



# Performance Monitoring in the 2008 Nonresidential Building Energy Efficiency Standards

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# Performance Monitoring



- CIEE and PIER research over last 10 years has demonstrated that significant energy savings is achievable if monitoring systems are installed in buildings that allow operators to track equipment and system performance over time
- Current PIER research is developing a Guide Specification for Performance Monitoring Systems that will give building owners the information they need to demand monitoring capabilities within a set of control system specifications



# Performance Monitoring in the 2008 Standards



- Definition of what makes up a PM system, for example:
  - whole building electric and gas meters
  - major system submetering
  - temperature monitoring
  - data archiving and visualization
- Certificate of Acceptance (COA) for Performance Monitoring Systems
- Substitution of permanent monitoring system for one-time COA tests for applicable equipment



# Performance Monitoring in the 2008 Standards



- In the performance approach, consider discounting the energy performance of the standard building systems that are not monitored
- **CREDIT FOR INSTALLED CAPABILITIES**  
A 2005 precedent – dimmable ballasts with central load control – gets 25% lighting credit