



**Programmable Communicating Thermostat  
(PCT)  
Systems Integration (SI)  
Interfaces (I/F)**

**Ron Hofmann  
PIER DR R&D Program Advisor  
February 16, 2006**



## Reasons for SI I/F Specs

- ★ **One PCT SI I/F for all of CA (US)**
  - ◆ Retail purchased at Home Depot, etc.
  - ◆ Consumer owned, installed, maintained
- ★ **Common signaling throughout CA (US)**
- ★ **Works with any minimum AMI system**
  - ◆ Signals synched with AMI resolution
- ★ **Compatible with legacy technologies**
  - ◆ Preserve richness of thermostat options

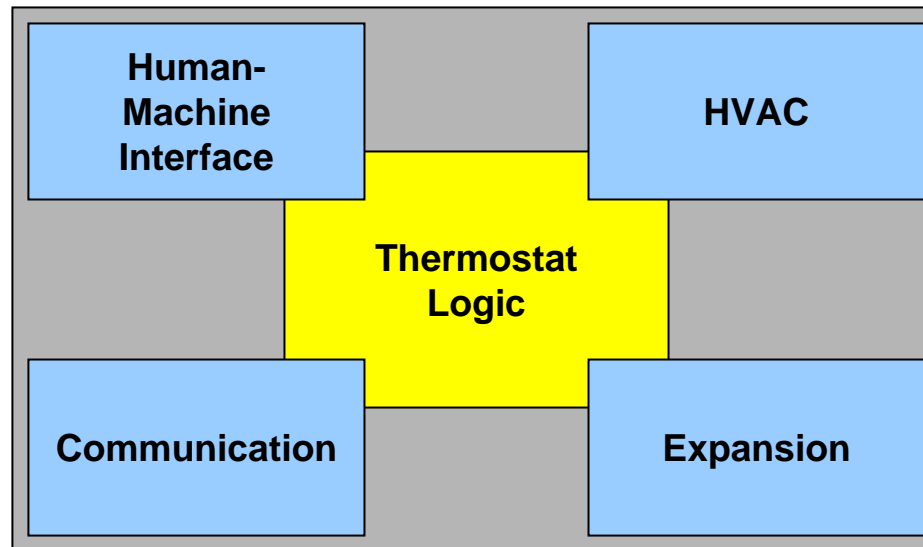


# Why are we here?

- ★ **A Straw Man Concept (R&D)**
  - ◆ Common signaling (broadcast packets)
  - ◆ Plug-in HVAC connection (plug & work)
  - ◆ Expansion port (evolutionary features)
  - ◆ Additional human information (override)
- ★ **Title 24 Standards**
  - ◆ Industry works it out with CEC



# Four R&D PCT Interfaces





# Proof-of Concept Prototype

