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Coming Soon

Proposed AB 970 Building Standards Schedule For Emergency Regulations

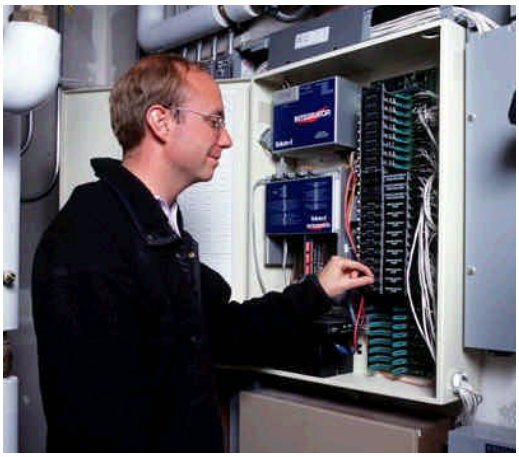
11/15 Cost Effectiveness Analysis Report, Draft Standards and Alternative Calculation Method (ACM) Rules

11/28 Feedback Workshop (Architects and builders can submit comments prior to this workshop at nonres@energy.state.ca.us)

1 /4 Commission Emergency Adoption of Building Standards and ACM Rules

1/19 ACM Model Update Applications

2/7 Effective date of the Emergency Regulations
Commission Approval of ACM Models
Notice to Building Officials Regarding the Emergency Regulations



Credit: Jim Yost

Lighting and HVAC controls are among the building components addressed by the revised Title 24 rules.

Visit the EDR website at:
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Legislators Mandate New Energy Rules for 2001

Facing the challenge of meeting a tight deadline while securing public consensus, the California Energy Commission will release new Title 24 standards on Jan. 4, 2001.

The Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) were established in 1978 in response to a state mandate to reduce California's energy use. These standards (along with standards for energy efficient appliances) accomplished their goal and have helped Californians save more than $15.8 billion in electricity and natural gas costs.

But in recent months, growth trends in technology use have strained the adequacy and reliability of California's electricity supply. Assembly Bill 970, signed into law on Sept. 6, was enacted to respond to this situation. According to the California Energy Commission (charged with carrying out the bill's mandates), AB 970 is intended to "provide a balanced response to the electricity problems facing the state that will result in significant new investments in new, environmentally superior electricity generation, while also making significant new investments in conservation and demand-side management programs to meet future energy needs of the state." The bill states that within 120 days of its passage, the Energy Commission is to "adopt and implement updated and cost-effective standards …to ensure the maximum feasible reductions in wasteful, uneconomic, inefficient or unnecessary consumption of electricity."

To expedite its rulemaking process for amending the current residential and nonresidential standards, the Commission will focus on measures that can be quickly analyzed and justified and have a clear and significant impact on peak energy demand.

The Nonresidential Standards under consideration include:

- More stringent efficiency requirements for HVAC components, including packaged units and chillers

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- Duct System Efficiency for Packaged Rooftop Units
- HVAC Controls
- Lighting and Lighting Controls

For more information on the new standards and for updates on the rulemaking process, you can visit the California Energy Commission Web page at www.energy.ca.gov/AB970_standards/index.html

High-Bay Fluorescents Exceed HID Lighting in Energy Efficiency, Light Quality

The design profession has long believed that fluorescent lighting made the most sense for low-ceiling applications–below 15 or 20 feet–and that high-intensity discharge (HID) lighting was better for high-bay applications. But an article in the July/August issue of *Environmental Building News* reports that new high-output T-5 lamps and specially designed high-bay fluorescent fixtures give fluorescents the upper hand in both applications. Replacing metal halide HID high-bays with T-5 high-bays can yield energy savings exceeding 50 percent–and still yield the same amount of light at the work surface. And fluorescent high-bays provide better light quality than even the best HIDs. The color rendering index (CRI) of T-5s is 82 or higher, compared with 65 to 70 for metal halide.

For example, a 400-watt metal halide fixture that consumes about 465 watts, including its ballast, can be replaced with a multi-lamp T-5 fixture that consumes 234 watts including ballasts.

Also, fluorescent high-bays can be used with occupancy sensors and can be dimmed or controlled with multilevel switching, which can boost energy savings to over 90 percent. Although the initial cost for T-5 fluorescent fixtures is higher than HID fixtures and more of the fluorescent lamps are required, the energy savings from replacing HIDs with high-bay T-5s can often yield a payback of less than one year.

Maximizing the energy savings of fluorescents depends, of course, on a foundation of good lighting design, and you can help yourself to assistance with strategic daylighting and electric lighting design with a visit to the Energy Design Resources Web site at www.energydesignresources.com. There you will find Design Briefs on Daylighting, Lighting, and Lighting

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Controls. You will also find the EDR Skylighting handbook and the SkyCalc™ software tool to assist you in the design process.

And for more information on the Environmental Building News article referenced above, see Green Clips 148 08.02.00 at www.crest.org/environment/greenclips.

Building Environment and Thermal Envelope Council Seeking Presenters for "Sustainable Buildings III" Symposium

The Building Environment and Thermal Envelope Council (BETEC) will host a two day-long symposium titled "Sustainable Buildings III" in October 2001 in New Mexico, and is looking for topic presenters.

The event will be co-sponsored by the U.S. Department of Energy, Oak Ridge National Laboratory, the Sustainable Buildings Industry Council, the U.S. Green Building Council, and the Partnership for Advancing Technology in Housing.

This symposium will address the environmental characteristics of available building envelope materials and examine a number of new "green" materials. Presenters will address performance characteristics and properties of sustainable materials and emerging technologies. Also addressed will be installation techniques, economic analysis, code enforcement, and other subjects leading to environmentally sound building envelopes.

The symposium is a follow-up to ones held on the same subject in 1997 and June 2000, in which presentations were made on emerging sustainable building envelope materials.

Those interested in presenting a topic are encouraged to send a 200-300 word abstract to Andre Desjarlais, Oak Ridge National Laboratory, email: yt7@ornl.gov or via fax at (865) 574-9354. The deadline for submittal is January 10, 2001. The invited presentations will be published in a collection of symposium proceedings. For further information, contact Arun Vohra, U.S. Department of Energy, EE-41, 1000 Independence Ave SW, Washington, DC 20585-0121; Phone (202) 586-2193; Fax (202) 586-9811; Email: arun.vohra@hq.doe.gov