

BGE Demand Side Management Programs

April 30, 2007 NAPEE Mid-Atlantic Regional Meeting

Presented by: Ruth C. Kiselewich



A Constellation Energy Company

Overview of Baltimore Gas & Electric Company - BGE

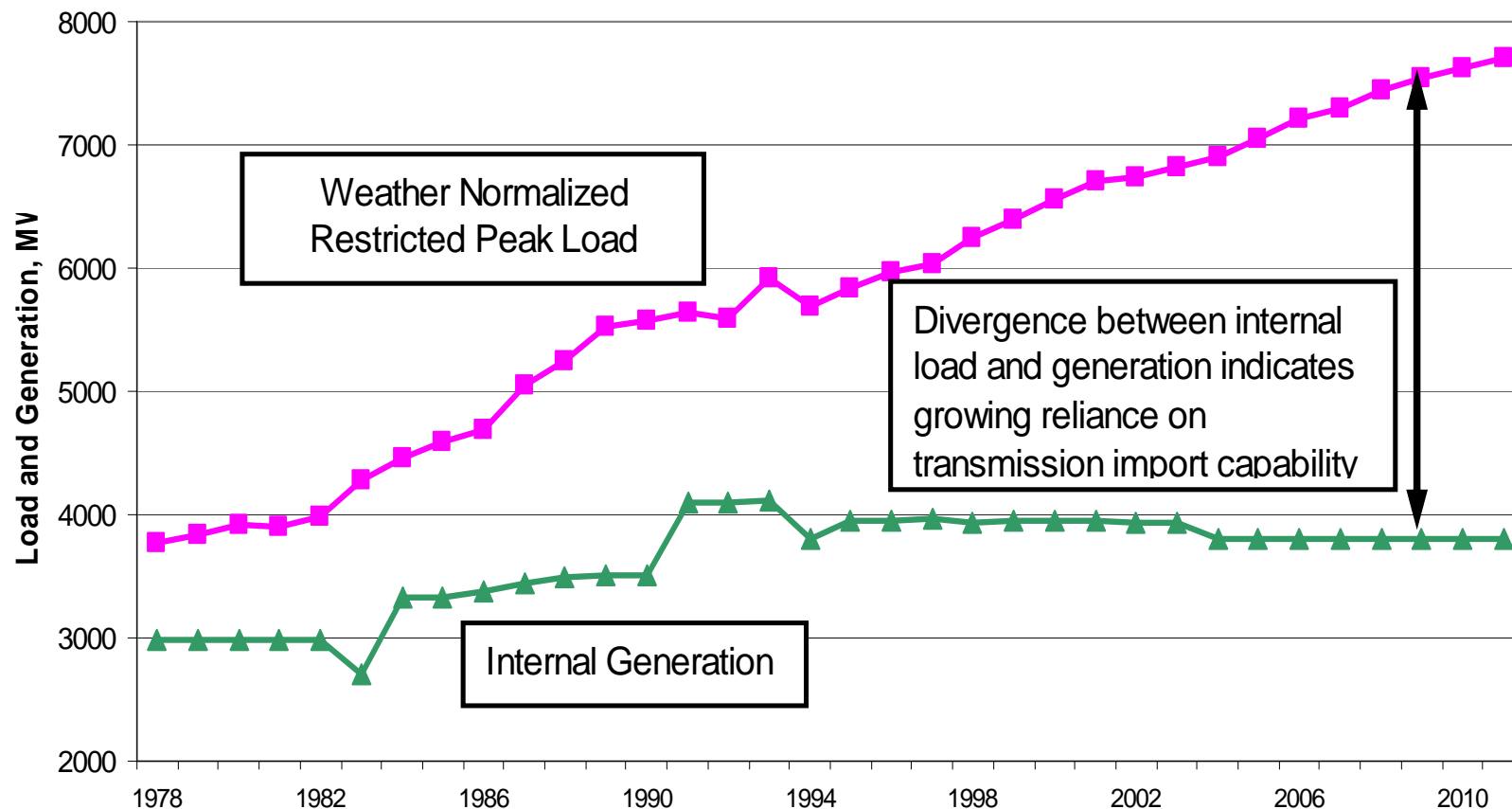
- Part of Constellation Energy
 - A Fortune 200 competitive energy company based in Baltimore.
 - The nation's leading supplier of competitive electricity to large commercial and industrial customers.
 - \$19.3 billion in 2006 revenues
 - \$21.8 billion in assets as of 12/31/06
- BGE
 - A regulated distributor of electricity and natural gas in Baltimore City and all or part of 10 counties in Central Maryland
 - More than 1.2 million electric customers and 640,000 gas customers
 - Total distribution volumes: 32.1 million MWH and 115 million DTH

BGE's Smart Energy Savers ProgramSM Announced in January To Help BGE Customers With Energy Costs

- BGE announced and filed with the Maryland Commission BGE's Smart Energy Savers ProgramTM on January 23, 2007
- New programs being developed include:
 - Demand Response Infrastructure (DRI)
 - Energy Efficiency/Conservation
 - Advanced Metering Infrastructure (AMI)
- For more than 190 years, BGE has been committed to customer service
 - BGE is constantly looking for new, innovative opportunities to improve that service, as well as providing options to help our customers make appropriate energy decisions

Other Reasons for Why We Are Implementing DSM: BGE Relies Heavily on Imported Supply

BGE Summer Peak Load vs. Internal Generation Capacity

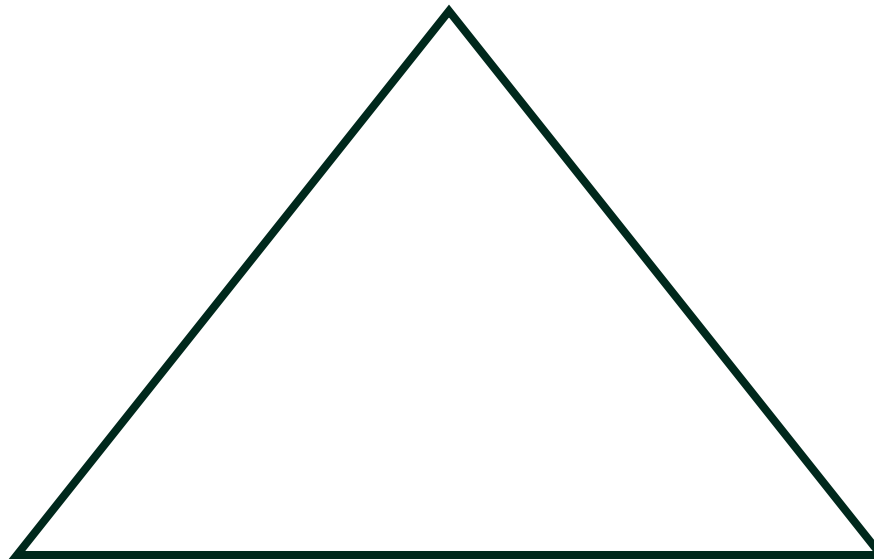


Additional Reasons BGE Is Implementing DSM

- Transition to higher, market-based generation costs has renewed the interest in conservation and energy efficiency
 - Enable customers to use energy wisely and efficiently
 - Technology improvements now available that achieve even greater savings
 - Minimize impacts of higher energy costs on customers' bills
 - Adopt “best practices” for achieving energy savings
- Customers **expect** BGE to promote efficiency - BGE viewed as the “energy expert”
- Positive program benefit/cost ratios from higher generation costs
- North American Electric Reliability Council (NERC) Reliability Assessment Report identifies residential and commercial demand-side measures as a means to insure adequacy of North America’s electric system
- Demand-Side Management (DSM) programs regaining momentum
 - \$1.9 billion spent in 2005 (*Source: EIA Form EIA-861, Annual Electric Power Industry Report*) - 23% increase over 2004

Part of a Balanced Approach for Energy Supply

Reduce Consumption



Build Transmission

Obtain Generation Supply

Demand Response Infrastructure (DRI) Description

Technology deployment to achieve customer benefits with the reduction of electric demand during periods of tight supply

- Technology:
 1. Programmable Communicating Thermostat
 2. Advanced Air Conditioning Control Switch

Either technology will allow BGE to regulate the operation of customer's central air conditioning during periods of very high electricity use

- Target Market : Residential
- Phased Deployment Schedule:

Phase I – Pilot program during summer 2007 (PSC approved pilot 2/21)

Phase II – Full deployment from late 2007 to mid 2011

Energy Efficiency/Conservation Description

- As part of January 23, 2007 Smart Energy Savers Program™ filing, BGE proposed a program where customers will receive rebates, incentives for purchasing *qualifying* Energy Star® or other high-efficiency products
- BGE will expand the current low income, gas Comprehensive Home Improvement Program (CHIP) allowing more gas and electric senior citizens and low-income qualifying customers to obtain weatherization services
- Home builders will be encouraged to construct homes that meet Energy Star® standards, so customers purchasing these homes can use less energy and lower utility bills
- High level program goals include:
 - During the first 10 years of the program, electric consumption will be about 10% lower and total gas consumption will be about 8% lower than they otherwise would have been
 - Over a twenty year time horizon, the electric programs will reduce greenhouse gas emissions by an average of 2.0 billion pounds of CO2 per year
 - o Equates to removing 230,000 cars from the road in each year

Energy Efficiency/Conservation Proposed Program Measures

- Energy Star® products
 - Clothes washers, dishwashers, refrigerators, freezers, room air conditioners, home electronics, lighting, and windows
 - Focus on promotion, sales training, and instant-rebate pricing
- Residential heating and cooling
 - Focus on installed performance for heat pumps, CACs, gas furnaces
 - Use EPA's new Energy Star installation criteria, including sizing
 - Work closely with contractors to promote the program and train crews for installation quality
 - Leverage and coordinate with federal credits for furnaces, ACs, HPs, and water heaters
 - Modest rebates to offset a portion of the incremental cost of higher efficiency equipment including for window air conditioners

Energy Efficiency/Conservation Proposed Program Measures (continued)

- Energy Star® Home Performance Platforms
 - Focus on whole-house, performance-based projects
 - Use the Home Performance with Energy Star® platform
 - Leverage federal tax credits for insulation and windows
 - Low-Income – a critical customer segment experiencing high energy prices
 - o Resume the electric low-income CHIP
 - o Complement EUSP with HVAC performance
 - Home Energy Audits

Energy Efficiency/Conservation Proposed Program Measures (continued)

- Energy Star® New Homes
 - Work with home builders/associations
 - Focus on technical assistance, training, co-op advertising
 - Pay for energy ratings
 - Limit direct capital cost rebates
 - Coordinate with federal home builder tax credits
- Expanded information services on the web and other media
- Future: Small commercial facility and equipment upgrades???

Timeline for Energy Efficiency/Conservation

- Implementation is dependent on Commission and collaborative process
 - Maryland PSC DSM Working Group met earlier in year but on hold due to other priorities
 - Pepco and Delmarva on March 21, 2007 filed to establish DSM and AMI surcharges, to establish a DSM Collaborative and an AMI Advisory Group
- BGE would like to implement some quick hit programs this summer since our customers will see another increase in electric rates as part of moving to market rates such as
 - CFL program
 - Window air conditioner replacement program
 - Energy Star[®] appliances such as refrigerators, washer, dryers

Final Component of Smart Energy Savers Program™: Advanced Meter Infrastructure (AMI)

- AMI, also known as “smart meters”, uses state-of-the art technology to read gas and electric meters remotely
 - AMI provides two-way communication between BGE and customer’s meter
- Uses of AMI
 - Power outages would be electronically detected, eliminating the need for customers to call to report outages
 - Allows a customer to review the previous day’s energy use online
 - AMI permits utilities to offer programs such as an expanded time-of-use program that offers lower electric rates during off-peak hours
 - Permits reading and controlling meters at any time so that BGE can rapidly support customers’ requests such as:
 - A change in suppliers
 - A change to a different rate
 - To initiate service or request a final bill

AMI Pilot and Rollout

- AMI pilot
 - Approved by Maryland Commission on April 13, 2007
 - About 9,000 meters deployed to 5,000 customers in first half of 2008
 - Purpose: (1) test field technology and limited system integration, assess deployment processes, evaluate vendor performance, (2) confirm resource requirements, (3) validate business case
 - Critical Peak Pricing pilot will be component of AMI pilot
- AMI rollout, if pilot successful, to be over 3 year period starting in late 2008 - 2011

BGE's January 23 Filing Proposed Cost Recovery Mechanisms

- Electric and Gas DSM (Conservation and DRI) Surcharges
 - Timely cost recovery is an integral component of the DSM Programs
 - Prospective rates with annual true-up
 - Surcharge to be included in the volumetric delivery rate – not a separate line item on the customer's bill
 - Earnings based on 8.49% ROR applied to expenditure balance
- Energy Efficiency/Conservation Programs
 - Electric Revenue Decoupling - BGE made whole for any distribution revenue loss between rate cases attributable to Company-sponsored energy efficiency/conservations programs
 - Gas and Electric Program Incentives - based on net savings from programs
 - Program costs amortized over 5 years – including program administration, rebates, monitoring and evaluation, etc
- Demand Response Infrastructure
 - Program Costs amortized over 10-15 years – including procurement and installation of devices and other capital expenditures, program administration, credits, monitoring and evaluation, etc

National Action Plan for Energy Efficiency (NAPEE)

- BGE is a membership of the NAPEE Leadership Group
- BGE fully supports NAPEE's recommendations
- BGE believes its proposed programs and regulatory treatment proposals are consistent with NAPEE's recommendations
- BGE looks forward to modifying its DSM program specifics based on best practices elsewhere in the country, pilot results where applicable, and based on critical input from its stakeholders
- BGE strongly believes demand side management programs are critical for its customers and BGE's continuing success

Questions?