



# California Utility Allowance Calculator (CUAC)

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# Why the CUAC?

A quick history and policy background  
without pictures



- The genesis of the California Utility Allowance Calculator was a recommendation from the New Solar Homes Partnership Affordable Housing Advisory Committee made in 2007.
- The Advisory Committee identified two policy issues hindering the adoption of more solar PV systems in affordable housing projects:



Net Metering



Utility Allowance Estimates



# Net Metering

- Problem: Getting power from one PV system credited to multiple tenant meters in a cost effective manner.
- Solution: Rulemaking 08-03-008. A recent CPUC Proposed Rulemaking Decision instituting “Virtual Net Metering” for the Multifamily Affordable Solar Home (MASH) program.



# Virtual Net Metering (VNM)

- Virtual net metering will allow the electricity produced by a single solar installation to be credited to the benefit of multiple tenants in the building without requiring the system to be physically connected to each tenant's meter.



# Utility Allowance (UA) Estimates

- Problem: Affordable housing utility allowances are generally developed according to federal regulations by local housing agencies and are based on an existing aging housing stock.



# UA Estimates Continued

- The Other Old Option Had Another Problem: A second rarely used option allowed for project-specific utility allowance estimates developed by a utility - something utilities have been very reluctant to provide.



## UA Estimates Continued

- Implications: Utility allowances generally did not reflect actual utility costs to tenants AND developers were not rewarded for increasing the energy efficiency of tenant units beyond the minimum required OR for installing solar PV systems that would offset tenant electricity demand.



# UA Estimates Continued

- Fundamental change in Federal Regulations occurred in July 2008.
- The new regulations set in place a hierarchy specifying which utility allowances applied to which projects.
- And they created multiple utility allowance options for developers and owners that had not previously existed.



# UA Estimates Continued

- Solution: A consumption-based utility allowance estimate allowed by the newly revised IRS regulation 1.42-10(b)(4)(ii)(E).

**That's exactly what the California Allowance Calculator provides!**



# Implications of using the CUAC

\$15 doesn't really mean much to my  
project . . . does it?



# Situations, Decisions, Consequences

- A “Typical” 9% Tax Credit Project
  - ✓ 80 low income units with 1 manager unit
  - ✓ New construction
  - ✓ Large family project
  - ✓ QCT or DDA location
  - ✓ Majority of funding expected from tax credit equity
  - ✓ Hard debt loan with multiple sources of soft subordinate funding



**I'm In Business To Make Money!**



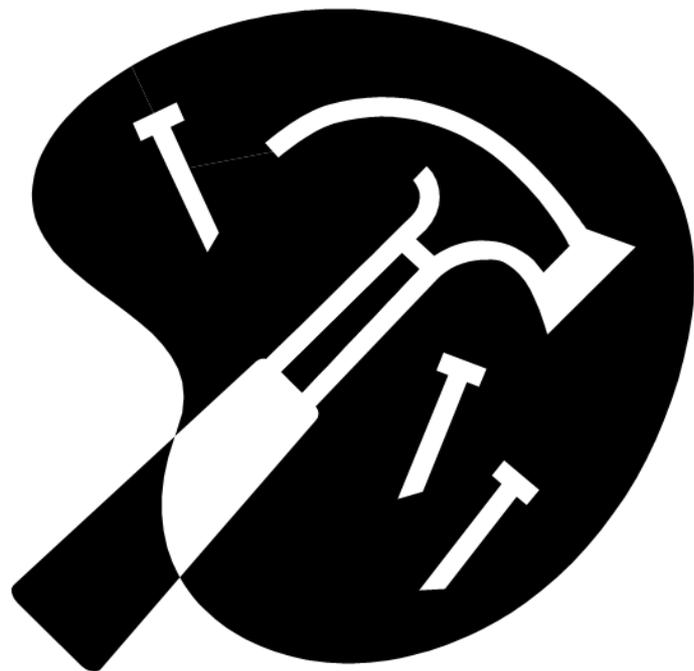
# I'm In Business To Make Money!

- Situation: The project is a very strong project and perfectly viable as is. It meets all the minimum requirements. The developer has built several projects in this city, knows the area, knows the risks.
- Decision: Developer decides to pocket the additional cash that results from using the California Utility Allowance Calculator.



# I'm In Business To Make Money!

- Consequences:
  - ✓ Increased profit taking of \$5 per unit = \$4800 per year.
  - ✓ Increase in the DSCR from 1.15 to 1.18 in Year 1.
  - ✓ Marginally improved position to syndicate or directly place the tax credits due to lower risk.
  - ✓ Regular deterioration of the project as a place to live and as an investment.



I've Got Bills to Pay . . .



## I've Got Bills to Pay . . .

- Situation: The project is a strong project, but located in a very competitive market. Each year expenses increase at or greater than the rate of inflation. Developer is expecting a longer than normal lease-up period and higher than average turnover.



## I've Got Bills to Pay . . .

- Decision: Developer decides that some competitive edge is needed. Considering various energy efficiency measures, the decision is made to go with those cost-effective measures that increase tenant comfort but with a relatively quick payback or payoff. Also decides to add increased security measures.



# I've Got Bills to Pay . . .

- Consequences:
  - ✓ Increased costs of \$200,000 offset by tax credit equity and utility incentives:
    - +\$200,000 in costs = \$260,000 in qualified basis
    - \$175,500 from tax credit equity (\$234,000 in total federal tax credits x \$.75 per tax credit)
    - \$20,000 in utility incentives
    - =\$4,500 in additional debt



# I've Got Bills to Pay . . .

- ✓ Increased cash flow of \$10 per unit
  - = \$9,600 per year
  - \$365 for debt service
  - \$8,800 for additional/more realistic operating expenses including increased maintenance, security and a lease-up incentives
  - = \$435 in increased revenue
- ✓ No substantial change in the DSCR



## I've Got Bills to Pay . . .

- ✓ Slight decrease in tenant turnover due to more market appropriate operating expensing and increased tenant retention.
- ✓ Marginally improved position to syndicate or directly place the tax credits.
- ✓ Marginal improvement in the project as a place to live and as an investment.
- ✓ Lower energy consumption and green house gas emissions associated with the development.



**Green Building is \$mart Business**



# Green Building is \$mart Business

- Situation: Developer is faced with a very competitive market. Additionally, green building is emphasized by state laws and local ordinances. The Developer's equity investors take a longer-term view than most.



# Green Building is \$mart Business

- Decision: Developer decides that a substantial competitive edge is needed. Considering various energy efficiency measures, the decision is made to go with those that are most cost-effective in the longer-term.



# Green Building is \$mart Business

- Consequences:
  - ✓ Increased costs of \$900,000 fully offset by tax credit equity, state and local utility incentives:
    - +\$900,000 in costs = \$1,170,000 in qualified basis
    - \$842,400 from tax credit equity financing (\$1,053,000 in total federal tax credits x\$.80 per tax credit)
    - \$28,800 in utility incentives
    - \$120,000 in solar incentives
    - =-\$91,200 hard debt



# Green Building is \$mart Business

- ✓ Increased cash flow of \$15 per unit
  - +\$14,400 in Year 1
  - +7,756 for less debt service
  - \$14,800 for additional operating expenses including increased PV maintenance costs, etc.
  - =+\$7,356 in increased revenue
- ✓ Substantial change in the DSCR from 1.15 to 1.29 in Year 1



# Green Building is \$mart Business

- ✓ Decrease in tenant turnover due to improved competitive position of the project in the marketplace.
- ✓ Improved position to syndicate or directly place the tax credits.
- ✓ Substantial improvement in the project as a place to live and as an investment.
- ✓ Lower energy consumption and green house gas emissions associated with the development.



# Wrap Up

## Examples vs. Reality

### Resources:

The Affordable Housing Energy Efficiency Handbook  
by Heschong Mahone Group, Inc.

Green Rehabilitation of Multifamily Rental Properties  
by LISC and Build It Green

## Questions?