

A Smart Grid Future

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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?

