

## **A Smart Grid Future**

### February 12, 2010

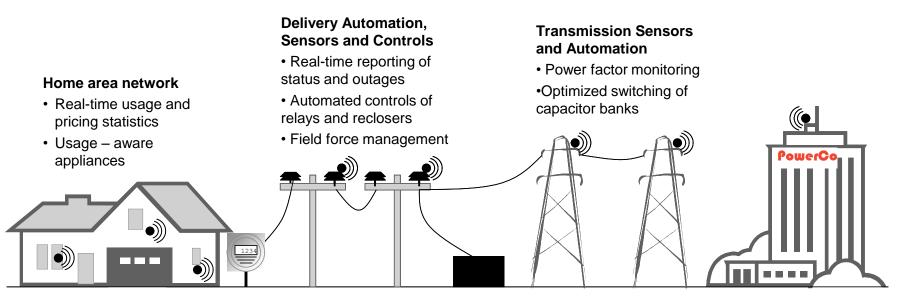
### What is Smart Grid – The Customer Perspective

Enhancing customer value with <u>cost-effective</u> technological advancements that <u>empower customers</u> in ways that lead to:

- More efficient utilization of electricity
- Reductions in future demand growth
- Improvements in the environment
- A more reliable and secure system
  Opportunistic
  Quality-focused



### **Smart Grid – Future Model ComEd's Perspective**



### Smart Meter

- · Report usage by time
- Report outages in real-time
- Remote disconnect
- HAN gateway

### **Distributed Generation**

- Micro-generation
- Solar
- Wind
- Net metering

### Data collection, processing and back office

3

- Automated billing
- Disconnection of unoccupied / unpaid
- Daily usage stats
- Time of Use pricing

# Smart Grid will deliver enhanced reliability and create new opportunity for customer control of energy usage and spend



# **Present Industry Challenges**

- ✓ Changes in Technology Smart Grid
  - Distribution Automation (DA)
  - Automated Metering Information (AMI)
  - Distributed Generation (DG)
  - Plug-in-Hybrid Vehicles (PHEV)
- ✓ Environmental Focus
  - Carbon Reduction
  - Sustainable Energy
- ✓ Stakeholder Expectations
  - Customers Reliability, Transactional
  - Regulatory Rate Recovery
  - Shareholders ROE
- ✓ Aging Infrastructure
- ✓ Economic Downturn
  - Impact on revenues







# **ComEd – A Future Perspective**

- The distribution grid will become more intelligent;
  - The electric distribution grid will be selfdiagnosing and self-healing
  - The emerging technologies will impact all aspects of the distribution value chain



- We will have to manage a more complex future distribution system
  - The mix of people and skills will change
  - Customers will demand more from the utility
- The focus will be on customer choice, affordability, reliability and power quality



# **Questions / Comments?**

