



# The Online California Utility Allowance Calculator (CUAC)

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## What does the CUAC do?

- Using the output from Energy Commission certified building modeling software, and internal calculations, the CUAC creates a utility allowance estimate that more accurately reflects the building and unit energy efficiency measures incorporated into an affordable housing project.





## Current CUAC

- Genesis in recommendations from the New Solar Home Partnership Affordable Housing Advisory Committee.
- The current CUAC is a downloadable MicroSoft Access-based tool.





# Current CUAC Issue

- It is MicroSoft Access.
  - It is PC only.
  - Tends to work differently on different machines depending on PC settings.
  - Works through a series of Access queries (many many many layers deep), SQL queries and visual basic scripting.





# Online CUAC will address this...

- Using a “software as service” model. 
  - User Accounts.
  - “Front End” access through a web browser interface.
  - Acrobat format/PDF utility allowance estimates downloadable and printable.



# Current CUAC Issue

- Version Control.
  - Pushing out updates for the “back end” lookup tables is haphazard and based on users.
  - Pushing out updates for the “front end” user interface is even more problematic.





# Online CUAC will address this...

- By having a single database.
  - SQL Server 2005 database housed on the a Commission Website.
  - There will be only one version – the very latest version.





# Current CUAC Issue

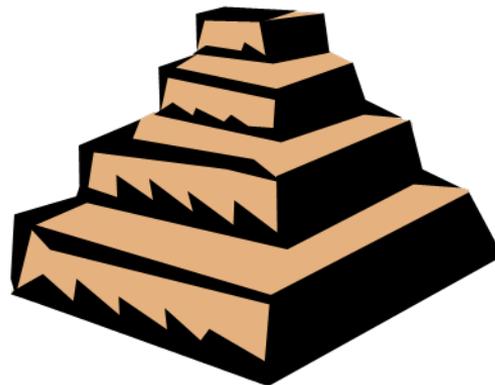
- Tiers Calculation Shortcut.
  - Simple formula used to calculate all utility tiers.
  - Monthly amounts are reduced to daily numbers and multiplied by 1.3 for Tier 2, by 2 for Tier 3 and by 3 for Tier 4.





# Online CUAC will address this...

- By having the actual tier break points for up to 5 tiers in the database.
  - Benefit of more accuracy in the estimates.
  - Benefit of more flexibility in developing the tariffs.





## Current CUAC Issue

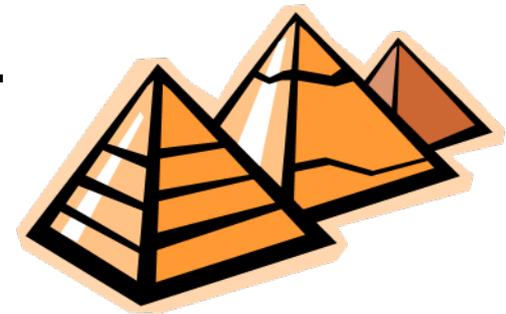
- Limited Flexibility in Handling the “Other” Utility Services.
  - Water most notably.
  - But also trash and sewer.





# Online CUAC will address this...

- By providing more flexibility in the available data entry options.
  - Allows for tiered water rates and water rates based on unit size.
  - Separates trash from sewer.





## Current CUAC Issue

- Not structured to handle Utility User Taxes (UUTs).
  - 144 Cities and 4 Counties have electricity and natural gas UUTs.
  - The rates range from 1% to 11%.





# Online CUAC will address this...

- By automatically looking up current UUT rates and factoring them in to the final calculations for electricity and natural gas.
  - Using a League of California Cities data set.





# Current CUAC Issue

- Security.
  - Savvy grade school kids could break into this program and alter data in lookup tables.





# Online CUAC will address this...

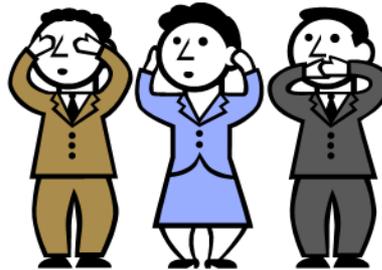
- By having one centralized database with appropriate security.
  - Will have SSL encryption protection.
  - Only Commission staff will be able to access and edit lookup table data.





# Current CUAC Issue

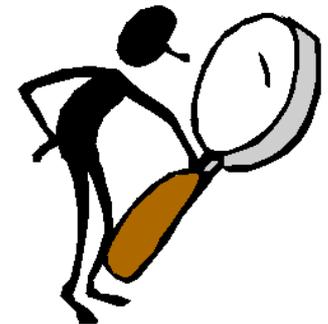
- Quality Assurance.
  - Who's using it?
  - How professional are the estimates they are producing with it?
  - What can be done to weed out or mitigate incompetence and/or corruption in the use of the CUAC?





# Online CUAC will address this...

- By having user accounts with user limitations, screens, requirements and certifications.
  - “Drafts” can freely produced by users, but not “Final” versions.
  - Accounts are either “Active” or “Suspended”.





# Wrap Up

Questions?

Interested in beta testing join the list serve here:

[http://www.gosolarcalifornia.org/affordable\\_housing/cuac.html](http://www.gosolarcalifornia.org/affordable_housing/cuac.html)

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