

The 2008 National Symposium on Market Transformation

Making Energy Efficiency Profitable for Utilities

“The PHI Experience – Blueprint for the Future”

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PHI Vision

Our Vision:

We see a future where success in our industry will be measured by companies satisfying four customer expectations:

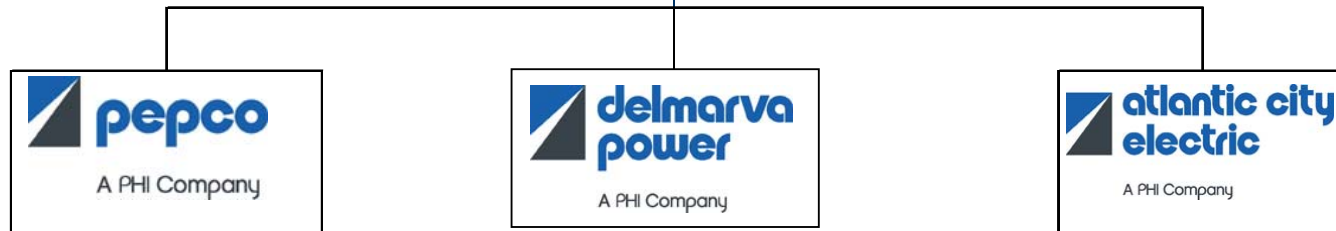
- Helping to manage energy bills*
- Having responsive customer service*
- Delivering power reliably*
- Being environmentally friendly*

Making the Vision Reality “Blueprint for the Future”

- *Implemented a Business Transformation initiative to align corporate structure to deliver on the “Blueprint for the Future.”*
- *Filed in four state jurisdiction for implementation of Advanced Meter Infrastructure (AMI), Demand Response (DR) and Energy Efficiency (EE) Programs.*
- *Filed for Decoupling in all four state jurisdictions.*

Utility Business Overview

Power Delivery



Electric

Electric

Gas

Electric

	pepco A PHI Company	delmarva power A PHI Company	atlantic city electric A PHI Company
Customers	▶ 753,000	▶ 513,000	▶ 121,000
GWh	▶ 26,488	▶ 13,477	▶ N/A
Mcf (000's)	▶ N/A	▶ N/A	▶ 18,300
Service Area	▶ 640 Square Miles	▶ 6,000 Square Miles	▶ 275 Square Miles
	▶ District of Columbia, major portions of Prince George's and Montgomery Counties	▶ Delmarva Peninsula	▶ Northern Delaware
			▶ Southern New Jersey
Population	▶ 2.1 million	▶ 1.3 million	▶ .5 million
			▶ 1.0 million

Note: Based on 2006 Annual Data.

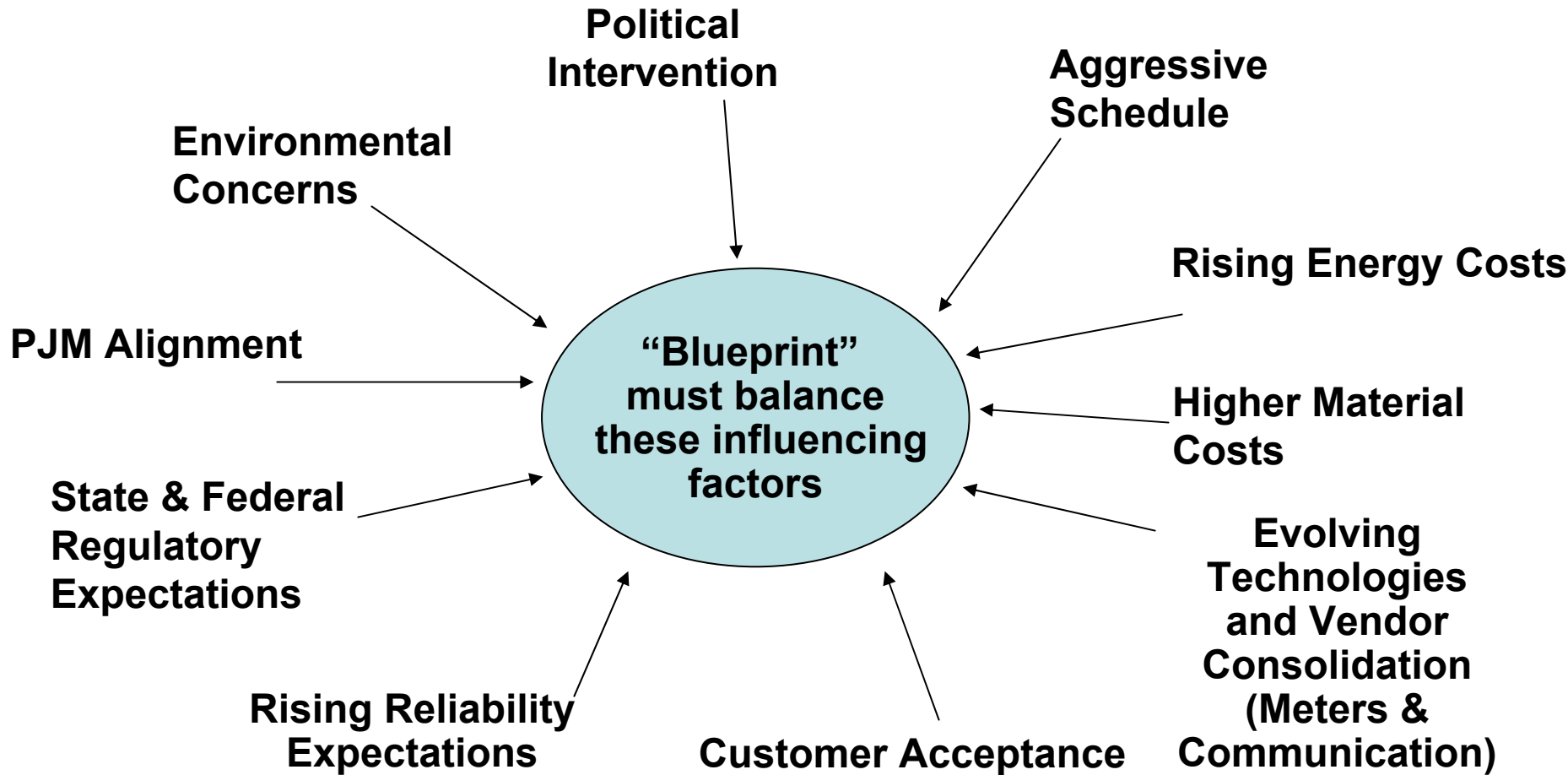
The Power of One



- ***Greater customer satisfaction***
- ***Improved reliability***
- ***Lower costs***
- ***Greater shareholder return***
- ***Aligned employees focused on the customer***
- ***Helping the environment***

Why Change Now?

Change Drivers:



Why Business Transformation?

Today  **the journey**  *The Future*

- | | | |
|--|---|--|
| Customer meters manually read | → | Meters have two-way communication |
| Dispatch to premise for voltage complaints | → | Read voltage remotely at customer premise |
| Customers call to report outages | → | We know when customers are out |
| We send bills when we want | → | Customer gets bills when they want |
| Dispatch switching manually | → | System reconfigures to minimize outages |
| Multiple crew hand offs to build or affect repairs / restoration | → | Build it / fix it with the same crew |
| Different systems used to manage work and customers | → | Technology, work processes, and policies leveraged for maximum efficiency and similar, positive customer experiences |
| Utility earnings based upon usage | → | Utility earnings decoupled from usage |

The PHI Plan – Blueprint for the Future

- Financial Incentives for Energy Efficiency and Demand Response
 - rebates, bill credits or other financial incentives
- Advanced Metering System, Distribution Automation and Other Technologies to Improve Reliability and Empower Customers
- Environmental Programs
 - rate options for plug-in electric vehicles and small-scale generators
- Reducing Our Carbon Footprint
 - transforming our 2,000 vehicle fleet and converting to biodiesel fuel, hybrids and other clean technologies

Technology and PHI Direction

Smart Grid Characteristics

- ***Interactive*** with consumers and markets
- ***Adaptive*** to correct problems before they become emergencies
- ***Optimized*** to make best use of resources and equipment
- ***Predictive***, rather than reactive
- ***Accommodates*** a variety of generation options
- ***Integrated*** to merge all critical information
- ***More Secure***

Change Drivers: AMI Benefits

- Eliminate Manual Meter Reading
 - Improved Accuracy
 - Eliminate Malfunctioning Meters
 - Eliminate Need for Re-reads
 - Eliminate Need for Estimated Reads
 - Tamper Protection
- Permit More Frequent Reading
 - Daily, Hourly, 15-Minute Increments
- Enhanced Customer Service Capabilities
 - Flexible Billing and Rate Structures
 - Improved Response to Inquiries
 - Improved Move-In / Move-Out Information
 - Remote Turn-on and Turn-off Capability
 - Increased Flexibility for Rental Properties
- Demand Response and Distributed Generation
- Reliability: Outage Detection, Safety, Monitoring

Creating a Demand-Responsive Market

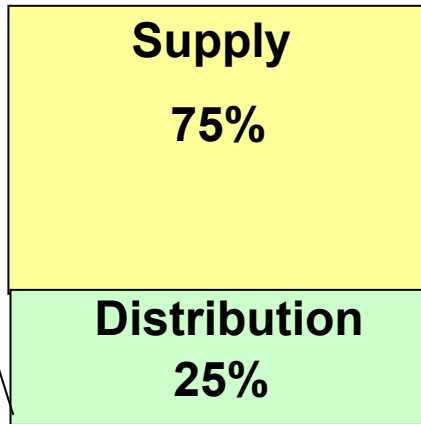
- Technology empowers customers to take control of energy costs with tools that let all customers manage electricity use and respond to pricing signals
- Revised rates, subject to regulatory approval, take away link between sales and revenue (decoupling) and remove disincentive for utilities to offer conservation programs

Potential Customer Impacts

Costs and Benefits flow to customers through both the Delivery and Energy components of their bill and will happen over time....

- Eliminate Manual Meter reading
- Enhanced Customer Service
- Power Quality
- Remote Connect/Disconnect
- Tamper Detection
- Operating Efficiencies

Approximate Residential Customer Bill Breakdown



- Energy Conservation
- Flexible Rate Structures
- Demand Response
- Plug-in Hybrids
- Distributed Generation
- Future Carbon Effects

Incidental Benefits

- Smart Grid Benefits
- Smart Appliances
- Home Automation

Cost Recovery

- **Bill Stabilization Adjustment**

- Distribution rate decoupling mechanism removes utility financial disincentive to offer/support DSM
- Only applicable to distribution portion of bill
- Eliminates revenue fluctuations due to weather and changes in customer usage patterns
- Customer bills will be more stable
- Utility revenue will be more predictable and better aligned with costs
- Utility will be better able to recover fixed costs

Cost Recovery (continued)

- **DSM Surcharge**
 - Non-Bypassable Distribution Surcharge
 - Rate Class Differentiated
 - 5 Year Rolling Recovery of DSM Costs
 - Interest on Unrecovered Costs at Utility Allowed Rate of Return

Cost Recovery (continued)

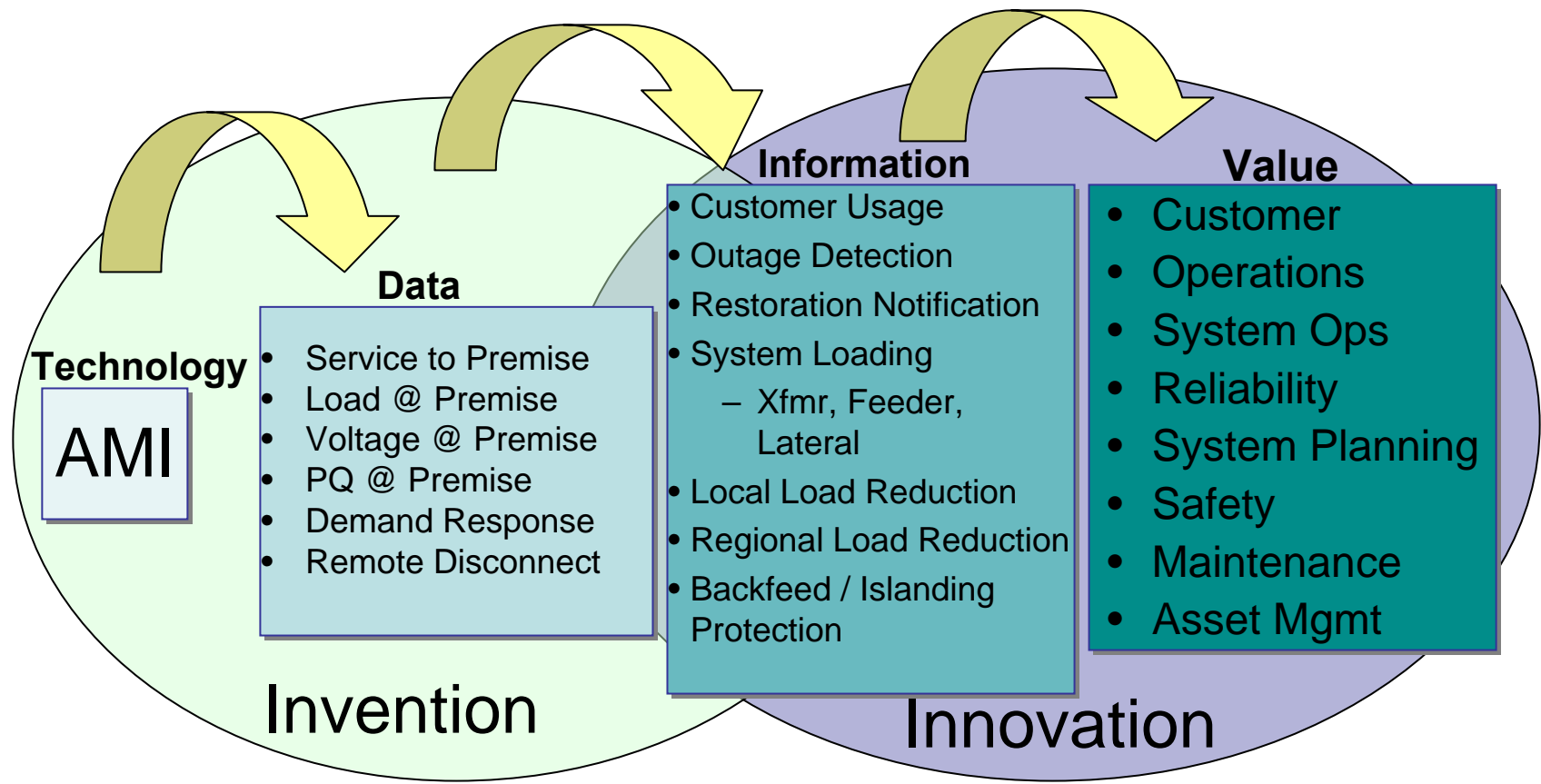
- **AMI Adjustment Mechanism**

- Timely recovery of AMI capital costs over 15 year period to reflect expected equipment life
- Accelerated cost recovery of existing meters over 3 to 5 year period
- Recovery of demand response smart thermostat capital cost over 15 year period
- Interest on unrecovered capital costs at utility allowed rate of return
- Utility monetized AMI operational savings to be netted from AMI Adjustment Mechanism
- AMI Adjustment Mechanism set annually based on previous 12 month actual expenditures
- Similar AMI cost recovery mechanisms approved by other jurisdictions

Regulatory and Customer Challenges

- Regulatory
 - Greater results versus customer acceptance
 - Consistent rate and program design (to extent possible)
 - Cost recovery
 - Equipment amortization/accelerated retirement
 - Decoupling
- Customers
 - Consider range of customer interaction
 - Communication and education
 - Acceptance and adoption

Invention vs. Innovation



For PHI to achieve the full benefits of this investment, it will require innovation to be provided from almost every PHI employee.

The Future is Now

- Smart Grid is Coming
- Technology is here and continues to evolve
- The way in which we execute our work must evolve to take advantage of the new technological capabilities
- Resources need to be leveraged across the organization.
- Employees must work together as one organization to fully realize the value to customers and shareholders