

A photograph of a wind farm in a green field under a blue sky with scattered clouds. Several white wind turbines are visible, with a wooden utility pole in the foreground. The text is overlaid on the image.

# Smart Grid: Priorities for California

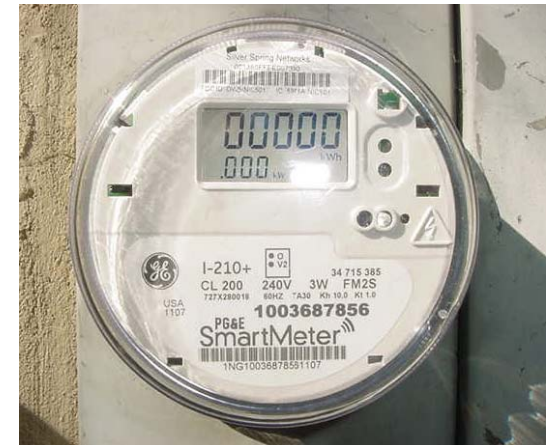
Kevin Dasso  
Pacific Gas and Electric Company  
May 13, 2009



# Building on Success

- Smart Grid foundation: 10 million automated meters by 2012 (PG&E)
- Fund and promote pilots that leverage SmartMeter foundation to improve:
  - System reliability
  - Demand response
  - Dynamic pricing
  - Renewables integration
  - Enhanced customer energy management, efficiency

PG&E  
SmartMeter





# California vs. National Policy

- California is in a leadership position and needs to maintain that position
- California utilities are actively engaged in the federal standards development processes and need to stay coordinated on those efforts
- Every utility is starting its Smart Grid journey from a different place but the technologies and functions enabled need to be compatible
- Avoid California-centric solutions

# Are California's Policies Too Aggressive?

No, but...

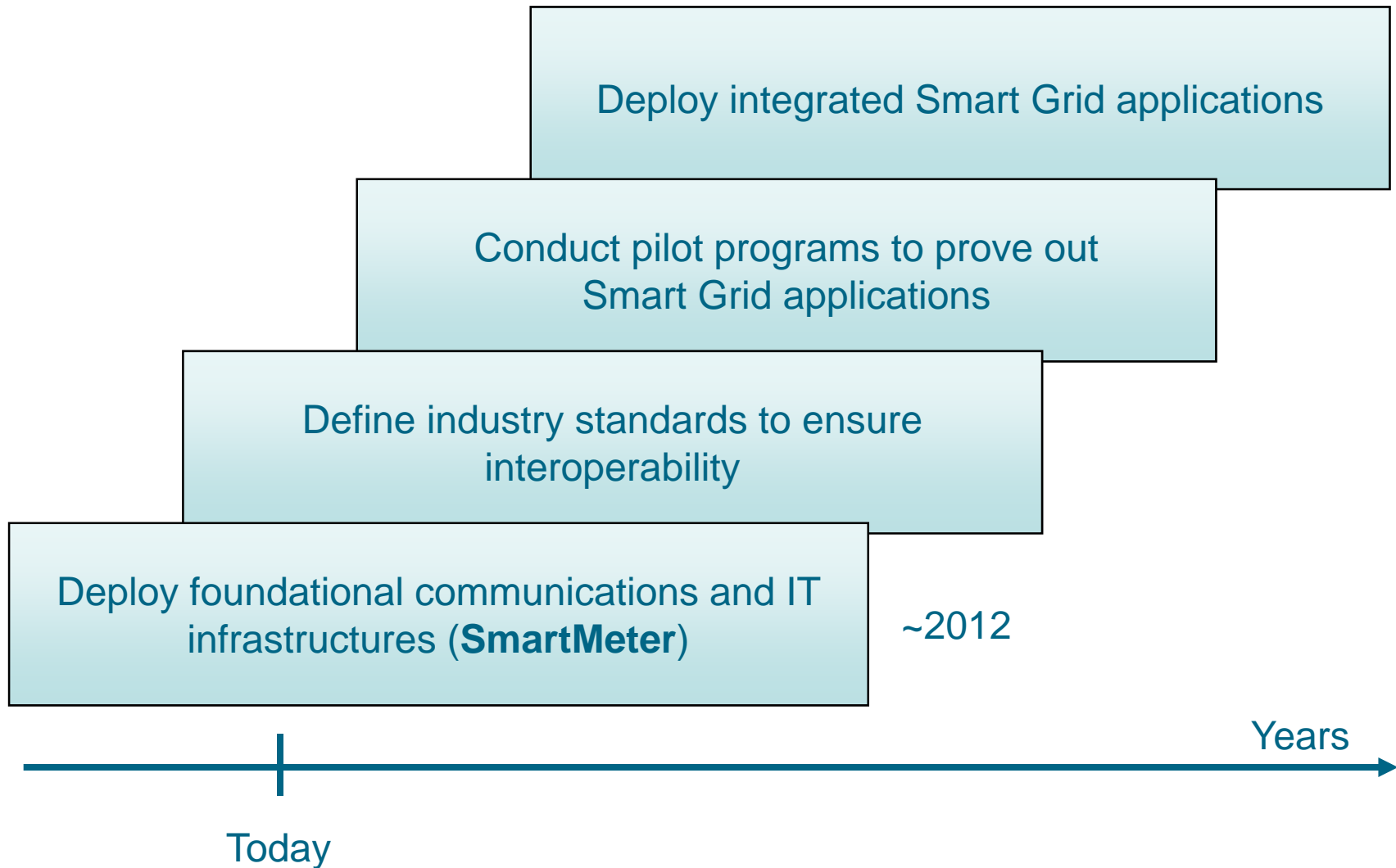
- There is still a lot we don't know about how to achieve these goals – Impacts of resource intermittency remains a major question
- California needs flexible compliance options for meeting the RPS and GHG requirements (resource eligibility, unbundled renewable energy credits, etc.)
- Cost to customers and reliability implications need to be considered in drive to achieve California's energy policy goals

# Learn From the Lessons of Restructuring

- Some flaws attributed to industry restructuring:
  - Poor market design making it vulnerable to gaming
  - Inability to affect consumer behavior through price signals
  - Inadequate resources made available at peak times
- Smart Grid embodies some of the solutions:
  - Dynamic Pricing
  - Demand Response
  - Energy Storage
- Policy flexibility is critical to avoiding unforeseen problems



# How California Can Support Our Journey



# Integrated Approach Accelerates Reliable Deployment of Smart Grid Technologies



- **Standards definition:** Shape standards that will underlie future Smart Grid implementations



- **Test facilities:** Enable prototyping and testing of Smart Grid technologies



- **Pilots:** Implement technologies in a real-world setting



PG&E service territory



- **Full system deployment**