SDG&E Plan for Advanced Meters

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SDGE

A Sempra Energy® utility
SDG&E’s “Smart Meter” Scope

- Replace 1.4 million electric meters
- Retrofit 900,000 gas meters
- Deployment 2008-2011
- $572 MM Capital and O&M
Why Smart Meter at SDG&E?

- California energy crisis 2000-2001
  - Peak demand issues
  - Provide more “real-time” information
- CPUC order CA IOU’s look at AMI
- Net positive benefits to society, ratepayers
- Meets CA’s Energy Action Plan “6 policy goals” and SDG&E’s functional requirements
- Unanimous CPUC approval in April 2007
Operational Benefits

- Meter Reading Automation
- Access and Re-Bill
- Unmetered Energy Usage
- Avoided Energy and Capacity
- Outage Management
- Capital Efficiency / Deferrals
- Other Customer Service, Operations, Management Cost Reductions
- Foundation for Smart Grid
Smart Meter: Foundational

Future Vision: optimize use of technology to improve service to customers and operational efficiency

Smart Grid

FUTURE

TODAY

Smart Home

DG; Self-heal; storage; Self-sense

Central Automated Operations

Intelli-Dispatch

Real-time Analytics

Smart Meter
Customer Benefits

- Save energy and money
- More privacy
- Improved customer service
- Outage management
- Supports the environment
- Future of Smart Homes, Businesses
- Opportunity to start reinventing the utility-customer relationship
What we’ve done to date
Regulatory

- All party settlement with Intervenors
- Added remote disconnect/re-connect, HAN, extended warranties, etc.
- Technology Advisory Panel (TAP)
- Risk sharing for over or under spending
- Cost allocation based on distribution
- Vendor, technology neutral approach
RFPs

- **1<sup>st</sup> RFP**: 5 parts
  - Prime Services, Information Systems, Systems Integration, Technology and Installation

- **2<sup>nd</sup> RFP**: Technology and Installation only
  - Emerging technologies, additional requirements and update all pricing

- Project costs based on RFP data

- Open industry standards, open architecture
2006-2007 Field Tests

- Test technical viability of metering and communications technologies
- Diverse geographical areas
- Customer feedback on installation process
- Technologies operated successfully in our service territory
- Concluded Smart Meter benefits can be achieved based on the functionality and performance that were delivered
IT/MDM Work

- Capgemini – Prime Systems Integration
- Itron – Meter Data Management On-line presentment
- Security
Business Process/Change Management

• 60 key business processes affected
  • “Business Process Design” sessions

• Change management plans underway
  • Change roles/program structure
  • Leadership alignment & sponsorship
  • Stakeholder & impact analysis, change readiness
  • Internal communications and engagement
  • Training development
Stakeholders

- Opportunity to start reinventing utility-customer relationship
- Research
- Customer input, co-design
- Proactive outreach
Final Vendor Contracts Status

- Detailed technology (meters, modules and network communications) & installation contract negotiations now underway

- Preferred vendor names confidential until signed contracts
Plans Going Forward

- May-July 2008 initial installations, evaluation
  - Dress rehearsal for mass deployment
- May 2008 announce tech/install vendors
- Continue extensive change management, business processes, IT, stakeholder communications
- Prepare for mass deployment
Lessons Learned So Far

- Appreciate the complexity
- It will take more time than you think
- Be flexible
For More Information

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