



Update on PCTs (Programmable Communicating Thermostat)

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PIER 2/16/06 Workshop

- * Over the past year three PIER workshops on system integration (SI) issues related to AMI (Advanced Metering Infrastructure) & PCT (Programmable Communicating Thermostats) interfaces (I/Fs)**



Stakeholder Meetings

★ Stakeholders Participating Included

- ◆ IOUs
- ◆ Munis
- ◆ thermostat manufacturers
- ◆ Commission staff
- ◆ others



Project Status

- ★ **Commission and IOUs agree on many points including:**
 - ◆ Responding to emergency signals – offset of 4 degrees F, cannot be overridden by user
 - ◆ Responding to price signals – offset of 4 degrees F, can be overridden by user
 - ◆ External port's – capable of receiving external modules which will enable various communication modes and other features
 - ◆ Common user interface (LCD, LED) – provides information to the user such as the type of DR event and the status of the device
 - ◆ Standardized equipment connector – for ease of installation and minimizing installation errors



Project Status

* **Issues Requiring Continued Discussion – Two Alternative Modes for Communication:**

- ♦ One-way communication on the PCT and enabled – allows Munis and others to use one-way communication for DR events without further effort. May also be used for backup to two-way communication. Two-way communication will be enabled thru the external port which disables the one-way mode.
- ♦ No default one or two-way communication on the PCT – the external port will be used to enable either the one-way or the two-way communications, depending on the utilities choice.

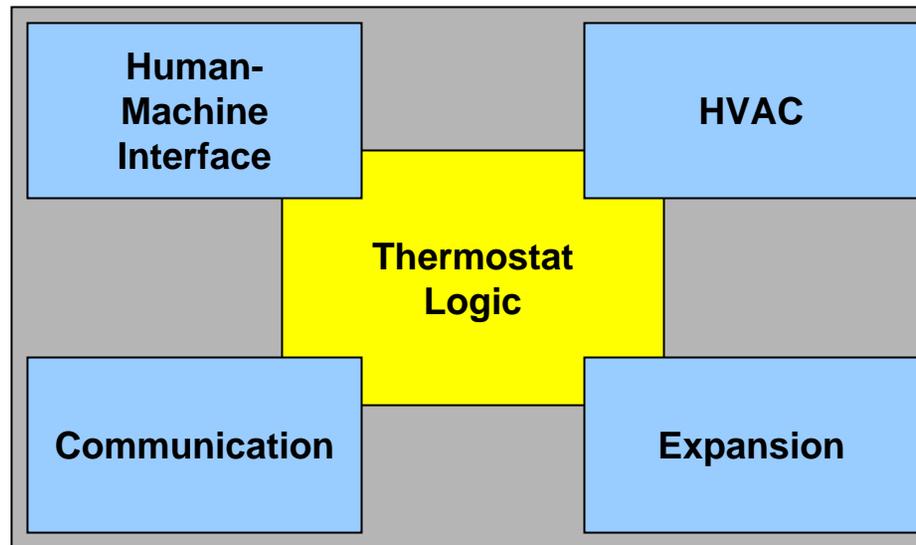


Proof of Concept

- * Once the utilities and the Commission agree upon a PCT concept, Ron Hofmann and the Berkeley group (PIER Contractors) will develop prototype hardware and proof of concept, and answer all remaining technical questions**

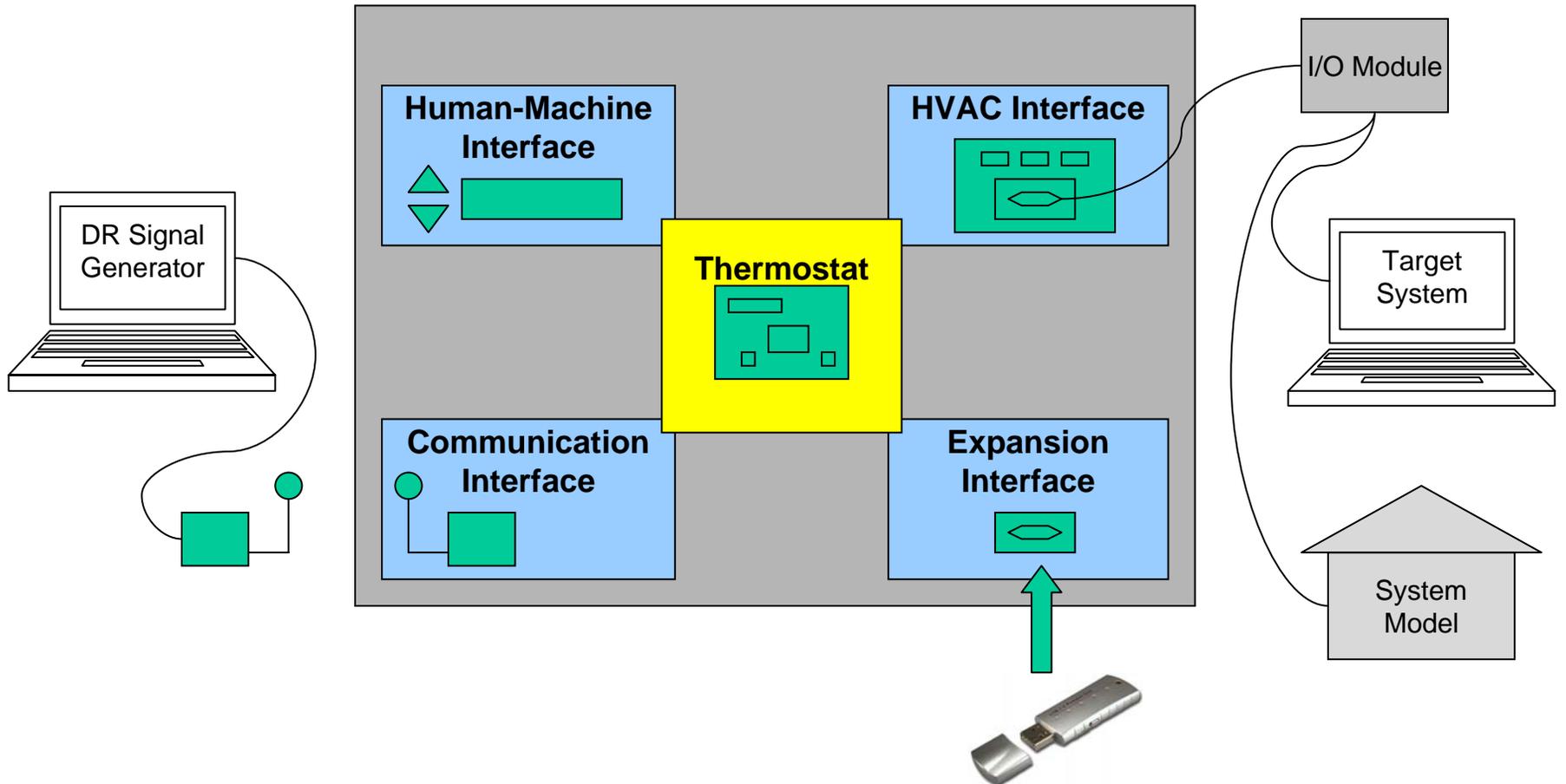


PCT Concept





Proof-of Concept Prototype





PCTs Update

Questions?