Residential & Nonresidential Alternative Calculation Method (ACM) Approval Manual

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Two ACM Manuals

Alternative Calculation Method (ACM)

- **ACM <u>Approval</u> Manual**
  - Under consideration
  - Contains the process for approving software
- **ACM <u>Reference</u> Manuals**
  - Not being considered at this time
  - Documents how the software models building components (algorithms, assumptions)
  - Will be developed when 2016 details known

Compliance Manager

The term Compliance Manager means:

- Simulation and compliance rule implementation software
- Engine for all software, including public domain CBECC-Res and CBECC-Com

NOTE: Although Public Domain software is not an ACM, CBECC-Res and CBECC-Com follow the procedures in this manual.

2016 Overall Approach

- Combined Residential and Nonresidential into one ACM Approval Manual
- Submittal requirements
- Approval process for new software and updates
- Timelines
- Software tests moved to Appendix A and B

Types of Approval

- Functionality or Vendor Changes / no change in results
- Bug fixes / may change results
- Minor Compliance Manager updates
- Major Compliance Manager updates

Bug Fixes

- ✓ Bug fixes made to the Compliance Manager
- ✓ No Approval Required
- ✓ If combined with other changes it becomes a major or minor update
- ✓ No expiration of previous version

Changes Initiated by Vendor

- No compliance manager update involved
- No change in results / examples include:
  - Error messages
  - Screens
  - New operating system
- No approval required
- Must notify the Energy Commission

Process for Compliance Manager Changes

Minor Updates

- Have 45 days or longer to incorporate
- Old version expires in 60 days

Major Updates

- Have 90 days or longer to incorporate
- Old version expires in 90 days

✓ Business Meeting or Executive Director approval (Management Decision)

Submittal Requirements

- Software tests
  - All tests required for initial approval
  - After which only affected tests required
- Software for review by the Commission capable of creating the HERS transfer file
- Fee for initial approval
- Fee may be required if an application is rejected or disapproved

Expired Approval vs. Decertified

- Included the language to cover the cases when new versions are approved and previous versions expire
- Decertification is limited to:
  - Major defects
  - Standards change

Basics of Compliance Manager

- How the standard design/energy budget is calculated
- Building features
- Appliance standards
- Source of Time Dependent Valuation
- Climate Zone details
- Reference Manuals

User Manual

- Energy Commission staff looking for:
  - Detailed help for user to model a building
  - A tutorial
- Will not require the resolution approving the software (which is posted on the Energy Commission's approved programs website)