Empowering Smart Energy Users

Paul Orzeske
President, Honeywell Building Solutions
Forward Looking Statements

This report contains “forward-looking statements” within the meaning of Section 21E of the Securities Exchange Act of 1934. All statements, other than statements of fact, that address activities, events or developments that we or our management intend, expect, project, believe or anticipate will or may occur in the future are forward-looking statements. Forward-looking statements are based on management’s assumptions and assessments in light of past experience and trends, current economic and industry conditions, expected future developments and other relevant factors. They are not guarantees of future performance, and actual results, developments and business decisions may differ from those envisaged by our forward-looking statements. Our forward-looking statements are also subject to risks and uncertainties, which can affect our performance in both the near- and long-term. We identify the principal risks and uncertainties that affect our performance in our Form 10-K and other filings with the Securities and Exchange Commission.
Honeywell International

- $33.4 billion in 2010 revenues, 51% outside of U.S.
- Nearly 130,000 employees operating in 100 countries
- Morristown, N.J., global corporate headquarters

Aerospace

Automation & Control Solutions

Transportation Systems

Specialty Materials

32%

41%

13%

14%
Energy Is Our Business…

50% of the Honeywell portfolio helps drive energy efficiency
…And Business Is Evolving

Smart grid is creating new relationships and opportunities for home, building and factory owners, as well as utilities and grid operators.

These developments will fundamentally change the behaviors of energy users and suppliers.
What Are the Challenges?

• **An Evolution, Not a Revolution**
  – Updating the grid is a 10- to 20-year effort
  – Utilities and their customers need solutions now

• **Infrastructure Just a Means**
  – New networks / sensors / meters just a starting point
  – Consumers need tools to react to a dynamic grid

• **Renewable Ebb and Flow**
  – Solar, wind and other resources are intermittent
  – Backup generation is not a viable option
  – Current storage options are limited

• **Complexities from Plant to Light Switch**
  – Lack of open standards
  – Concerns about grid and data security
  – Skepticism around enabling technologies
Honeywell’s Answer

Infrastructure Builds The Platform; Applications Deliver Value
U.S. Energy Consumption

Industry (gas) 32%

Buildings (electricity) 40%

Transportation (oil) 28%

Residential 22%

Commercial 18%

Building Automation Can Control 66% Of Energy Use In Homes And Buildings

A Smart Combination…

- Honeywell can quickly and effectively address existing challenges by linking…

**Energy Efficiency (EE) + Demand Response (DR)**

Using Less Pays More
And a Smart Portfolio...

- Mixing core offerings with strategic acquisitions
- Building strong, effective connections from utilities to their end users:
  - Homes
  - Buildings
  - Industrials
For a Smarter Grid

Automatic Response To Peak Demand Delivers Optimum Load Reduction
Smart Residents

Baltimore, Maryland

Demand Response – Residential

• Partnered with Baltimore Gas & Electric Co. (BGE)
  – Reduce peak consumption on hot days when grid is constrained

• Target participation: 50% of eligible BGE customers
  – 420,000 homes with central A/C
  – 20-30% above typical participation

• Target reduction: 600 megawatts of peak reduction — equivalent to ~12 gas-fired peaking plants
Smart Businesses

Southern California

Demand Response – Commercial & Industrial

- Only company selected by U.S. DOE for automated demand response pilot
  - Project funded by $11.4-million Smart Grid Investment Grant
- Target participation: ~700 commercial and industrial facilities
- Target reduction: 80 megawatts
Smart Municipalities

Tallahassee, Florida

Smart Metering

- $14.9-million contract with municipal utility
- Replaced 220,000 electric, natural gas and water meters with a smart metering network system
- Will reduce operating costs by an estimated $21 million over 15 years

Demand Response – Residential/C&I

- Complete program design, marketing and installation
- Target participation: 100+ commercial and industrial facilities
- Target reduction: 17 megawatts
Smart Government

Silver Spring, Maryland

Micro-Grid Development

• On-site utilities and energy infrastructure at the White Oak Federal Research Center
  – New Food and Drug Administration headquarters
• Expanding central plant to meet campus heating, cooling and energy requirements
  – Optimizing the efficient delivery of utilities
  – Strengthening energy security by reducing reliance on traditional grid
• Target reduction: expected to save 48 million kilowatt-hours of electricity per year
  compared to traditional construction
State Grid of China

- **Customer Background**
  - Largest utility in the country and world
  - $600 billion investment over 10 years to construct a “robust smart grid”

- **Demand Side Management**
  - Published measures in November 2010
  - Encouraged to build system to control 10% of peak load
  - Goal: Reduce grid electricity sales *volume* and *peak demand* by 0.3%; U.S. $1 billion reduction

Auto DR Pilot

- **Collaborative Effort**
  - Pilot project co-supported by State Grid EPRI and U.S. Trade & Development Agency

- **Proof of Concept**
  - Testing impact of automated demand response (Auto DR) for shedding load in commercial and industrial facilities

- **Feasibility Study**
  - Evaluate price and reliability of DR strategies
  - Assess environmental, social and business impact
Honeywell Opportunity

Honeywell is connecting utilities and all of their customer types through:

- Energy Efficiency
- Automated Demand Response
- Remote Monitoring
- Micro Grids

100+ Utilities

10 Million Buildings

Thousands of Industrial Facilities

150 Million Homes
Honeywell Activity

- **Leading DR Charge**
  - 1 million+ residential devices installed
  - Commercial and industrial gaining traction

- **Combining EE and DR**
  - “Negawatts” – permanent or temporary – are the cheapest source of energy
  - Fills intermittency gap from solar and wind

- **Investing for Success**
  - Strategic acquisitions – e.g., Akuacom and E-Mon
  - “Smart grid ready” solutions an integral part of roadmap
  - Participating in the development of open standards

- **Growing Globally**
  - Launch of Smart Grid Investment Grant projects
  - Winning new projects in China and other countries