs to our customers is

[18] See Delaware Delmarva Power Blueprint Filing of February 6, 2007; Maryland Delmarva Power Blueprint Filing of March 21, 2007; Maryland Pepco Blueprint Filing of March 21, 2007; District of Columbia Pepco Blueprint Filing of April 4, 2007, DC Formal Case No. 1056; Maryland Delmarva Power Energy Conservation and Demand Response Plan Filing of October, 26, 2007, MD Formal Case No. 9111; and Maryland Pepco Energy Conservation and Demand Response Plan Filing of October 26, 2007, MD Formal Case No. 9111.

the "right thing to do" and that the Company must act to put programs in place to better serve our customers in New Jersey. PHI's recent commitment to the Clinton Global Initiative to boldly support energy efficiency initiatives to reduce power plant air emissions underscores this position.

L. Implementation Plans

ACE's implemented DSM programs in New Jersey will build upon the existing DSM programs currently operated by the Board's Office of Clean Energy. The Company is prepared to assume management responsibility for existing DSM programs in the near-term and to work with the Office of Clean Energy to establish an appropriate transition process and time period. ACE will work collaboratively with the Board and New Jersey electricity market stakeholders to refine, improve, and augment existing DSM programs. An important near-term step for ACE will be an evaluation of the successes of existing and recent DSM programs in southern New Jersey. ACE proposes to submit planned utility DSM program additions and improvements to the Board for its approval prior to implementing any new or revised programs. The Company is committed to implementing aggressive DSM programs within its service territory that fully use collected SBC funds to assist the State in achieving its aggressive energy savings goals. ACE will submit quarterly DSM program reports to the Board for its review.

IV. DEMAND RESPONSE PROGRAM PROPOSALS

ACE's planned installation of an AMI System supports the introduction of three new proposed ACE demand response programs: 1) a residential/small commercial remotely controllable smart thermostat program to permit the utility to reduce summer air conditioner load during peak periods, 2) a dynamic pricing program to offer all Basic Generation Service

customers[19] a default or optional critical peak pricing or critical peak rebate rates, and 3) an Internet based demand response platform to support larger-size customer participation in the PJM demand response program.

A. Direct Load Control Program

As noted earlier, ACE continues to operate its Peak Savers Club Program to reduce summer peak electricity load through the direct control of residential air conditioners, water heaters, and electric motors. This Program relies upon the use of aging one-way direct load control switches. The only method to validate the operability of this equipment is to inspect the switches through costly field inspections by qualified technicians.

On May 23, 2006, the Board issued an Order approving a settlement agreement regarding the future operation of existing New Jersey direct load control programs. In the May 2006 Order, the Board directed New Jersey utilities to work with the Board Staff and the Division of Rate Counsel to evaluate existing utility direct load control programs and to recommend the "future direction" of the programs. In consultation with the Board Staff and the Division of Rate Counsel, the utilities hired Summit Blue Consulting, LLC to work with the parties to develop recommendations regarding these direct load control programs. On June 7, 2007, in conformance with the May 2006 Order, ACE, Jersey Central Power and Light Company, and Public Service Electric & Gas Company, jointly filed a proposal, "New Jersey Direct Load Control Program Proposal" to expand their existing direct load control programs in the manner recommended by Summit Blue. That filing stated that each utility would subsequently submit its

[19] The availability of dynamic pricing for customers receiving electricity through the BGS process is expected to also support and encourage the provision of dynamic electricity supply pricing by competitive retail electricity suppliers.

Company specific plan to the Board for consideration. On August 20, 2007, ACE filed its Company specific plan, Docket No. EO06040297. ACE's filing provided proposed program details for 2008 and stated that proposed program details for the period of 2009 through 2012 would be presented in this filing. (ACE, August 20, 2007 Filing, p. 3). As of this filing, the Board has not acted on ACE's August 20th filing.

ACE hereby sets forth the specifics of its remotely controllable smart thermostat program for the period of 2008 through 2012. The Company's proposed smart thermostat program has been designed to be linked to the deployment of the AMI System as that System is deployed by ACE. In this manner, ACE will establish two-way communication with each smart thermostat. The AMI enabled communications system will enable ACE to integrate its smart thermostat program with a dynamic pricing program, provide messaging information through the thermostat display (daily consumption data, energy price data, etc.), and verify that the thermostat is operational.

In accordance with the joint New Jersey utility filing on June 7, 2007, the Company proposes to install new direct load control ("DLC") equipment for residential central air conditioning and electric heat pump systems in the ACE service territory beginning in 2008. By 2012, it is expected that 42,200 ACE customers will voluntarily[20] participate in the new program and provide peak electricity demand reduction capability of approximately 50 MW. The overall cost of this program during the 2008 through 2012 period is estimated to be $16.6 million.

[20] ACE notes that an alternative approach that would significantly increase customer participation and reduce marketing expense would be for the Board to mandate residential and small commercial customer participation in the program. ACE is willing to work with New Jersey stakeholders to examine the benefits and appropriateness of such an aggressive approach. ACE's expected market penetration rate is based upon the market projections made by Summit Blue.

ACE's new residential DLC program has been designed based upon the program recommendations contained in the recent Summit Blue Consulting Report, "New Jersey Central Air Conditioner Cycling Program Assessment," issued on June 4, 2007 and submitted to the Board as part of the June 7, 2007 joint utility filing.[21] This filing sets forth the expected program participation levels during the period of 2008 - 2012, the expected peak electricity demand impacts, proposed program budgets, and the proposed cost recovery method. The Company seeks Commission approval of ACE's new residential direct load control program and proposed cost recovery method in the near-term to permit time for vendor selection, marketing, and installation of equipment prior to the 2008 summer.

1. Program Summary

ACE proposes to install remotely controllable smart thermostats at residential customers' homes and later expand the program to small commercial customers to enable the Company to reduce peak electricity demand during periods of high summer electricity use. The program will be created in a manner that comports to the requirements of the PJM demand response wholesale market. Residential customer participation will be voluntary and incented by the one time payment of $50 and the receipt of a smart thermostat, in accordance with the recommendations of Summit Blue. (Report, p. 80). The deployed remotely controllable smart thermostats are expected to have the following minimal capabilities: 1) operate as programmable thermostats for customers, 2) be uniquely addressable by ACE, 3) have the capability of communicating in the near-term through cellular or radio communications and in the near future through the deployed AMI System, and 4) be capable of reducing central air conditioner system load through both

[21] Board Staff, the Division of Rate Counsel, and the New Jersey electric distribution utilities participated in the preparation of the Summit Blue Report. This Report contains the cost-effectiveness justification for the implementation of new utility sponsored direct air conditioning load programs. (Report, p. 60 -72).

temperature setback and cycling options. Consideration will be given to selecting equipment that can be retrofitted to communicate with future deployment of advanced metering equipment. Recruitment of residential customers and installation of equipment is expected to begin during 2008 and conclude during 2012, when 17 percent of eligible residential customers are expected to participate in the program.[22]

Smart thermostats offer significant advantages over the equipment used in ACE's existing direct load control program, the "Peak Savers Club Program." These very significant advantages include the following:

- Unique addressability by the utility for each customer participant – enabling utility individual feeder load control and utility ability to remotely modify individual customer program enrollment.
- Indoor smart thermostat location compared with outdoor direct load control switch location – significantly reducing the likelihood of the removal of direct load control equipment by HVAC contractors or customers.
- Alternative cycling control strategies that can be selected by the utility, subject to participant agreement.
- The potential ability over time to provide utility messages to customers that include such information as the current price of electricity, current cycling activities, and bill-to-date information after supporting advanced metering equipment has been installed.

[22] Expected New Jersey new DLC program participation rates were developed by Summit Blue. Mandatory participation of eligible customers would achieve a significant penetration rate.

- Programmable thermostat capability to permit customers to automatically revise cooling and heating system settings. Customers who take advantage of this capability can significantly reduce their energy use for cooling and heating. (Deployed smart thermostats will be initially programmed at the time of installation in conformance with each participant's preference.)
- The potential future ability to communicate directly with a deployed smart meter that enables a customer to automatically respond to high electricity prices during periods of high summer electricity demand.
- The future possibility of being used by New Jersey gas distribution companies to reduce residential gas heating use during periods of high winter gas demand, subject to participant heating equipment and their agreement.

Near-term communication with each smart thermostat is anticipated to be one-way via radio. Beginning in 2011, when ACE deploys its planned AMI System,[23] thermostat communication will be upgraded to two-way through the AMI System for newly installed smart thermostats and potentially for smart thermostats that have already been installed. Two-way communication capability through the AMI System offers significant benefits that include numerous customer service benefits and a variety of utility operational improvements, including the ability to verify the operational capability of direct load control equipment remotely, thereby avoiding costly site inspections. AMI supported dynamic pricing options could permit the smart

[23] ACE plans to submit a filing to the Board later this year describing its planned deployment of an Advanced Metering Infrastructure for all of its electric distribution customers.

thermostat to receive energy pricing information directly through the meter and greatly increase the quantity of customer demand response available within the ACE service territory.

2. Deployment/Participation Plan

The targeted residential customer deployment participation rate is contained in Table 1. As noted previously, recruitment of residential customers and installation of equipment is expected to begin during 2008 and conclude during 2012 when 42,200 participants (17 percent of eligible residential customers) are participating in the program. This approach is consistent with Summit Blue's recommendations. During 2008, ACE proposes to recruit 5,000 residential customer program participants that are electrically connected to a limited number of specific distribution system feeders with high summer peak electric loads. In 2009 and 2010, customers located on additional feeders will be invited to participate. Beginning in 2011, additional customer participation eligibility will be related to ACE's planned deployment plan. Eligible residential customers must have an electric central air conditioner or heat pump. Existing residential Peak Savers Club participants located on the eligible feeders will have the option of upgrading their current DLC equipment to smart thermostats, subject to all of the terms of the new program.

The Company plans to select equipment and installation vendors through a competitive vendor RFP process after receipt of Board approval to implement the program, to recruit customer participants during the first and second quarters of 2008, and to install equipment during the second and third quarters of 2008. Load research metering equipment will be installed on a statistical sampling of homes and feeders to permit the Company to verify the magnitude of resulting summer load reductions.

Table 1
ACE Residential DLC Program Deployment Schedule

Year	2008	2009	2010	2011	2012
Incremental Participants	5,000	9,300	9,300	9,300	9,300
Total Participants	5,000	14,300	23,600	32,900	42,200

The future deployment of an AMI System will provide advanced metering for all of its distribution customers. As noted previously and described in the Summit Blue Report, the availability of AMI is expected to support two-way communications to future DLC equipment, to provide detailed interval data supporting load reduction estimates, and to offer supporting electricity dynamic pricing options[24] that reflect wholesale PJM electricity market prices on either a day ahead or real time basis. ACE concurs with the Summit Blue conclusion that the coupling of direct load control equipment with AMI will be the most cost-effective approach to direct load control programs over future years.

ACE will recommend future program revisions to the Board based upon achieved customer participation levels, achieved load reductions, equipment operational capability, and the timing of planned AMI System deployment. Therefore, ACE anticipates that it will be necessary to modify the deployment schedule for the 2009 through 2012 time period displayed in Table 1 after the 2008 summer.

3. Peak Electricity Demand Impact

Summit Blue has estimated that peak electricity demand reductions will average 1.2 kW per residential program participant. Table 2 contains the peak electricity demand reduction

[24] Future pricing options might include hourly prices, critical peak prices, or critical peak rebates. Dynamic pricing options could be mandated or made optional by the Board, depending upon policy objectives.

estimates that will be achieved by ACE, if the deployment schedule contained in Table 1 is achieved. By 2012, resulting peak demand reductions are expected to exceed 50 MW. Additional demand reductions will be achieved when an AMI System is deployed and dynamic pricing options are available to residential customers.

Table 2
ACE Residential DLC Program Peak Demand Impact
(MW)

Year	2008	2009	2010	2011	2012
Incremental	6	11.2	11.2	11.2	11.2
Cumulative	6	17.2	28.3	39.5	50.6

4. Program Budget

ACE has developed a program budget based upon the deployment schedule contained in Table 1. Actual expenditures will vary based upon vendor selection and negotiations and customer participation rates. A brief description of each program element is provided below:

- Smart Programmable Thermostats – Summit Blue estimates the cost per thermostat to equal $200 for capital and $100 for installation.[25]
- Load Research Meters – 100 whole house load research meters, providing adequate sampling for a residential control group and adequate sampling of participants. (When the AMI System is deployed, future load research metering

[25] No additional communication costs are included at this time. The Company plans to rely upon existing radio communication capability. If this equipment is determined to be inadequate to provide the necessary communications to the new DLC equipment, ACE will incur additional expense for any required upgrade. The deployed thermostats will be designed to be compatible or upgradeable to communicate through the AMI System when it is deployed.

related expense will be avoided by the availability of hourly interval load data for all customers.)

- Load Research Feeders – ACE has included funds to support the monitoring of three feeders so that the feeder level impact of deployed smart stats can be monitored. The Company plans to install three phase metering on each of the monitored feeders and to expand this monitoring capability as the program is expanded.
- Marketing expenses will be incurred for direct mail recruitment materials, mailing expense, and the handling of customer inquiries. Actual customer response rates will determine direct mail related expenses.
- Incentive amounts are assumed to be $50 per participant, as recommended by Summit Blue.[26] Additional incentive amounts may be required if targeted market penetration is not achieved.
- PJM demand response market earnings may be available for sharing with program participants or to offset utility program costs through participation in the PJM demand response market. Under current BGS market rules, these benefits are passed directly to generation suppliers. The current presumption is that BGS suppliers will reduce their supply bid prices to reflect the financial value they derive from existing direct load control programs. However, ACE recommends that BGS supplier rules for new utility sponsored direct load control programs be modified to permit ACE to capture all direct PJM market incentives to offset and

[26] The Company assumes that a minimum customer "stay" provision will be required.

lessen ACE DLC program costs for customers and/or provide additional incentives to program participants. ACE recommends that the existing BGS rules be modified to permit the utility to capture these financial benefits for the benefit of customers.

- Annual program maintenance expense is estimated based upon existing annual ACE Peak Savers Club Program maintenance expense.
- Load research monitoring expense represents the additional expense to retrieve and store program related load research data.

Program budgets for the period of 2009 through 2012 will be revised after program vendors are competitively selected and vendor contract negotiations completed.

Table 3
ACE Residential DLC Program Budget
(2007 Dollars)

Category	2008	2009	2010	2011	2012	Total
Capital						
T-Stats/Installation	1,500,000	2,790,000	2,790,000	2,790,000	2,790,000	12,660,000
LR Meters	30,000	0	0	0	0	30,000
LR Feeders	195,000	195,000	195,000	195,000	195,000	975,000
Subtotal	*1,725,000*	*2,985,000*	*2,985,000*	*2,985,000*	*2,985,000*	*13,665,000*
O&M						
Marketing	46,000	32,500	32,500	32,500	32,500	147,500
Incentive	250,000	465,000	465,000	465,000	465,000	2,110,000
Maintenance	17,500	90,000	90,000	90,000	90,000	450,000
LR Monitoring	90,000	46,000	46,000	46,000	46,000	230,000
Subtotal	*403,500*	*633,500*	*633,500*	*633,500*	*633,500*	*2,937,500*
Total	**2,128,500**	**3,618,500**	**3,618,500**	**3,618,500**	**3,618,500**	**16,602,500**

5. Tariff Rider

ACE recommends and respectfully requests that specific program operational rules and participation requirements be included as a rider to the Company's residential rate tariffs. As noted earlier, the new program will be designed to operate in a manner that permits the Company to operate the program in conformance with the existing PJM demand response market. The Company's proposed rate rider will be submitted to the Board for its approval as part of a compliance filing after receipt of Board approval to implement the proposed DLC program.

6. Small Commercial Customers

Beginning in 2011, at the expected time of AMI deployment, ACE proposes to expand the smart thermostat program to eligible small commercial customers at the time they receive an AMI meter. Summit Blue has examined the available small commercial load impact studies and determined that load reductions achieved by this program are "generally twice as high as residential impacts." (Summit Blue Report, p. 32) Summit Blue did not calculate cost-benefit ratios for small commercial customers, but stated that the small commercial cost-benefit ratios will be higher. (Summit Blue Report, p. 63) If the Board approves ACE's implementation of a residential remotely controllable smart thermostat program, the Company will work with the Board, the Rate Counsel, and market stakeholders to develop a detailed plan to expand the program to small commercial customers. This plan would be submitted to the Board for its approval during 2010. Preliminary Company estimates, suggest that if a small commercial smart thermostat were implemented on an optional basis for customers, 40 MW of additional peak demand could be achieved by year-end 2012.

Table 4 contains the anticipated market penetration rate of the small commercial program and Table 5 contains the projected peak demand impacts. Market penetration estimates are

based upon an assumed customer participation rate of 17 percent, similar to that estimated by Summit Blue for the residential customers. Peak demand impacts are based upon an estimated 4.4 kW peak demand reduction per installed smart thermostat.[27]

Table 4
ACE Commercial DLC Program Deployment Schedule

Year	2008	2009	2010	2011	2012
Incremental Participants	0	0	0	4600	4600
Total Participants	0	0	0	4600	9200

Table 5
ACE Commercial DLC Program Peak Demand Impact
(MW)

Year	2008	2009	2010	2011	2012
Incremental	0	0	0	20.2	20.2
Cumulative	0	0	0	20.2	40.4

A preliminary budget for the small commercial smart thermostat program is contained in Table 6 and projects a total deployed expense of $3.8 million. [28]

[27] *See* Summit Blue report, p. 43.

[28] Additional load research metering related costs are not anticipated because of the expected availability of hourly energy use data through the deployed AMI System.

Table 6
Preliminary ACE Commercial DLC Program Budget
(2007 Dollars)

Category	2008	2009	2010	2011	2012	Total
Capital						
T-Stats/Installation	0	0	0	1,380,000	1,380,000	2,760,000
Subtotal	*0*	*0*	*0*	*1,380,000*	*1,380,000*	*2,760,000*
O&M						
Marketing				10,000	10,000	20,000
Incentive	0	0	0	460,000	460,000	920,000
Maintenance	0	0	0	45,000	45,000	90,000
Subtotal	*0*	*0*	*0*	*515,000*	*515,000*	*1,030,000*
Total	**0**	**0**	**0**	**1,895,000**	**1,895,000**	**3,790,000**

- Smart Programmable Thermostats – Summit Blue estimates the cost per residential thermostat to equal $200 for capital and $100 for installation.[29] ACE has assumed that these costs will be similar for small commercial customers.
- Marketing expenses will be incurred for direct mail recruitment materials, mailing expense, and the handling of customer inquiries. Actual customer response rates will determine direct mail related expenses. Overall marketing expense is projected to equal that of the larger residential program due to the greater diversity of the small commercial customer market segment.

[29] No additional communication costs are included at this time. The Company plans to rely upon existing radio communication capability. If this equipment is determined to be inadequate to provide the necessary communications to the new DLC equipment, ACE will incur additional expense for any required upgrade. The deployed thermostats will be designed to be compatible or upgradeable to communicate through the AMI System when it is deployed.

- Incentive amounts are assumed to be twice as high as they are for the residential program. Additional incentive amounts may be required if targeted market penetration is not achieved.
- PJM demand response market earnings may be available for sharing with program participants or to offset utility program costs through participation in the PJM demand response market
- Annual program maintenance expense is estimated based upon existing annual ACE Peak Savers Club Program maintenance expense.

B. PJM Market Earnings

As previously noted, BGS suppliers currently receive available market benefits from existing New Jersey direct load programs. The current presumption is that BGS suppliers will reduce their supply bid prices to reflect the financial value they derive from existing direct load control programs. However, ACE recommends that BGS supplier rules for new utility sponsored direct load control programs be modified to permit ACE to capture all direct PJM market incentives and that the Company be permitted to use those funds to offset and lessen ACE DLC program costs for customers. [30]

C. Dynamic Pricing Rate Structures

The deployment of an AMI System will enable ACE to expand dynamic pricing for electricity to all of its distribution customers. Under dynamic pricing, actual electricity prices are designed to reflect wholesale market energy prices at differing times of day. For example, ACE's affiliated electric distribution company, Pepco is testing three alternative forms of

[30] Any modification to BGS rules must be established well prior to any bid period to ensure suppliers are able to factor the requirements into their bid prices.

dynamic pricing for residential customers at this time based upon day ahead sub-zonal hourly Locational Marginal Prices ("LMP") PJM energy prices for the District of Columbia. These alternatives forms are: 1) hourly prices, 2) critical peak period prices, and 3) critical peak rebate prices. In the District of Columbia, participants in the test will receive price signals on the day before the prices are effective. District of Columbia low income customers are restricted to participation in the critical peak rebate program only to ensure that their energy costs will only be equal to or lower than their current level.

PHI retained the Brattle Group to estimate the likely peak load reductions achievable from a critical peak pricing structure in the ACE service territory in New Jersey. Brattle estimates that 41 MW of ACE peak demand will be reduced if critical peak pricing is optional and 20 percent of eligible customers who participate are priced under the rate. If the critical peak pricing is mandated by the Board with an option for reverting to a non-dynamic price, 148 MW of ACE peak demand will be reduced, assuming 80 percent of eligible participants participate. These estimates were developed only for ACE customers who do not currently have interval metering.[31] If dynamic prices were adopted throughout the year, additional incentives would be available to reduce or shift energy use during weekday afternoons, when energy prices are higher.

Dynamic pricing will help to encourage customers to install photovoltaic systems by enabling the payment of a higher market based price for the output of each unit based upon the higher prices of energy during the day and particularly during the many hours of daylight on summer weekdays. Dynamic pricing will help encourage the adoption of plug-in vehicles and

[31] The existing ACE interval metering threshold is one Megawatt. Additional peak demand reductions are achievable if all of ACE's New Jersey distribution customers adopt a dynamic price structure.

ensure that the majority of these vehicles are recharged during the night during periods of lower energy costs.

ACE recommends that the Board convene a working group to discuss alternative forms of dynamic pricing rate structures in the near-term that would be submitted for Board approval and implemented at the time of AMI deployment.

D. Internet Load Reduction Platform for Load Curtailments

ACE proposes to establish an Internet Platform for load curtailments to motivate non-residential customers to participate in PJM load response programs by providing a convenient method to do so. The number of eligible customers will increase significantly as AMI is deployed, providing the PJM required hourly energy data. Participants will receive energy use information, ACE Zonal PJM Locational Marginal Prices for energy, and load reduction calculations will be provided through the Internet Platform. The minimum size for customer participation will be set at 100 kW to correspond with existing PJM market rules. Customer incentives will be based upon the load reductions that are achieved. ACE proposes to share 70% of the earnings with participants and retain a 30% to offset program costs. Payment to customers participating through ACE will appear as credits on the customer's electric distribution bill. Participants will have the option at any time to exit this Program and participate in any PJM demand response program through a competitive Curtailment Service Provider, a Load Serving Entity, or directly with PJM. ACE expects to enroll 10 MW of peak demand reductions in this program after three years. Three year program costs are presented below.

Table 7
ACE Demand Response Internet Platform Budget
(2007 Dollars)

Year	Utility Administration	Marketing	Outside Services	Capital Equipment	Evaluation	Total Non-incentive Costs	Incentives	Total Program Cost
Year 1	$30,000	$40,000	$25,000	$170,000	$0	$265,000	Mkt.	$265,000
Year 2	$20,000	$20,000	$25,000	$0	$0	$65,000	Mkt.	$65,000
Year 3	$20,000	$20,000	$25,000	$0	$12,000	$77,000	Mkt.	$77,000
Total	**$70,000**	**$80,000**	**$75,000**	**$170,000**	**$12,000**	**$407,000**	**Mkt.**	**$407,000**

E. Comprehensive Energy Saving Pilot ("CESP") Program

In an effort to assist New Jersey policymakers achieve Governor Corzine's ambitious electricity reduction goals, it will be necessary to create a holistic approach to reducing electric-grid sourced electricity consumption. Therefore, ACE proposes to establish a comprehensive energy savings pilot program that will seek to maximize individual customer electric grid-sourced electricity consumption through an integrated approach consisting of the installation of energy efficiency and conservation measures, installation of renewable on-site generation, installation of demand response enabling equipment, and over time, integration of installed measures with a dynamic electricity pricing structure supported by AMI deployment. The Company proposes to implement a three to five year pilot program that will demonstrate and examine the extent to which individual residential customers and select public schools can lessen their electric footprint. ACE will develop a pilot team to select and design measures that are appropriate for each participant and to work with participants to install selected measures. ACE

proposes to initiate the first stage of the pilot program in 2008. Detailed pilot program design will be provided to the Board prior to project start.

1. Residential Component

ACE proposes to work with a new home builder designing a new subdivision in southern New Jersey to integrate as many energy efficiency, conservation, renewable generation, and demand response measures as are reasonably practicable. It is anticipated that approximately 25 new homes would participate in the program.

2. School Component

ACE proposes to work with three existing public schools to integrate these technologies into their daily operations.

3. Pilot Demonstration

ACE will work with participants to showcase each project, demonstrating achievable energy savings to developers, building operators, electricity consumers, and New Jersey policymakers.

4. Pilot Evaluation

ACE will monitor the energy consumption of each participant and conduct a detailed program evaluation at the conclusion of the five year pilot program. The Company will prepare a final evaluation report/case study detailing the findings of the pilot program. ACE will seek to partner with a local university to provide technical support for the project and educational benefits to the students.

5. Program Costs

ACE will seek to fund the installation of select measures through available DSM and renewable incentives and to work with participants to provide additional incentives, as needed.

Additional incentives could include low interest loan financing options. Participants are expected to cover a portion of installed costs for each installed measure. ACE recommends that all utility incurred pilot expense be recovered through the existing New Jersey Societal Benefit Charge ("SBC"). Preliminary utility incurred projected pilot costs are estimated to be $5 million at this time.

V. LOW INCOME PROGRAMS

ACE recognizes the continuing concern of affordable energy for low income customers. The Company continues to actively work with low income customers, county agencies, community groups, and other key stakeholders to help meet the needs of these customers. ACE holds an annual low income summit to facilitate an exchange of ideas to better serve low income electricity consumers. The Company's Vice President responsible for Business Transformation presented an overview of ACE's overall Blueprint for the Future Plan during the October 10, 2007 ACE and Delmarva Power Annual Low Income Energy Assistance Summit.

Currently, ACE and six other electric and gas utilities jointly manage New Jersey's statewide Residential Low Income Program, known as "Comfort Partners." Since the program's inception in 2001 under the New Jersey Clean Energy Program, ACE has contributed to the success of this low income program that is designed to improve energy affordability for low income households through the installation of comprehensive energy measures. The seven utilities have operated through a dynamic Working Group structure to jointly administer the Comfort Partners program. The Working Group also includes Board representation. ACE has developed a wealth of experience in designing, implementing and assisting in the evaluation of this low income program; and has contributed to all decisions made regarding its operation.

Selection of program delivery contractors and program delivery costs are shared between the participating gas and electric utilities.

To ensure that low income customers' electricity costs are not adversely affected or are reduced through AMI deployment, ACE recommends the following. First, any identified low income customer would be placed on critical peak rebate rates after AMI deployment. Under these rates, low income customers would receive a rebate for reducing their energy consumption during peak electricity demand periods and would not face any risk of a higher price from their inability to do so. Second, any additional AMI capital costs could be recovered from non-low income customers through distribution rates.[32] Third, ACE proposes to offer identified low income customers a choice of either a remotely controllable smart thermostat or an energy consumption display device[33] – both of which will communicate through the deployed meter.[34] Both devices are expected to provide customers with the ability to closely monitor daily energy consumption and energy prices so that customers can better control their monthly electricity bills rather than receive the information through the ACE bill.

In the District of Columbia, ACE's affiliated company, Pepco, is currently testing the provision of both energy consumption and estimated bill to date information via smart thermostats. ACE estimates that installed display devices will cost approximately $200 each and that 2,000 low income customers will select this option for a total deployed cost of $400,000.

[32] The state government or local governments would be responsible for identifying and coding low income residential customers.

[33] The Company will evaluate the benefits of making this device available to other customers, but anticipates if it does so, that customers would pay for the cost of any deployment.

[34] The timing of the availability of these devices for individual customers will be dependent upon the timing of smart thermostat availability or AMI meter installations.

Cost estimates for deployed smart thermostats are contained within the program budget projection. It is difficult to project the peak demand and energy savings that will result from the display devices, so these figures have not been included in the projected demand and energy savings.

VI. SOLAR PROGRAMS

ACE proposes to establish two new programs that will result in the installation of 3.5 MW of additional photovoltaic distributed generation capacity over a 5 year period in New Jersey. These installations will assist the State to achieve its aggressive solar renewable portfolio standards goal. Importantly, the installations are expected to provide additional generation capability during periods of high summer peak electricity demand while simultaneously reducing power plant air emissions. The Company respectfully requests that the Board approve the following two utility programs at this time.

A. ACE Facility Installations

Under this initiative, ACE would purchase and own photovoltaic equipment that would be installed at utility owned substations and used to serve substation load in addition to providing excess power to the electricity distribution network. Photovoltaic equipment would also be installed on company owned and leased buildings and used to serve facility load in addition to providing excess power to the electric distribution network. Photovoltaic equipment would be purchased from and installed by competitively selected vendors. Equipment costs would be recovered through base electric distribution rates. Earnings from energy sales and the New Jersey market sale of solar renewable energy credits would be used to offset distribution utility revenue requirements. ACE's preliminary engineering analysis suggests that 50 ACE facilities

are potential photovoltaic sites and could provide a total of 500 kW of additional solar capacity. The Company estimates that photovoltaic equipment could be installed at selected company sites within 24 months of Board approval.

B. **ACE Customer Installation Program**

Under this program, ACE would arrange for the installation of a net metered/interconnected photovoltaic array on any qualified ACE customer's property. In addition to the turn-key installation of systems, the Company would provide a 15 year maintenance program to ensure that the installed units continue to generate electricity during that time period. Program costs would be recovered over a 15 year period through a line item charge on participating customer's ACE distribution bills. Interest charges would be discounted and set at a fixed interest rate of two percent below market, the discount of which could be lower or higher depending on subsidies available through New Jersey's Societal Benefits Charge. Customers would own the installed photovoltaic equipment, receive available Federal and State tax credits, receive any available State provided rebates, reduce their monthly energy supply costs, receive net energy metering related payments, and receive funds through the sale of generated renewable energy credits. Competitive photovoltaic equipment vendors and installers would be certified by ACE to provide these services directly to customers. Long-term maintenance of the installed equipment would be provided through competitively selected vendors. If approved by the Board, ACE proposes to establish a distribution rate tariff for this service.

ACE's customer photovoltaic installation program addresses several existing solar market problems: 1) it provides ready customer financing; 2) it provides turn-key installation services; 3) it ensures that systems are properly installed; and 4) it ensures that installed systems

are properly maintained. The Company estimates that 1,000 photovoltaic systems would be installed under this program, increasing state photovoltaic generating capacity by 3.5 MW within a five year period. Actual achieved customer installations are expected to vary based upon the changing cost of systems, the availability and magnitude of State and Federal incentives, and actual loan interest rates.

Utility incurred program costs will include utility administration expense, marketing costs, evaluation costs, and the cost of buying down interest on the offered loans. Total program costs over a five year period are expected to be approximately $2 million, with the majority of the incurred cost representing the interest buy-down expense.

To assist customers with the installation of solar systems, the Company has developed a Green Power Connection portal located on its Internet Website. This site provides customers with detailed information regarding the installation of renewable energy-generating systems, such as solar panels and wind mills, on their property and to ensure they are safe and compatible with our electrical systems. The Website provides information to assist the customer to determine available State and Federal incentives. If the Commission approves the ACE customer installation program, this website will serve as another method of providing important program information to customers.

VII. COST RECOVERY

ACE's Blueprint for the Future is an aggressive plan designed to provide real and substantial benefits to the Company’s New Jersey customers. To successfully implement the plan and achieve its many benefits ACE will be required to make significant capital and financial commitments. Such commitments require companies, regulators and others to implement

innovative, yet appropriate, regulatory and cost recovery approaches. Some of those innovations have been endorsed and encouraged by independent groups such as the National Action Plan for Energy Efficiency Coalition. Some have been adopted in other jurisdictions served by ACE's affiliated utilities, Pepco and Delmarva Power. ACE urges the Board to give serious and open-minded consideration to the following proposals designed to facilitate the many benefits to ACE's customers made possible by the Blueprint.

A. Distribution Rate Decoupling

ACE recommends that the Board establish a working group to examine alternative distribution utility rate methods in an effort to remove distribution utility financial disincentives related to the promotion of DSM and renewable programs, thereby better aligning the financial interests of the Company and its shareholders with the interests of New Jersey consumers and state policy makers. PHI's Maryland distribution utilities, Pepco and Delmarva Power, recently received the approval of the Maryland Public Service Commission for its Bill Stabilization Adjustment ("BSA"), which decouples distribution rates from energy throughput. (Maryland Commission Order No. 81517, Formal Case No. 9092, issued on July 19, 2007 and Maryland Commission Order No. 81518, Formal Case No. 9093, issued on July 19, 2007.) Pepco has proposed a similar BSA mechanism in its District of Columbia electric base distribution rate case. (District of Columbia Formal Case No. 1053). Delmarva Power has recommended a similar BSA mechanism in Delaware. (Delaware PSC Docket No. 05-304). Under the BSA proposals in other jurisdictions, individual customer distribution charges are related to consumption, but overall distribution charges are adjusted so that utility earnings remain constant regardless of total throughput. Distribution rate decoupling is supported by the Clinton Global

Initiative, the Natural Resources Defense Council, the Mid-Atlantic Distributed Resources Initiative, and the National Action Plan for Energy Efficiency Coalition.

A critical component in the development of demand-side management programs that help customers meet the challenges of the current high costs of energy, without conflicting with the interests of utility shareholders, is the establishment of a mechanism such as the BSA, which decouples the revenue derived from the provision of electric delivery service with the level of electricity consumption. The BSA is a sound decoupling mechanism that should stabilize distribution revenue fluctuations resulting from unanticipated changes in usage, and ensure that the Company only recovers the Board approved level of distribution costs. In essence, it should provide for decreases in delivery rates if actual revenues per customer are above the Board approved level, and it provides for increases in delivery rates if actual revenues per customer are below the Board approved level.

The decoupling mechanism creates an adjustment to customers' bills that is designed to reflect differences between Board-approved delivery revenue levels and actual delivery revenues. This is good for the customer because the Company's customers will pay only the amount determined by the Board as required to provide safe and reliable service. This is a benefit to the Company because the Company can maintain a stable revenue stream year-to-year. The mechanism should provide the Company with a stream of revenues consistent with the costs of providing safe and reliable service. The Company's costs for providing service are generally fixed, regardless of the volume of sales that the Company delivers to its customers. This proposal provides for a matching of revenues in quarterly periods, with the corresponding amounts that the Board has approved as adequate compensation for providing service. Thus, both customers and the Company are better off under the mechanism. The mechanism also

protects the Company from ongoing attrition due to the reduced usage by customers. This will help avoid frequent rate cases and the attendant costs.

The decoupling mechanism will promote demand-side management measures. In this filing, the Company is proposing utility implementation of energy efficiency, conservation, and demand response programs for all customers, as part of an overall response to the recent increases in supply prices, concerns over the adequacy of supply, and increasing environmental concerns related to power plant air emissions. Demand-side management programs reduce sales and, consequently, revenues and fixed cost recovery decline. This creates a disincentive for the utility to consider demand-side resources. The existing rate structure provides strong financial incentives for utilities to sell as much electricity as possible in order to maximize profit. The decoupling mechanism removes the incentive for the Company to maximize its sales in order to benefit shareholders. Without a decoupling mechanism, the Company's shareholders benefit with each additional kWh delivered. With a decoupling mechanism, the link between increased sales and profits is broken. The Company's interest in helping its customers use energy wisely and efficiently no longer seems at odds with the interests of shareholders. By decoupling the Company's revenues from changes in the volume of electricity delivered to customers, decoupling aligns the Company's interests with the interests of the customer.

The issues described above are not unique to ACE; many other utilities across the country, both gas and electric, are in a similar position, and have developed a variety of approaches to address the over-recovery and under-recovery issue and the disincentive towards demand-side resources. The issue of the mis-match between the structure of costs and rates has long been faced by gas distribution utilities, since gas unbundling preceded electric unbundling.

Hence, many gas distribution utilities have implemented these mechanisms. Broadly speaking, the approaches can be categorized as follows:

- Weather Normalization Clauses – riders that correct for weather related changes in usage;
- Revenue Decoupling Tariffs – riders that correct for any differences in the usage levels built into base rates;
- Return Stabilization Mechanisms – expedited rate proceedings or riders that correct for both differences in usage and differences in cost;
- Fixed Variable Rate Design – changes in base rates that shift all fixed costs into fixed rate elements; and
- Increased Customer Charge – shift additional fixed costs in the customer charge.

In principle, rate structure changes that collect all of the fixed costs in a fixed charge would provide for the best alignment of costs and rates. That approach would, however, significantly increase rates for small usage customers. Stabilizing the return also addresses the problem, but removes the incentive for a utility to manage costs. While different approaches to address this issue have strengths and weaknesses, the BSA mechanism is particularly appropriate. The BSA approach represents an appropriate balance between the objectives of cost alignment, gradualism and efficiency.

It is important to keep in mind that the BSA mechanism would only be applicable to the distribution portion of the customer's bill; currently, the distribution portion accounts for only 18% of the average residential customer bill. The supply portion of the bill, which accounts for almost 60%, would not be subject to the mechanism. This has several important ramifications. First, customers still have a strong incentive to use energy efficiently, based on the savings

associated with the supply side of the bill. Second, by being applicable to only the distribution portion of the bill, the mechanism should create minimal fluctuation in the total amount of a customer's bill.

When implemented, a well designed distribution rate decoupling mechanism, such as the BSA, should have the following impact: 1) customer bills will be more stable; 2) revenues will be better aligned with costs; 3) disincentives toward energy efficiency will be reduced; and, 4) the Company will be better able to recover its fixed costs.

In summary, a well designed decoupling mechanism should address the following issues and include the following features:

- Provide a stable means for the recovery of essentially fixed costs, while maintaining an overall rate structure which is dependent on volumetric components.
- Position the Company in an economic and financial position to be a strong advocate in the promotion of energy efficiency and conservation initiatives.
- Provide customers with reasonably stable bills over the course of a year. The mechanism should appropriately consider each service classification on an individual basis. Additionally, an effort should be made to identify and exclude rate classes which, due to size or usage characteristics, may not benefit from the mechanism.

ACE is prepared to present its specific recommendations regarding appropriate electric utility decoupling mechanisms to New Jersey policy makers within a Board established distribution utility decoupling working group in the near-term.

B. AMI Adjustment Mechanism

The deployment of AMI technology will 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. To encourage the implementation of this new technology, the Board should adopt ratemaking policies that remove a utility's disincentive toward demand-side resources that reduce throughput. The Board should provide for timely cost recovery of prudently incurred AMI expenditures in order to provide cash flow to help finance new AMI deployment.[35]

ACE requests that a base rate electric adjustment mechanism ("AMI Adjustment Mechanism") be adopted to recover the capital costs associated with the installation of the AMI on a timely basis between base distribution rate cases. Specifically, the AMI Adjustment Mechanism would be set annually on the basis of total project expenditures during the previous 12 month period. ACE proposes to net utility cost savings[36] resulting from AMI deployment from the cost recovery sought each year. ACE requests that the cost of retiring all existing meters be recovered through the AMI Adjustment Mechanism over a three to five year period to recover stranded costs. ACE's rate of return on any unamortized expenditures would equal the Company's approved rate of return. The amount of the AMI Adjustment Mechanism would vary by customer class, reflecting any AMI or smart thermostat cost differences. These costs will be offset by energy cost reductions, utility cost reductions, and service quality improvements. The

[35] ERE-1 *Resolution to Remove Regulatory Barriers to the Broad Implementation of Advanced Metering Infrastructure,* Adopted by NARUC Board of Directors on February 21, 2007, NARUC Winter Meetings, Washington, DC.

[36] Expected utility cost savings are detailed in **Exhibit B** – the ACE AMI business case.

amount of the AMI surcharge could be reset to zero at the conclusion of each base electric distribution rate case when electric base distribution rates are reset.

An alternative utility cost recovery approach could be obtained through electric base rate case filings; however, this mechanism has the significant disadvantage of delaying the timing of ACE's cost recovery for a significant capital cost project, and having a potentially adverse impact upon the Company's cost of capital.

C. Direct Load Control Programs

ACE proposes to recover program costs through the existing System Control Charge ("SCC") across all electric distribution customers. The Company proposes that program capital costs be recovered over a fifteen year period[37] to avoid significant customer bill impacts and that interest expense on unrecovered capital costs equal ACE's allowed rate of return. A fifteen year recovery period is recommended due to the increasing obsolescence rate of one-way direct load control technology. ACE proposes to annually adjust its SCC rates for this program effective January 1st of each year through an annual cost recovery filing. The Company recommends program cost recovery through the SCC beginning after Board approval of ACE's proposed program. If the Company's cost recovery proposal is accepted, the SCC would be adjusted from its current amount of $0.000066 to $0.000085 beginning in early 2008, representing a residential customer bill increase of approximately $0.08 per month. ACE is willing to discuss alternative cost recovery mechanisms with the Board Staff. In PHI's other jurisdictions, PHI has

[37] ACE recommended that program costs be expensed over a one year period in its August 20, 2007 New Jersey Direct Load Control Program Proposal Filing, Docket No. EO06040297. This recovery period was recommended at that time to facilitate near-term Board approval of that proposal; however the Board has not established a schedule for considering the proposal as of this time. Therefore, it appears that additional time available to consider a longer recovery period for these utility investments that will further lessen the monthly distribution bill impact on ACE's customers.

recommended that cost recovery of DLC equipment be recovered through an AMI surcharge because of the unavailability of a SCC equivalent mechanism in those jurisdictions.

D. Large Customer Internet Platform, Low Income Programs, Solar Programs, Comprehensive Energy Saving Pilot Program and New Utility Provided DSM Programs

ACE proposes to recover its costs related to establishing a large customer Internet-based platform, additional low income conservation programs, and its customer solar program through New Jersey's existing SBC. The Company proposes to recover program costs through an annual filing detailing program costs to the Board. It would be appropriate to recover program costs over a five year period with interest on unrecovered costs set at the utility allowed rate of return. This longer recovery period would ensure that costs to consumers are more closely related to the stream of resulting financial benefits. The existing Board practice of expensing DSM related costs significantly lessens the quantity of funds available to support these initiatives.

VIII. MID-ATLANTIC POWER PATHWAY TRANSMISSION PROJECT

The majority of ACE's Blueprint plan is focused on the implementation of demand-side programs or distributed generation programs. However, a comprehensive plan to meet the energy requirements of southern New Jersey must include the development of adequate transmission supply. Participation rates and the success of voluntary demand-side management and distributed generation initiatives are uncertain. Even with all of these initiatives, the transmission system must be enhanced to support and complement these efforts. Therefore, additional transmission supply resources must be built to ensure that the future electricity demand in southern New Jersey is served reliably to sustain future economic growth.

Another need for transmission enhancements is to move the energy around the state and respond to changing generation patterns. As generation is retired to comply with environmental regulations, the transmission system must be capable to deliver the energy from other facilities without any restrictions or limitation. In addition, a robust transmission system will support the growth of renewable energy sources – providing the ability to transmit power generated by dispersed renewable generation while reducing the cost for interconnection of these facilities to the transmission system.

PHI and Atlantic City Electric are meeting this need by constructing a 230 mile 500kV transmission line from Southern New Jersey across Delaware and Maryland and interconnecting into the existing transmission system in Virginia. This line has been termed the Mid Atlantic Power Pathway, MAPP. MAPP will provide increased energy import capability from several existing and proposed nuclear power plants and support the expansion of the existing nuclear plants in southern New Jersey. In addition, MAPP will increase the reliability of the transmission system within the State, reduce transmission congestion cost and provide a path for future renewable energy generation facilities. PHI's proposed MAPP transmission project was approved by the PJM Board of Managers on October 17, 2007 for inclusion in the PJM Regional Transmission Expansion Plan.

IX. CONCLUSION

ACE welcomes the opportunity to work with the Board, the Division of Rate Counsel and other New Jersey electricity market stakeholders to implement each of the elements of the Blueprint for the Future. Full and prompt implementation of ACE's Blueprint Plan will help the Board and New Jersey policymakers achieve many of the energy goals that are expected to be

reflected in the New Jersey Energy Master Plan. Additionally, ACE customers will benefit through improved distribution service, greater ability to control energy costs, reduced power plant air emissions, and sustained reliability of electricity supply.