California Utility Allowance Calculator: CUAC

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History

- For LIHTC projects, the IRS establishes how utility cost estimates are obtained.
- Before August 2008, there were two ways:
  - Use the local PHA’s Utility Allowance Schedule.
  - Obtain a utility cost estimate from the local utility – based on existing comparables.
- Both significantly overestimated utility costs.
2008 IRS Ruling

- Allows the use of an “Energy Consumption Model”
  - By “a properly licensed engineer or qualified professional approved by [TCAC]”
  - The professional must not be “related” to the building owner.
  - Model must represent current building condition and current utility rates
  - Owner must review the basis of the calculation at least annually and redo if the utility rates increased
TCAC Draft Regulation

- For LIHTC applications, developers can submit utility cost estimates from the CUAC
- Professional using the CUAC to calculate utility allowances must be:
  1. A Certified Energy Plans Examiner (CEPE),
  2. Either:
     - A CA licensed electrical or mechanical engineer, or
     - A qualified HERS Rater
- Construction will require HERS inspections
Definitions

- CEPE is a certification given by the California Association of Building Energy Consultants (CABEC)
- HERS: Home Energy Rating System
- Each HERS Rater is accredited by one of the three HERS Providers:
  1. California Home Energy Efficiency Rating Service, or CHEERS
  2. CalCERTS
  3. California Building Performance Contractors Association, or CBPCA
CUAC Structure

- Energy use for heating, cooling and DHW come from EnergyPro (or similar program)
- Solar input comes from CEC PV program
- Lighting, cooking and appliance energy are calculated within CUAC based on:
  - Description of units
  - Choice of Energy Star appliances (or not)
  - Choice of high efficacy lighting (or not)
- Water and sewer are user inputs based on local fee structure
Using the CUAC

- Describe the project:
  - Electricity provider
  - Gas provider
  - Number of units (by type - # of bedrooms)
  - Address, owner info, etc.
  - Percent of solar to common area (if PV included)

- Obtain output from EnergyPro
EnergyPro Inputs for the CUAC

- EnergyPro models need to be run for each unique apartment description
  - Number of bedrooms
  - Significant size differences
  - Top, middle, or ground floor
  - Corner or middle apartment
  - Orientation

- All runs for apartments with the same number of bedrooms are weight averaged

- Weighted averaging output (CUAC inputs) are twelve months of kWh and therms numbers for each apartment type (number of bedrooms)
CEC PV Inputs for the CUAC

- CEC PV is run for specific system and project
  - Brand, size, rating
  - Location and orientation
  - Surrounding obstructions
- CEC PV output (input to the CUAC) is a series of twelve monthly kWh values
Administration

- All forms from/of the CUAC must be submitted, with appropriate signatures
- CUAC analysis should be redone at the time of lease up
- Owner must review the utility allowance annually
  - Redo the runs using the current CUAC
  - Tariffs will have been updated if they changed
Questions?

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CUAC Availability

- Download at:

  https://usprojects.kema.com/sites/uat

  User name: kemausext\kema-uat

  Password: sftdl1