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
Proof-of Concept Prototype
PCTs Update

Questions?