

# Disruptive Technology in the Electricity Sector

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imagination at work

# GE Energy Management

## GE's electrification and automation business

We help our customers safely...

- Generate
  - Transmit
  - Distribute
  - Convert
  - Protect
  - Automate
  - Control
  - Optimize
- electricity.



Motors & Generators



Power Delivery



Electrical equipment



Protection and control



Software



Variable frequency drive



Critical power



High performance automation



Services



# Energy Management's T&D portfolio

## Grid Automation

- Protection & Control
- Industrial Communications
- Monitoring & Diagnostic
- Smart Metering



## Software Visualization

- Asset Management
- Asset Control
- Solutions as a Service
- Advanced Analytics

## Primary Equipment

- Transformers & Capacitors
- HV Primary Equipment
- Power Sensing
- FACTS



## Projects & Systems

- Substation Projects
- Distribution Automation
- Emergency Power
- Value Added Services

# Innovation at the edge

## Energy Efficiency



## Intelligent Buildings



## Connected Appliances



## Advanced Metering



## Microgrids



## Electric Vehicles



## Demand Response



## Battery Storage



## Distributed Generation



# Implications for the electric sector

## 1 Customers

- Customer engagement is critical, but...
- Questions remain over how best to “animate” the customer
- Time to rethink rate design?

## 2 Utility business models

- Cost recovery – are volumetric tariffs outdated?
- Electric Distribution Utility (EDU) versus Distribution System Operator (DSO)
- Redrawing the boundaries of the regulated utility

## 3 Services

- “Basic” services versus “Value-added” services
- How best to promote competition among service providers
- Enabling technologies

Thank you