

### Proposed Changes to the Low Income Energy Efficiency Program

Presented by the Low Income Energy Efficiency (LIEE)
Standardization Team

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#### Background

- LIEE Standardization Team filed proposed changes to the LIEE Policy and Procedures (P&P) Manual and Weatherization Installation Standards (WIS) Manuals on January 18, 2005
- Most changes were made to:
  - Comply with changes in code
  - Respond to questions/comments from field staff
  - Bring P&P and WIS Manuals into consistency with each other
  - Clarify policies previously recommended and/or adopted
- Comments filed by parties focused on:
  - Procedural issues
  - Changes to the 80-20% rule for multifamily buildings
  - Consideration of furnace repair and replacement as minor home repairs
- In a March 25, 2005 ACR, the Commission instructed the Team to reconsider proposed changes through a process that increased public input. This reconsideration was tabbed as Phase 5.1 of the Standardization Project.



# Work Scope for Phase 5.1 of the Standardization Project

- On April 25, 2005, the Standardization Team submitted a work scope for Phase 5.1 that addressed the following issues:
  - Reconsideration of changes recommended in the January 18 filing
  - Development of policies and installation standards for new measures proposed by the Team for the 2006 LIEE Program
  - Development of policies and installation standards necessary to comply with new Title 24 rules on alterations of existing homes
- The work scope also provided for LIEE Standardization Team meetings to be open to the public
- The Commission accepted the work scope in an June 7, 2005
   ACR



#### Phase 5.1 Activities

- April 8 and 15 Workshops on the Assessment of New Measures
- April 11 Presentation to the LIOB on New Measures and Proposed Program Changes
- Open Team meetings on April 26, May 10, June 7, June 22, June 28, July 5, July 25-6, August 12, August 23, and September 8-9
- Discussions with the Commission on Title 24 changes



### Overview of Types of Recommended Program Changes

- Changes designed to refine operation of Program
  - Also included in January 18, 2005 filing, but revised for the November 1, 2005 filing
- Changes to accommodate new measures
- Changes to accommodate changes in Title 24

# Overview of Recommended Changes to the LIEE Policy and Procedures (P&P) Manual



### Changes to P&P Manual: Customer and Structural Eligibility

- Minor Editorial Changes
  - Clarification of income tiers
  - Expansion of types of income to be considered
  - Clarifications relating to CARE income verification
  - Change from "weatherization" to "program services" when referring to full program offerings
  - Clarification of definition of self-employment income
- Changes in 80-20 Rule
  - Mobile homes no longer covered by 80-20 rule
  - Multifamily 80-20 rule modified to exclude installation of refrigerators, evaporative coolers, high efficiency window/wall air conditioners and high efficiency central air conditioners



# Changes to P&P Manual: Customer and Structural Eligibility (cont.)

- Other Substantive Changes
  - Requirement that household be served by an active utility meter
  - Provision that, in overlap areas, the utility serving heating fuel be the primary provider of weatherization services (exception for case of non-IOU heating fuel)
  - Language permitting water heaters to be replaced in occupied homes if necessary to mitigate Natural Gas Appliance Testing (NGAT) problems
  - Change in income eligibility for migrant housing centers to make it consistent with spirit of AB 868



# Changes to P&P Manual: Customer and Structural Eligibility (cont.)

- Modifications designed to expand exceptions to the 10-year rule on "go-backs"
  - change in feasibility of ceiling insulation (can install ceiling insulation)
  - customer's receipt of infiltration reduction measures and subsequent furnace malfunctions (can repair or replace furnace)
  - need for refrigerator replacement (can provide refrigerator)
  - homes that have resolved NGAT problems (can install infiltrationreduction measures)
  - SCE exception to allow for installation of high efficiency air conditioners
- Inclusion of window-wall air conditioners as satisfying requirement for LIEE services
- Policy that homes treated by separate gas and electric utilities be treated as if they were served by a single utility (for purposes of minimum number of measures)



# Changes to P&P Manual: Program Measures

- Description of Commission's new process for considering new measures
- Revisions to list furnace and water heater repairs/replacements as minor home repairs
- Addition of new measures: duct testing and sealing and high efficiency central air conditioners (note: air conditioner tune-ups withdrawn as measure for now)
- P&P Manual now lists measure offerings by CEC Climate Zone



# Changes to P&P Manual: Minor Home Repairs

- Manual now characterizes furnace repair and replacement and water heater repair and replacement as minor home repairs
  - Team gave commitment to assess cost-effectiveness of furnace repair or replacement as a measure
  - Definition of NGAT failure expanded to case where water heater is leaky or furnace is either inoperative or missing and another appliance is used for heating
- Modifications in caps for furnace repairs and replacements to recognize differences across furnace types
- NGAT repairs given high priority in the enforcement of caps.
- Overall home cap increased to accommodate addition of water heater repair or replacement and furnace repair or replacement



### Changes to P&P Manual: Measure Installation Policies

- Added policies for central air conditioners and duct testing and sealing
- Added a section on duct testing and sealing as a means of compliance with new Title 24 regs
- Clarified that measures are non-feasible if they are already present,
   even if not installed in accordance with current installation standards
- Brought policies relating to furnace repairs and replacements into consistency with adopted NGAT policy
- Modified water heater replacement discussion to recognize that it is a minor home repair done in response to NGAT fails
- Revised the age requirement for window/wall air conditioners from 10 to 15 years to recognize lifetime of these units
- Revised age requirement for refrigerator replacement
- Reorganized some sections



### Changes to P&P Manual: Other Issues

- Updated pre-inspection policies
- Modified policy to allow for reimbursement of contractors in cases when a fail or a correction finding is reversed by an arbitrator
- Deleted statements relating to Rapid Deployment
- Modified NGAT policy to reflect team's NGAT recommendation relating to homes using non-IOU combustion fuels (as per previous filing)
- Expanded description of NGAT steps
- Provided for the completion of NGAT within five days from the installation of infiltration reduction measures
- Added explicit non-feasibility criteria for NGAT



### Modifications of Earlier Recommendations based on Public Input

- Modified changes in 80-20% rules to continue to install some measures in homes not occupied by income-eligible households
- Expanded the conditions under which homes may be revisited within the 10-year rule
- Expanded the definitions of NGAT fails and consequently expanded the circumstances under which furnaces and water heaters can be repaired or replaced
- Dropped the requirement that replacement furnaces be high-efficiency units
- Provided the compensation of contractors when arbitrators overturn an inspection failure
- Modified specific language on a wide variety of policies (income documentation, Program Manager interpretation of policies, etc.)



### Elements of Commission's 12/15/05 Draft Decision requiring changes in P&P and WIS Manuals

- Offer Duct Testing and Sealing in Zones 10-16
  - Change already recommended.
- Offer duct testing and sealing to qualified multifamily homes in Zone 15 of the SDG&E service area
  - Will require modification of P&P and WIS if extended beyond the Winter of 2005-6
- Offer duct testing and sealing in all zones and dwelling types when installing new furnaces
  - Will require modification of P&P and WIS if extended beyond the Winter of 2005-6 (Note that this goes beyond Title 24)
- Offer high efficiency air conditioners in all three residence types in Zones 14 and 15
  - Change already recommended



### Elements of Commission's Winter Draft Decision requiring Changes to P&P and WIS Manuals

- Change income eligibility to the same benchmarks as used in CARE (200%)
- Replace gas fired forced air furnaces as part of a whole-house weatherization effort or on a go-back basis where the existing unit has an AFUE of 65% or lower; replace with models with AFUE of 80 or 92, depending on climate zone.
- Make forced air furnace services available to renters, where feasible
- Utilities are authorized to perform ductwork whenever installing a new furnace
- Replace leaky water heaters (change already recommended)
- Utilities may increase the number of new refrigerators and CFLs they place in existing homes (change in # of CFLS will require change; unclear what changing the number of refrigerators means)
- Replace only refrigerators that are ten years old or more

# Overview of Changes to the Weatherization Installation Standards (WIS) Manuals



### Three Types of Changes

- Changes designed to refine the operation of the Program
- Changes designed to allow for the inclusion of new measures
- Changes designed to accommodate the requirements from Title 24



#### Recommended Changes in the WIS

- Changes made in the WIS to accommodate:
  - Field experience gained over the past two years
  - Title 24 requirements
  - Bringing program into compliance with Commission order
  - Adding new measures



### Components of the WIS

- Definitions
- Preface pages
- Material and installation criteria
- Non-feasibility criteria



### Section 3: Ceiling Insulation

- The Catastrophic Duct Leaks and Disconnects section deleted and the new Section 20 added
- Commission retrofit insulation criteria replaced the WIS values.
- Nonfeasibility criteria modified to address obstructions in the attic



# Section 5: Water Heater Insulation and Section 6: Water Heater Pipe Insulation

- Allow "gas shut-off valve" to be used in lieu of temperature pressure (T&P) relief valve
- Requirement for plastic ties revised



#### **New Standards Added**

- Section 10: Duct Testing Standards
- Section 20: Duct Sealing Standard
- Section 21: Central High Efficiency Air Conditioner Standards



#### Section 16: Evaporative Cooler Installation and

Section 22: Wall/Window Air Conditioner

- Both sections were modified to be consistent
  - Egress window requirements
  - Height criteria
  - Wall-mount location under windows
  - Windows less than 5 feet above floor
  - Exterior clearance from gas meters to match utility guidelines



### Section 18: Natural Gas Central Forced Air Heating Systems Repair & Replacement

- AFUE and SEER/EER ratings were changes to match Title 24
- Programmable thermostat criteria modified to include ENERGY STAR® qualifications
- Allow battery-powered units for millivolt systems
- Reference to Title 24 duct leakage added



# Section 19: Natural Gas Wall & Floor Furnace Repair and Replacement

- Efficiency criteria modified to match Title 24
- Furnace model with thermostat on side of furnace cabinet allowed
- Criteria for CO measurement and draft/spillage test removed and Section 29: NGAT referenced



#### Section 29: NGAT

- Reorganized into five parts:
  - General Criteria
  - Pre-Weatherization NGAT Evaluation
  - Weatherization Crew Verifications
  - Post-Weatherization NGAT Procedures
  - Post-Repair/Replacement Checks