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# MEMORANDUM

California Energy Commission
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October 23, 2012

To: California Energy Commission

From: Heschong Mahone Group, Inc.

**Re: Comments on AB 758 Residential Stakeholder Hearing regarding Panel 3 – Multifamily and Low Income**

## AB 758 Multifamily Sector Comments

The Heschong Mahone Group, Inc. (HMG) submits the following comments to the California Energy Commission (CEC) regarding the AB 758 Residential Scoping Plan. The comments are in direct response to questions posed at the AB758 Workshop on the Comprehensive Energy Efficiency Program for Existing Buildings, Panel 3, on Monday October 8th, 2012.

These comments pertain to the multifamily building sector and stem from HMG's experience designing, implementing and providing technical support to multifamily energy retrofit programs for the California utilities, non-profit and government entities.

## 1. Question 16

*How can whole-building programs be meshed with existing low-income programs? What barriers would need to be overcome? How can the fact that multifamily buildings have a mix of tenants that qualify for low-income assistance and tenants that do not qualify, be addressed so that whole building upgrades are feasible?*

### 1.1 Integration of Program Processes and Incentives

Streamline low-income and whole-building programs by using a building block approach and leverage low-income direct install measures towards a % improvement requirements (e.g. 20%) and incent only the measures not installed through the direct install programs. The energy savings division happens on the back-end rather than making participants go through multiple programs.

For example, HMG is implementing the City of San Diego program, whereby a low-income project can leverage ESAP/WAP direct install measures to achieve deeper energy savings to lower total energy bills. Through participation in the whole building and ESAP program, and multiple measures, the energy savings percent improvement is estimated to be 22%. The property would only be incented on an improvement above the ESAP program measures, or 11% of total estimated energy savings in the example in the table below, but would be able to count the ESAP savings toward whole building program qualification requirements.

Some additional observations regarding this approach include:

- For SDG&E program, we are yet to have any projects come through SDG&E that have both WB and ESAP – either they are already served or ineligible because of either
  - Income limitations, measures don't qualify, don't have the measures
  - Income qualification is not consistent across programs
- Offer ESAP direct install measures for all units and have property owners pay for non-qualifying units (affordable units are free)
- Incorporate ESAP into WB and offer a higher incentive for low-income to cover ESAP measures
- Integrate competing programs. For example, in Michigan, HMG is designing a customer-solution-oriented program that utilizes energy advisors to help property owners to appropriate approach to rehab from direct install, prescriptive, multi-measures, and whole-building.
- Address affordable housing timeframe issues; time intensive and lengthy process to apply for, and coordinate funding, and get through procurement processes (especially for housing authorities) and, hence, the importance of continued and consistent programming to allow planning time.

## 1.2 Audit Standards and Software

- Allow both TREAT and EnergyPro energy analysis software for WAP and other low income programs. A software comparison analysis was underway, but AB758 work has been stopped since April.
- Ensure that all audits are investment grade and consistent among IOU, BPP, HUD, Enterprise, etc. so that one standard energy audit, or a standard audit with minor custom modifications, can meet needs of multiple funding programs.
- Either set standards for training and allow multiple certifications to meet standards, or combine certifications into one type of training and/or certification program which may give auditors a wide pool of opportunities and range of skills
- Consider having future existing whole building multifamily program incentive structures based on energy savings estimates and measured actual energy savings. A two-pronged approach would likely be required with calibrated energy models used to assist selection of energy efficiency measures with incentive paid based on selection of measures and estimated improvement over existing conditions. The second incentive, or "kicker" incentive, is paid based on actual energy savings determined by comparing normalized pre and post retrofit bills. This approach can also impact behavioral changes and influence energy conservation by paying an incentive to reduce energy use of miscellaneous equipment loads.
- Have consistent audit protocols be the common denominator for ESAP, WAP, WB training

- Work with CTCAC to approve the California Utility Allowance Calculator for retrofits and allow for use on non TCAC funded projects

## 2. Question 18

*What lessons learned from the San Diego multifamily whole building pilot should be extended into a statewide program? What issues need to be addressed?*

### 2.1 HERS II Industry Development

- The HERS II industry needs support to develop (similar to the content and magnitude of the support for BPI contractors) via the HERS Providers, CEC, programs, and/or professional association. Support in terms of continuing education on viable business models and skills, developing technical capacity (building science and simulation), business, customer, and program participation skills for scalability and quality.
- Increase the capacity and interest of the HERS Providers staff in terms of multifamily buildings, audits, modeling, and teaching and mentoring. Encourage dedicated staff focused on multifamily.
- Develop HERS registries to accommodate multifamily retrofits and develop MF building rating system
- CEC to adopt HERS II for multifamily regulations and provide support to raters, industry, CPUC, IOUs, and implementers on developing issues and continuous improvement
- Establish a process and notification for changing program rules and requirements and grandfathering in legacy participants.

### 2.2 Program Consistency and Continuity

- There is a need to address the indoor air quality (IAQ) issue when retrofitting existing multifamily buildings because many energy efficient retrofits affecting combustion appliances, building airflow, and thermal barrier will require IAQ assessments. These may be a cost burden to perform and may also result in additional work required to correct deficiencies identified during the IAQ assessment. However, it is necessary and must be addressed in future existing whole building multifamily programs . When necessary community resources should be consulted as part of the effort to appropriately address integrated whole building multifamily energy efficiency programs with IAQ assessments.
- Develop well thought out QA/QV and verification protocols
- Think in terms of achieving net zero and better integrate solar thermal and miscellaneous equipment loads into whole building programs.
- Currently IOUs will not allow cross promote between programs. Participants always chose California Solar Initiative incentives over whole-building incentives because they are much higher.

- Combine program requirements – streamline one submission for both programs because participants may want to participate in one program
- Ensure program longevity to allow rater to invest in training, develop expertise and efficiencies, and experience business growth to reduce incidents of people investing money and numerous training days to only get one job from the programs
- Address non-energy related issues, resources, benefits and issues including, but not limited to indoor air quality testing, notification, liability and costs in TRC constrained programs and understand the market's funding limitation and fear of liability, which can encourage program drop out