

Distribution Infrastructure and Smart Grid Solutions

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RECD. JUN 29 2011

**ADVANCED
TECHNOLOGY**
Transmission & Distribution Business Unit



June 2011

Robert Sherick

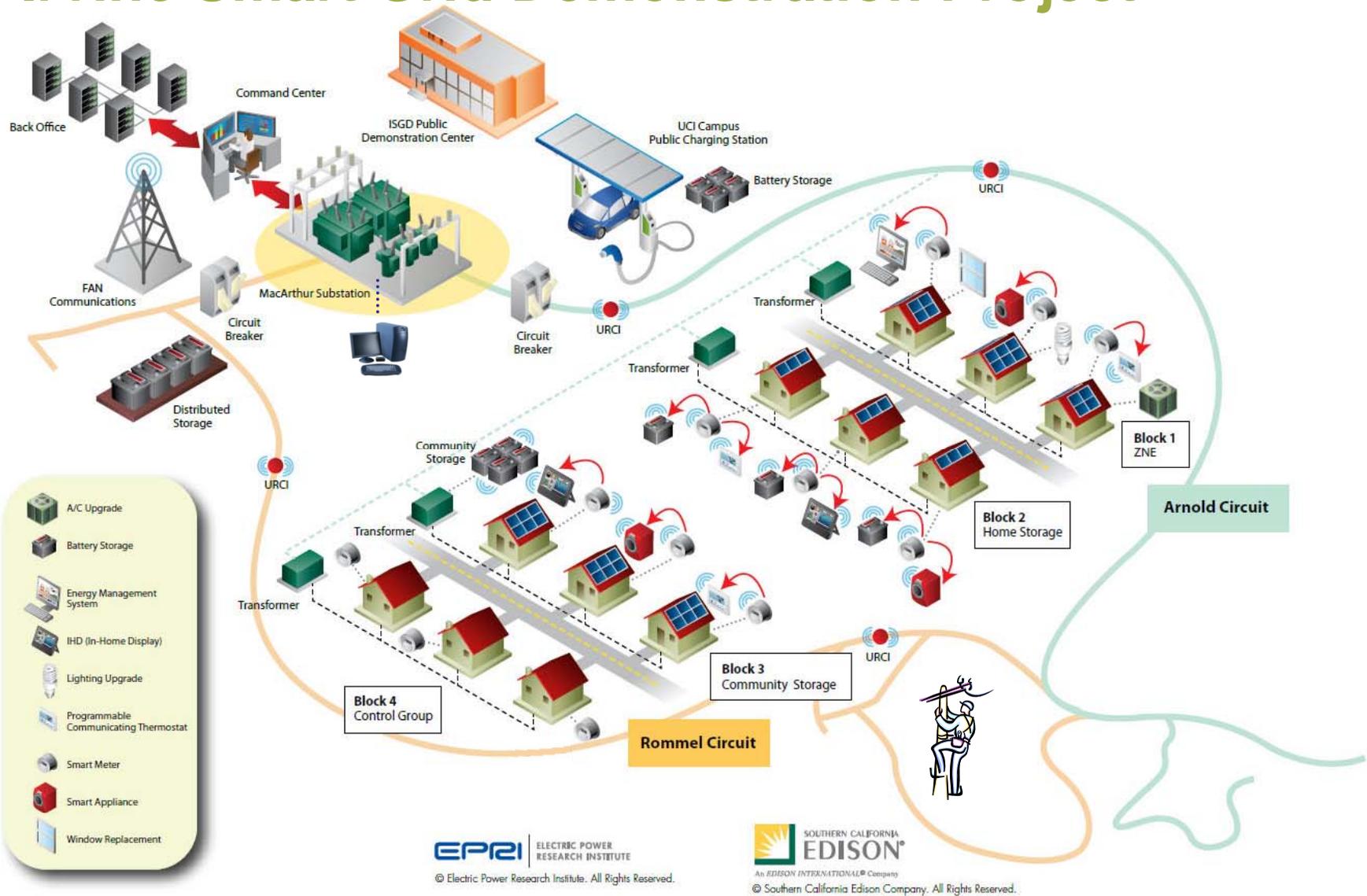
Overall Transmission and Distribution Vision

- Be Safe
- Comply with the Rules
- Keep the Lights On
 - Growth of Southern California in 50's and 60's
- Satisfy Our Customers
- Spend Wisely
- Build for the Future
 - Safe and efficient integration of centralized and distributed renewable generation
- 125 Years of providing safe, reliable, clean, and cost-effective electricity to Southern California
- Integrated through General Rate Case

American Recovery and Reinvestment Act

- Irvine Smart Grid Demonstration Program – Lead
 - Zero Net Energy Home – DG and Storage
 - PEV at Home and Work
 - Community Storage
 - Pilot Distribution Management System
 - Measure Demand Response
 - Cyber-Security
- Tehachapi Storage Program - Lead
- Superconducting Transformer – Site Host

Irvine Smart Grid Demonstration Project



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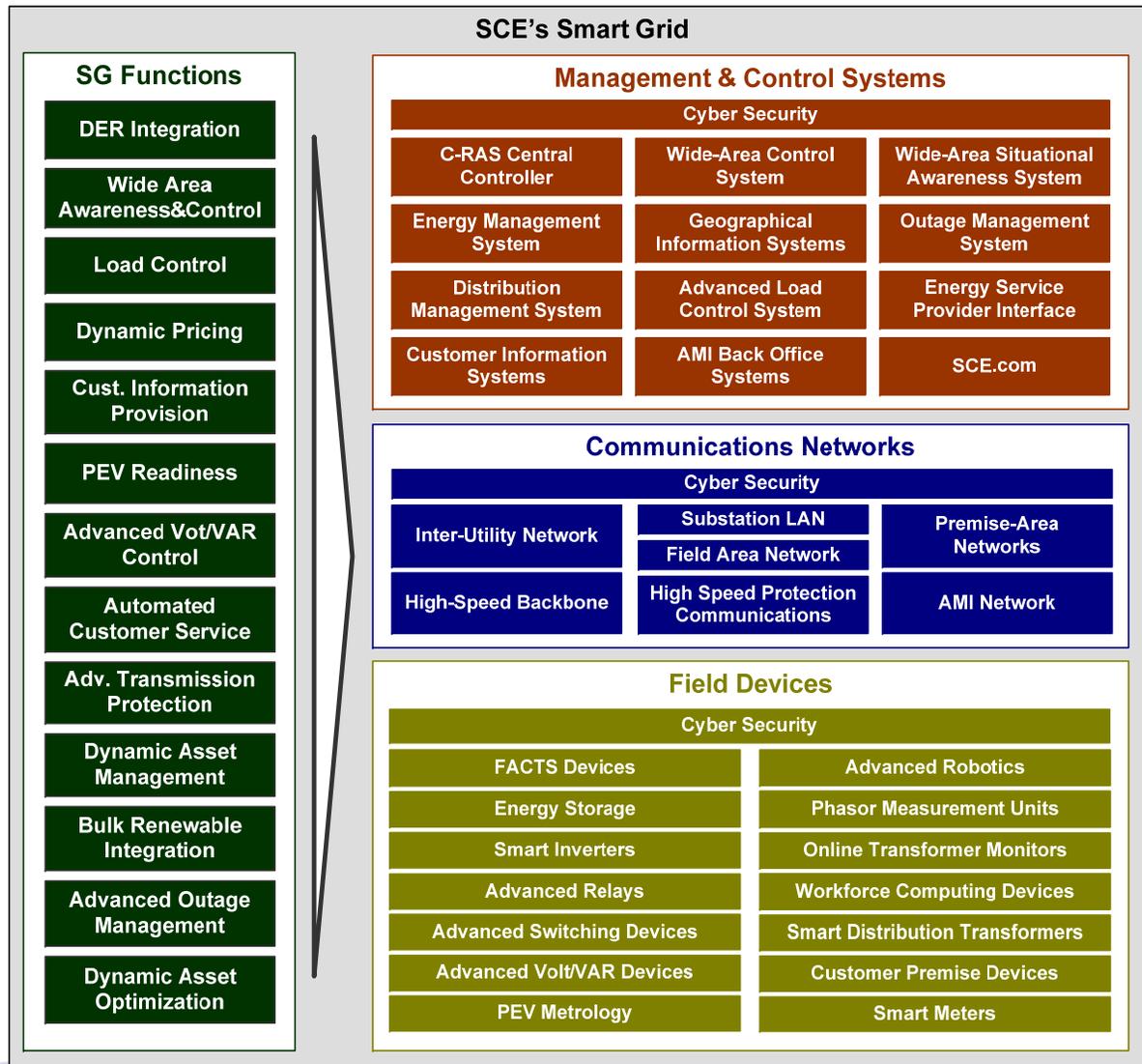
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Distribution System

- Near term (1 – 2 Years)
 - Complete Smart Meter deployment
 - Continue ongoing infrastructure replacement
 - Continue Circuit and Capacitor Automation
 - Pilot Distribution Management System
 - Pilot Self-Healing Circuit Automation
 - Pilot Smart Distribution Transformers
 - Upgrade Wireless Communication System
- Medium term (2 – 5 Years)
 - Implement Distribution Management System
 - Leverage ARRA programs – SCE's and others
 - Evaluate pilot programs for possible deployment
- Long term (5 + Years)

SCE's Smart Grid Deployment Plan



SCE's Smart Grid consists of both functions and infrastructure required to deliver functions

Highly integrated system – System of Systems

ADVANCED TECHNOLOGY

Transmission & Distribution Business Unit

For more information on SCE's Smart Grid strategy, news, and updates, go to: www.sce.com/smartgrid