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RESPONSE OF SAN DIEGO GAS AND ELECTRIC COMPANY TO THE ADMINISTRATIVE LAW JUDGE'S FOURTH RULING SEEKING FURTHER INFORMATION FROM THE LARGE INVESTOR-OWNED UTILITIES' 2009 – 2011 LOW INCOME ENERGY EFFICIENCY/CARE APPLICATIONS

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I. INTRODUCTION

In accordance with the Rules of Practice and Procedure of the California Public Utilities Commission ("Commission" or "CPUC") and the Administrative Law Judge ("ALJ") Ruling, dated August 14, 2008 ("Ruling") which seeks further information on the Large Investor-Owned Utilities' 2009-2011 Low Income Energy Efficiency/Care Applications, San Diego Gas & Electric Company ("SDG&E") provides this response to the questions posed in the Ruling.

II. RESPONSE

Please provide me information on when/how your utility verifies/certifies/re-certifies customer income eligibility for CARE and/or LIEE. I seek this information in view of information contained in the DRA brief of 8/1/08 and PG&E's reply of 8/13/08, quoted below. If you have a pre-existing document that describes the process, it would be my preference to receive that document.

DRA's 8/1/08 brief:

In 2008 alone, PG&E took measures to cause a net decrease of 36,228 customers from its CARE program simply because many of its customers did not recertify or failed to provide proof of their income levels. Specifically, PG&E appears to have engaged in a campaign to obtain post-enrollment verifications in writing from a large number of CARE customers. DRA is informed and believes that customers failing to respond in writing to the post-enrollment verification were denied participation in the CARE program. Regardless of the reasoning behind the decreases, PG&E did not have Commission authorization to conduct its post-enrollment verification for such a large group of CARE customers. Furthermore, the Commission directed PG&E to focus on enrollment, not income verification, in 2007-2008. In A.06-06-034, PG&E requested $100,000, merely 1% of its overall CARE administrative budget, to determine why customers do not respond to CARE income verification request.30 PG&E did not ask the Commission for authority to decrease enrollment, but only to spend a relatively small amount of money to study the issue of income verification. The Commission denied PG&E's request because it appeared to be contrary to the Commission's requirement that the utilities develop ways for customers to enroll in CARE that do not require income verification, such as categorical eligibility, extended certification and automatic enrollment.31 DRA clarifies that it is not opposed to the CARE verification process, but urges the Commission to set guidelines to ensure that there is 'zero' risk of un-enrolling legitimate CARE customers. Under PG&E's current tactics, there is a significant risk that legitimate CARE customers are not responding and are thus being booted from the CARE program.

PG&E's 8/13/08 Reply Brief

DRA errs in stating that PG&E has been engaged in an effort to decrease CARE enrollment.5/ PG&E has outlined a list of numerous measures, including moving from a two to four year certification period for fixed income customers, expanded methods of CARE customer sign-up, and expanded outreach efforts to ensure a robust program. Ratepayers, however, are entitled to ensure that IOU representatives are taking reasonable steps to prevent unqualified customers from participating in this program. PG&E learned that some high-usage CARE customers had annual electric bills that alone exceeded the total annual household income amounts stated on their applications, and that CARE customers whose average usage exceeded 500% of baseline had a verification failure rate of 19% above average. PG&E stepped up and took appropriate action to monitor the post-enrollment verification (PEV) process so that only qualified customers would be permitted to receive the extremely large subsidies associated with this group of customers. At Tier 5, CARE customers are receiving energy for approximately 9.5 cents that would otherwise be priced at 36 cents (a 73% discount). In order to continue to receive this high-level subsidy, customers are simply being required to provide appropriate documentation. DRA has expressed concern that customers may not take the time to fill out the post-enrollment paperwork, however, if a customer ignores the original PEV letter, the 45-day reminder phone call, and the 60-day reminder letter, they are still not precluded from participating in the program. All that a customer needs to do should they let the 90 days lapse is to reapply for the CARE program and submit the requested income documentation. Given the level of subsidy these customers are receiving, this does not seem to be an unreasonable burden.

SDG&E Response to Q1:

<u>CARE</u>

The CARE program is a **self-certification program** that provides customers with a 20% discount for those who qualify if their combined household income is at or below 200% of the federal poverty guidelines. Customers can either qualify based on their declared income or by declaring their participation in one of the approved mean tested programs.[1] Customers

[1] Authorized in Commission Decision 06-12-038.

are required to recertify or verify their income upon request.[2] Expanded CARE provides the 20% discount to non-profit group living facilities and agricultural housing.

CARE Recertification – Customers are asked to recertify their eligibility every one, two or four years, depending on the customer type, the likelihood of their eligibility in the program, or their sources of income.

- One-year Recertification - Submetered tenants are subject to a one-year recertification time period. Annually, submetered tenants are individually notified of their requirement to renew their eligibility. Participants of the Expanded CARE program are also required to recertify annually.
- Two-Year Recertification- All residential individually metered customers are subject to recertification every two years. Once their two year period has arrived, the account is processed through a probability model prior to the issuance of a recertification request. This model was established as a means to automatically recertify those CARE customers with the highest likelihood of being qualified, based on various criteria.[3] Customers "passing" the model are considered to be very likely eligible, and they are automatically recertified for two years. Customers "failing" the model are sent a notification that they must complete the renewal application in order to remain on the program.
- Four-year Recertification (Fixed Income) – Fixed income recertification was established for customers declaring their sources of income to be fixed. The utilities have established the sources of fixed income customers as SSI, SSDI, SSP, and pensions.[4] Income eligibility is not likely to change for these customers; therefore, the recertification period has been established as four years.

Post Enrollment Verification (PEV) – The utilities do not require verification of income from customers at the time of application/enrollment. However, after enrollment,

[2] Resolution E-3586 dated January 20, 1999, approved statewide uniform self certification enrollment process with random post enrollment verification for the CARE program.
[3] Model includes: Electric usage, home ownership and economic demographic indicator.
[4] D.06-12-038 authorized the four-year recertification and established SSI, SSDI, SSP and pensions as fixed income.

customers are subject to random income verification and may also be income verified for cause[5].

- Random Income Verification – Customers participating in CARE are subject to Random Income Verification at any time during their enrollment in the program. Customers randomly selected for income verification are processed through a probability model prior to having a request for verification issued. As in the recertification model, customers "passing" the model are considered to be very likely eligible, and they are automatically income verified for two years. Customers "failing" the model are sent a notification that they must complete the income verification request in order to remain on the program.
- For Cause Income Verification – Customers may also be selected for income verification at any time during their participation if there appear to be factors that cause question as to the customer's eligibility. Accounts may become questionable for various reasons, including:
    - Multiple applications submitted with varying income levels
    - Customer calls providing lead on participants ineligibility
    - Non-response to an income verification request within a one-year period
    - Consistently high usage (above 1400 kWh) without payment credit issues

Once selected for either the Recertification or Income Verification process, a letter requesting the customer provide the requested information in order to continue to receive the benefits of the CARE program is mailed. If the customer fails to respond to the first letter within 30 days, a second letter is sent to the customer providing the customer yet another opportunity to continue their CARE program enrollment. After the second 30 day period lapses, prior to the removal from the program a bill message is sent to the customer warning the customer that they will no longer receive the discount effective their next billing cycle, providing them an additional 30-days to respond. If the customer fails to comply with this request which is within 30 days or the next billing cycle the customer is then removed from the CARE program.

[5]Resolution E-3586 dated January 20, 1999, approved random income verification.

As authorized, SDG&E accepts both public assistance program participation and income documents as proof of CARE eligibility. Customers are encouraged to provide proof of participation of a household member receiving benefits from any one of the six public assistance programs within the last 12 months. SDG&E believes it is easier for our customer to provide proof of participation in an assistance program versus proof of household income documents. The six public assistance programs are Medi-Cal, Women Infants and Children (WIC), Low Income Home Energy Assistance (LIHEAP), Healthy Families A & B, Temporary Assistance for Needy Families (TANF), and Food Stamps. If no one in the household participates in any of the programs mentioned above or by customers' own choice, customers can send copies of income documents for every household member receiving income or aid.

To continue receiving the CARE discount, SDG&E requires customers to return the completed and signed PEV form along with required document(s) in the postage paid envelope provided within 90 days. All received PEV forms and attached document(s) are carefully reviewed and followed up, if necessary, by CARE employees. The results of the PEV process could be:

Complete: A customer is PEV approved when a completed application is received with proof of income documents showing household income within qualifying guidelines, or proof of participation of a household member in an assistance program. Customer will continue to receive the CARE discount.

Incomplete: Customers who fail to provide signature or income documents are mailed a system-generated *incomplete* letter, specifying the missing information, in their preferred language and English. If the customer provides the missing information within the 90-days of the PEV mailed date, the customer will continue to receive the CARE discount.

Ineligible Application: A customer's application is found ineligible when:

- The completed application is received with proof of income above the guidelines.
- The customer fails to supply income documents but marks an income range above qualifying criteria.

The customer is removed from CARE, reinstated on the applicable non-CARE rate, and may receive corrected billings.

Customers may also voluntarily submit a CARE application and documentation proving eligible income or participation in one of the assistance programs. The customer account is updated and removed from the PEV process for 24 months.

LIEE

All homes receiving LIEE program services must be income eligible. SDG&E verifies customer eligibility for LIEE at the initial enrollment stage based on the following enrollment types:

- **Full Income Documentation** – Verification of total household income as detailed in Section 2.2 of the "LIEE Program Statewide Policy and Procedure Manual" (see attached herein) and within the annual income limits as set forth by the Commission.

StatewideP&PManual
-2006-final_rev04_20

- **Targeted Self-Certification** – Customers identified in low-income demographic geographic areas may enroll by self-certifying that their total income is within the annual income limits as set forth by the Commission. The targeted self certification enrollment process was adopted by the Commission in D. 05-10-044 and D. 06-12-038.

- **Categorical Eligibility** – D. 06-12-038 authorized the utilities to implement categorical eligibility enrollment. Customers may be enrolled in the program with proof of current participation of a household member in any one of the following local, state, or federal assistance programs:
    - Medi-Cal
    - Food Stamps
    - TANF (AFDC)
    - WIC
    - LIHEAP

- Healthy Families A & B

- CARE customers who have been post enrollment verified (PEV) within the last 12 months may be eligible to participate in the LIEE program without providing additional income documentation if their income status has not changed.

SDG&E does not perform any type of LIEE recertification process.

III. CONCLUSION

SDG&E appreciates this opportunity to provide further detail and clarity regarding its Application and looks forward to working with the Commission and other interested parties in this proceeding. This concludes SDG&E's responses.

Respectfully submitted,

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2006
Low Income Energy Efficiency Program Statewide Policy and Procedures Manual

Applicable to:

Pacific Gas & Electric Company
Southern California Edison Company
Southern California Gas Company
San Diego Gas & Electric Company

October 25, 2005

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1

Introduction

1.1 Overview

This *Program Year 2006 Statewide LIEE Policy and Procedures Manual* (*PY2006 P&P Manual*) describes the policies and procedures followed in the Low Income Energy Efficiency (LIEE) Programs administered by Pacific Gas & Electric Company (PG&E), Southern California Edison Company (SCE), Southern California Gas Company (SoCalGas), and San Diego Gas & Electric Company (SDG&E). This *PY2006 P&P Manual* is accompanied by two other documents with which all contractors working in these programs must comply:

- *California Conventional Home Weatherization Installation Standards*, which describes the materials and installation procedures that must be followed during the installation of measures in conventional homes; and
- *California Mobile Home Weatherization Installation Standards*, which describes the materials and installation procedures that must be followed during the installation of measures in mobile homes;

Copies of these documents (referred to hereafter as the Installation Standards, or the WIS Manuals) may be obtained from the individual utilities.

The policies and procedures in this *PY2006 P&P Manual* are supplemented by the general and specific terms and conditions incorporated into contracts between the utilities and their contract service providers as part of the LIEE Program.

Updates in Program policies and procedures may be issued by the utilities during the course of the 2006 Program Year. The operational interpretation of policies and procedures incorporated into this PY2006 Manual and the associated Installation Standards rests with the utilities' Program Managers. Changes in the means of implementing policies, procedures and standards will be discussed with contractors prior to being made.

1.2 Structure of this Manual

The remainder of this *PY2006 P&P Manual* is organized as follows:

- Section 2 specifies general statewide policies and procedures relating to customer and home eligibility for the LIEE Program.
- Section 3 discusses polices relating to customer outreach and customer relations.
- Section 4 describes the services that are provided under the LIEE Program in the initial home visit.
- Section 5 lists the energy efficiency measures that are available to participants in the PY2006 LIEE Program.
- Section 6 discusses policies relating to minor home repairs and furnace repairs and replacements.
- Section 7 describes polices and procedures relating to the installation of energy efficiency measures and the provision of minor home repairs in participating homes.
- Section 8 summarizes general statewide inspection polices and procedures.
- Section 9 discusses contractor eligibility.
- Section 10 describes policies and procedures relating to natural gas appliance testing.
- Appendix A provides a list of the cities comprising the CEC climate zones used in the determination of ceiling insulation levels and Program eligibility of other measures.

2

Customer and Structural Eligibility

2.1 Overview

This section discusses the eligibility of individual households for LIEE Program services. Eligibility of a household for measures offered through the Program depends on several factors, including:

- Household income;
- The utility services provided by the utility to the dwelling;
- The specific type of structure in which the household resides;
- The ability to obtain the approval of the landlord in the event the household resides in rental property;
- Previous LIEE Program services provided for the property in question; and
- The dwelling's need for energy efficiency measures offered through the Program.

These eligibility requirements are explained below.

2.2 Income Requirements

2.2.1. Income Guidelines

All the utilities use the LIEE income guidelines established by the California Public Utilities Commission ("CPUC" or "Commission") to qualify participants in the LIEE Program. These guidelines are provided to the utilities by the CPUC on an annual basis. There are two sets of income levels that define the income eligibility requirement. As established in D. 01-06-010,[1] the first set of the income levels applies if the applicant is 18 years or older, and no permanent household member is 60 years or older or disabled.[2] The second set of income levels applies if the applicant is 18 years or older and one or more permanent household members is either 60 years of age or older, or disabled. The CPUC updates the LIEE income

[1] See *Interim Opinion: Eligibility Criteria and Rate Discount Level for Low Assistance Programs*, D. 01-06-010, June 7, 2001.

[2] A disability must be a long-term condition in order for the household to qualify for the second tier guidelines.

guidelines every year for inflation. Table 2-1 presents these guidelines for the period of June 1, 2005 through May 31, 2006. This table will be updated annually prior to June 1.

Table 2-1: Income Guidelines (June 1, 2005 Through May 31, 2006)

Number of People Living in Household	If the applicant is 18 years or older, and NO permanent household member is 60 years or older or disabled, total household income before taxes cannot exceed:	If the applicant is 18 years or older and ONE OR MORE permanent household members is either 60 years of age or older, or disabled, total household income before taxes cannot exceed:
1	$24,200	$27,700
2	$24,200	$27,700
3	$28,400	$32,500
4	$34,200	$39,200
5	$40,000	$45,900
6	$45,800	$52,600
If greater than 6, add the following amount per person	$5,800	$6,700

2.2.2. Types of Income Included in Household Income

For the purposes of determining Program eligibility, all income is considered, from all household members, from all sources listed in Table 2-2, whether taxable or non-taxable income, including (but not limited to) wages, salaries, interest, dividends, child support, spousal support, disability or veteran's benefits, rental income, Social Security, pensions and all social welfare program benefits before any deductions are made. Table 2-2 indicates the specific items included as income for the purpose of determining eligibility for the LIEE Program.

The following types of receipts are *not* considered household income for the purposes of determining eligibility:

- Loan proceeds;
- Assets (money in bank accounts, a house, a car or other property of possessions);
- Funds transferred from one applicant account to another; or
- Liquidation of assets (other than the portion representing capital gains).

Table 2-2: Items Included in Income

Wages, salaries and commissions	401K payments or withdrawals[1]
Alimony payments	Rental income and royalties[2]
Child support payments	School grants, scholarships or other aid*
Disability benefits	Self-employment earnings[2]
Foster care payments	Social security payments
Realized capital gains on assets	Housing subsidies
Interest and dividends on assets	Supplemental Security Income (SSI) payments and State Supplemental Payments (SSPs)
Food stamps	Temporary Assistance to Needy Families (TANF) payments
Gambling/lottery winnings	Unemployment Benefits payments
General relief	Veterans Administration Benefit payments
Monetary gifts (both one-time and recurring)	Workers Compensation payments
Insurance settlements or legal settlements*	Union strike fund benefits
Pension payments or withdrawals*	

1 Other than loans.
2 For rental income and self-employment income, only positive values of income are included. Negative net rents and negative self-employment income are ignored.

2.2.3. Verification of Income

Income documentation must be reviewed, recorded, copied and retained by service providers prior to the installation of measures for all prospective participants. Qualification for other programs cannot be taken as adequate evidence of qualification for the LIEE Program, except in the case where the utility has verified that the customer is CARE-eligible within the past year. CARE self-certification does not automatically qualify a household for LIEE, except in the case of group homes, where it is specifically allowed.

The utility will periodically audit income documentation retained by the contractor. In the event that documentation is not complete and correct for a participant, payment to the contractor for the provision of Program services to that unit may be disallowed.

The kinds of income documentation required by the Program include but are not limited to those presented in 2-3. In applying these documentation requirements, the following stipulations must be observed:

- Current award letters must include the value of the award and the period of time in question. They must also be dated within one year of the customer's signature date and must list the customer's name.

- Affidavits relating to gifts must indicate the amount and frequency of the gift(s). They must also contain the name, phone number, address and signature of the giver.
- In determining rental income, it must be understood that a renter-landlord relationship exists between household members when a room or rooms in the home are being rented. Unless the renter is a dependent of someone in the household, the renter's income is not included in household income and the renter is not counted as a household member. The rental payments count as household income. In the event that the renter is a dependent of someone in the household, the renter's income is counted, the renter is considered as a household member, and the rental payment is not counted as part of household income. A dependent is anyone claimed on the applicant's income tax return.
- Federal income tax documentation must include copies of all 1099s and W-2 forms.
- Affidavits from an employer who pays the applicant cash wages must be on the employer's letterhead and include the company name, address and phone number. It must also include the name of the applicant, total amount paid to the applicant, and the frequency of payments, and must contain a signature from the employer's authorized representative.

Table 2-3: Types of Income Documentation

Type of Income	Documentation
Wages, salaries and commissions	Copy of customer's payroll check stub(s) OR Federal income tax filing showing gross income OR affidavit from employer (for cash wages only, and only where just one employer)
alimony or child support payments	Copy of check, bank statement, OR most recent court document stating amount
Disability benefits, foster care payments, Unemployment Benefits, VA Benefits, Workers Compensation	Copy of checks stubs OR copy of most recent award letter
CAPITAL gains	Federal Income Tax filing showing capital gains
Food stamps	Copy of most recent award letter OR food stamp/cash issuance letter (indicate TANF or General Relief)
Gambling/lottery winnings	determined on case-by-case basis
General relief	Copy of most recent award letter (Notice of Action) OR copy of uncashed check(s) OR copy of direct deposit statement(s)
Monetary gifts	Copy of customer's bank statement OR affidavit from gift giver
Proceeds from insurance settlements or legal settlements	Copy of settlement document
Interest and dividend income	Copy of customer's bank statement(s) OR copy of customer's investment statement(s) OR Federal Income Tax filing showing gross income
Pension or 401K payments or withdrawals	Copy of customer's check stubs OR copy of most recent award letter OR Form 1099R from prior year
Rental income [1]	Tax return (Form 1040, Schedule E, Total Rental Real Estate and Royalty Income or Loss) showing rental income OR copy of rental receipts OR copy of rental agreement specifying rent amount and affidavit from tenant
School grants, scholarships or other aid	Copy of award letter OR copies of cancelled checks
Self-employment earnings[1]	Income statement showing most recent quarterly adjusted earnings plus prior year's tax return (1040 Schedule C, Net Profit or Loss) OR written affidavit from an accountant or applicant
Housing subsidies	award letter
SSI payments, TANF payments, or Social Security payments	Copy of most recent award letter (Notice of Action) OR copy of uncashed check(s) OR copy of customer's direct deposit statement
Union strike fund benefits	Copy of benefits payment stub

[1] For rental income and self-employment income, only positive values of income are included. Negative net rents and negative self-employment income are ignored.

- If the applicant receives cash wages for jobs like mowing lawns, babysitting, handyman services, casual day labor, etc., a self-employment affidavit from the applicant is acceptable if it meets all Program criteria.
- In cases where a household claims no income for the past 12 months, the applicant must demonstrate his or her means of financial support other than income. In the event that the applicant cannot provide documentation of either income or other means of support, Program services will not be performed until such information is provided.

2.2.4. Household Income Calculation Procedures

Household income guidelines are based on gross *(pre-tax)* annual income. For self-employed individuals, gross (pre-tax) income is defined to be net profit or loss from self-employment. In the event that a full 12 months of income information is not available, or if there has been a change in the employment status of the household over the past 12 months, it may be necessary to annualize income from a shorter period of time. If, for instance, a household member has been employed for six months, the income earned over this period would be annualized by multiplying it by 2.

It is the intention of the LIEE Program for all outreach personnel to compute annual income as accurately as possible. The calculations used will depend on the type of records available from each household member. Since all household members may not have the same type of income records, it may be necessary, and appropriate, to use more than one method when documenting income for different members of the same household.

2.2.5. Determining Household Size

Household size is the current number of people living in the home as permanent residents. Friends or family on a temporary visit (less than 6 months) are not considered household members nor are their earnings part of household income.

Children and/or other dependents residing in the household *only* on weekends, holidays, or vacations may be counted as part of the household only if the family claims them as dependents on their federal income tax filing. Children by previous marriages who do not reside in the home cannot be considered household members, even if they are receiving child support, unless they are claimed as dependents on the applicant's federal income tax filing.

2.2.6. Qualifying Multifamily Complexes

The LIEE Program makes use of fractional income qualification for certain measures for multifamily complexes. The terms of income qualification are as follows:

- *For the purposes of determining income eligibility,* multifamily complexes are defined as those with five (5) or more dwelling units. Duplexes, triplexes, and

four-plexes will be qualified as single family homes for the purposes of determining income eligibility.

- In multi-family buildings, the following measures may be offered only to dwelling units occupied by income-qualified households: refrigerators, evaporative coolers, and high efficiency window-wall air conditioners.
- To qualify an entire multifamily building for other measures offered by the Program (defined as 80-20 measures), at least 80% of all (occupied and unoccupied) dwelling units must be occupied by income-qualified households. However, if at least 80% of all units adjacent to a common attic space satisfy the 80% rule, that attic space may be treated even if the 80% rule is not satisfied for the entire building. In the event that fewer than 80% of the dwelling units are occupied by income-qualified households, individual dwelling units occupied by qualifying households may still receive all feasible 80-20 measures**.**
- Service providers must review, copy and store income documentation for all households used to qualify an apartment building. The provider must also make its best effort to review and record income documentation for all other households in the multifamily building (i.e., those not used to meet the 80% qualification standard).
- Unoccupied and other non-qualified multifamily dwellings may be weatherized, as long as the multifamily building satisfies the 80% rule for income qualification.

2.3 Service Eligibility

2.3.1. General Service Eligibility Conditions

To be eligible for the LIEE Program, a customer must be served by an active utility account/meter. In an area served by different investor-owned gas and electric utilities (e.g., the SoCalGas-SCE overlap area) the fuel source for the dwelling's space heat shall determine which utility will be the primary provider of weatherization services to the dwelling as long as that fuels source is either natural gas or electricity. In the event that a non-IOU heating fuel is used *and* the home has air conditioning, the electric IOU will be the provider of weatherization measures other than infiltration-reduction measures.

The following measure-specific eligibility requirements will be observed in the LIEE Program.

- ***HVAC Measures.*** HVAC measures are all measures affecting heating and/or air conditioning usage in participating homes. HVAC measures can be divided into infiltration reduction measures and other HVAC measures. Infiltration-reduction measures include door weather-stripping, caulking, outlet gaskets, and evaporative cooler covers. Non infiltration reduction HVAC measures include ceiling insulation, high efficiency window/wall air conditioners, and evaporative coolers. Homes heated with a non-IOU fuel but which also take air-conditioning service

from an IOU are ineligible for infiltration reduction measures, but are eligible for non-infiltration reduction HVAC measures only.

- ***Electric Equipment Measures.*** Electric equipment measures include thread-in compact fluorescents, hard-wired compact fluorescent porch light fixtures (for single family non-mobile homes only), and refrigerator replacements. The utilities will continue to offer all other feasible LIEE electric equipment measures to homes with non-IOU space heating and/or water heating fuels.
- ***Water Heating Measures***. Water heating measures include pipe wrap, faucet aerators, low-flow shower heads and water heater blankets. The utilities will not offer water heating measures to homes that heat water with non-IOU fuels.
- ***Minor Home Repairs***. Minor home repairs include services intended to reduce infiltration, mitigate hazardous conditions, or accommodate the installation of other measures. Minor home repairs that reduce infiltration will not be provided to homes with non-IOU combustion fuels. However, the utilities will perform non-infiltration reduction minor home repairs in these homes. Subject to the provisions of Section 10 of this P&P Manual, furnace repair and replacements and water heater repairs and replacements may be made in owner-occupied homes when necessary to mitigate NGAT fails.[3] The utilities will not offer furnace repairs/replacements or water heater repairs/replacements to homes that use non-IOU combustion fuels because they are not authorized to repair or replace appliances using these fuels.

2.3.2. Referrals

In order to provide the maximum opportunity for eligible customers to receive all feasible measures, the four IOUs—PG&E, SCE, SoCalGas, and SDG&E—will set up a referral system with each other and with the local Department of Community Services and Development (DCSD) agencies.

In the event that a customer uses a space or water heating fuel provided by an entity other than an IOU, the utility will install measures for which the customer is eligible under the utility's program and refer the customer to local agencies funded by the California Department of Community Services and Development (DCSD) for Low-Income Home Energy Assistance Program (LIHEAP) eligible measures not installed under the LIEE Program. In order to implement this step, the utilities will work with DCSD and its local contractor agency network to set up a formal referral procedure.

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[3] Note that NGAT fails are defined to include cases where appliances are non-operational, or where a furnace is absent and the household uses another gas appliance for space heating. Furnaces and water heaters may be serviced in non-owner-occupied homes to mitigate NGAT problems if servicing can be done at a minimal cost.

In the event that a customer lives in an area where one IOU utility provides one service (either natural gas or electricity) and another IOU provides the other fuel (either electricity or natural gas), and if one utility is not providing all measures, a referral system will also be used to give the customer the opportunity to receive all measures for which he/she is eligible under the LIEE Programs of the two utilities. If the electric utility contacts the household first, it will install measures for which the household is eligible under the electric utility's Program and refer the customer to the natural gas utility's program for measures relating to natural gas end uses. If the initial contact is made by the natural gas utility, this utility will install measures for which the customer is eligible under the utility's program and refer the customer to the electric utility's program for measures applicable to electric end uses. In both cases, the utility installing infiltration measures will conduct natural gas appliance testing as long as the utility serves natural gas somewhere in its service area (and thus has trained gas service representatives). In the event that the customer has electric space heat served by an electric-only utility, the electric utility will not install infiltration measures if natural gas appliances are present. However, in this case the electric utility will refer the home to the local DCSD agency(ies).

In order to mitigate the duplication of costs that could otherwise be associated with customers participating in two utility programs, two steps shall be taken:

- First, outreach staff in each program will accept customer income qualification documentation already obtained by outreach staff in the other program; and
- Second, gas and electric utilities will offer common energy education in overlap areas so that customers will need to receive education only under one program.

Additionally, the minimum measure requirement for eligibility (see Section 2.9) will not apply to homes referred by one IOU to another, if the first IOU establishes that a home meets this minimum for the combination of gas and electricity.

2.4 Treatment of Master-Metered Units

Customers whose service is covered by master meters may participate in the LIEE Program. For these customers, the following policies and procedures will apply:

- Deemed savings can be used in the evaluation of Program savings for master-metered units.
- Program personnel will explain the Program to the landlord or property manager prior to contacting tenants.

- If the master-metered dwellings are multifamily units, the terms of Section 2.2.6 will apply. Landlords must be informed that income documentation will be required for the purposes of determining eligibility.
- Utilities may set a maximum on the percentage of participants treated by a contractor in a program year that are master-metered. This percentage will generally reflect the predominance of master-metered dwellings in the service area, but will be no higher than 15%. Table 2-4 presents the limits on the treatment of master-metered units for the four service utility programs. Three of the utilities with relatively high proportions of low-income customers on either electric or gas master meters will impose caps of 15%. SCE, which has a relatively low percentage of low-income customers on master meters (primarily because master metering is less common on electric meters) will impose a cap of 8%.

Table 2-4: Caps on Master-Metered Dwellings

Characteristic	PG&E	SCE	SoCal Gas	SDG&E
Estimated percentage of low-income dwellings with electric master- meters	10.0%	8.0%	n/a	5.0%
Estimated percentage of low-income dwellings with natural gas master- meters	18.0%	n/a	16.0%	30.0%
Cap on master-metered dwellings as a percentage of total treated units	15.0%	8.0%	15.0%	15.0%

These caps will be implemented through limits placed in contracts with installation contractors.

2.5 Structural Eligibility

Public Housing. Public housing is eligible for participation in the LIEE Program, but must meet the program eligibility requirements in order to participate. (Note that this does not include on-base military housing, insofar as these dwelling units are not served by the investor-owned utilities.)

Housing Type. Single family homes, multifamily dwelling units, and mobile homes are eligible to participate in the program.[4] To preserve equity, the utilities have adopted a long-term goal of having the mix of dwellings treated under the Program reflect the residence type

[4] Multifamily dwellings are defined as those in buildings with five (5) or more dwelling units.

mix found in the low income communities served by their programs. The multifamily targets are cast in terms of units treated, and are set equal to the proportions of multifamily dwellings in the overall low-income housing stock of each utility's service area. Table 2-5 presents the targets for multifamily units in the four service areas.

Table 2-5: Long Term Targets for Treatment of Multifamily Dwellings

PG&E	SCE	SoCal Gas	SDG&E
23.1%	51.3%	32.8%	47.5%

There are, of course, several reasons why homes treated in a specific year may not reflect the dwelling type mix of low-income housing:

- Other programs may overlap the LIEE Program, and may affect the overall treatment of eligible units.
- The mix of homes treated in the past under individual utility programs may not represent the dwelling type mix of that utility, so current programs may be designed to bring total program treatment rates into alignment.
- It may make sense from a marketing and outreach standpoint to target certain residence types each year, with the expectation that equity would be achieved over time.

As a result, the utilities may promote or limit the treatment of multifamily units in individual program years as long as these actions are consistent with the achievement of these long-term goals.

Housing on Non-Residential Rates. In general, only residential customers on residential rates are eligible to participate in the LIEE Program. However, group homes on non-residential rates are eligible for LIEE services as long as they are currently eligible for CARE under current CARE guidelines applicable to group living facilities,[5] and the structure in question is a single family, multifamily or mobile home suitable for weatherization under LIEE standards.[6]

CARE-eligible facilities include but are not limited to the following.

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[5] See D. 92-04-024, April 8, 1992; D. 92-06-060, June 17, 1992; D. 95-10-047, October 18, 1995. Also see *Commission Advisory and Compliance Division, Workshop Report on California Alternate Rates for Energy (CARE): The Development of Guidelines to Implement CARE for Migrant Farmworker Housing , Agricultural Employee Housing, and Employee Housing*, May 1995.

[6] It should be noted that CARE income eligibility requires that 100% of the residents of the facility (other than live-in staff) meet the CARE income guideline. This income eligibility criterion will be applied to group homes for the purposes of determining LIEE income eligibility.

- Migrant farmworker housing centers, as defined in Section 50710 of the Health and Safety Code, provided that 70% of all energy usage in master-metered facilities and 100% of all energy usage in individually-metered facilities is residential.
- Privately owned employee housing, as defined in Section 17008 of the Health and Safety Code, that is licensed and inspected by the state and local agencies pursuant to Part I of Division 13, and in which 100% of all energy use is residential.
- Housing for agricultural employees operated by non-profit entities, as defined in Subdivision (b) of Section 1140.4 of the Labor Code, and that has an exception from local property taxes pursuant to subdivision (g) of the Revenue and Taxation Code, provided that 70% of all energy usage in master-metered facilities and 100% of all energy usage in individually-metered facilities is residential.
- Non-profit group living facilities, defined as transitional housing (such as a drug rehabilitation or halfway house), short- or long-term care facilities (such as a hospice, nursing home, children's home or seniors' home), group homes for physically or mentally challenged persons, or other nonprofit group living facilities.
- Homeless shelters, hospices and women's shelters with the primary function of providing lodging and which are open for operation with at least six beds for a minimum of 180 days and/or nights (including satellite facilities in the name of the licensed corporation, where 70% of the energy supplied is for residential purposes).

As mandated by AB 868 and reiterated by an October 1, 2004 Administrative Law Judge's Ruling,[7] migrant housing centers are presumed to meet CARE income eligibility guidelines without verification. This presumption will also be used in determining LIEE income eligibility of such facilities. For the purpose of determining eligibility of other types of housing on non-residential rates, income qualification shall be considered satisfied if the facility is on CARE. These facilities represent a unique situation and this income verification procedure shall not be considered a precedent for other circumstances.

2.6 Home Ownership Documentation

2.6.1. Overview

Home ownership must be verified in order to ensure that the legal owner signs the Property Owner Waiver. It is the responsibility of the contractor to review the documents and ensure proof of home ownership. If a home is in the name of a deceased spouse, the surviving

[7] Administrative Law Judge's Ruling Seeking Input Regarding Assembly Bill 868 (Care Eligibility for Migrant Housing Centers), October 1, 2004.

spouse should be considered as the owner. For example, if the home is in the husband's name and never transferred to the widow, the widow is considered the current homeowner.

Any of the following may be used for home ownership documentation.

- Current loan or mortgage documents.
- Property tax records or bills.
- Home owner property insurance (fire insurance).
- Mortgage payment invoices or book.
- Data Quick or similar title search service.

2.6.2. Multiple Ownership

If the home is owned by more than one person, the homeowner will be considered any one of the persons whose name appears on the document.

2.6.3. Life Estate/Living Trust

A homeowner may have established a "Life Estate" or "Living Trust." With either, the property is deeded to another individual or trust but the original owner maintains control of the property. The original owner may sign as the property owner only if he or she has a copy of Life Estate or Living Trust documents. A copy of the Life Estate or Living Trust documents must be maintained in the customer's file.

2.6.4. Power of Attorney (POA)

In cases where the property owner is not available to sign on the Agreement, any person having a Power of Attorney (POA) for that owner may sign the Agreement. A copy of the POA must be maintained in the customer's file.

2.6.5. Property Management Companies

Authorized representatives of property management companies may sign for property owners for both single family and multifamily agreements under either of the following conditions: the property management company has a standard Power of Attorney agreement with the property owner; or the property management company has a signed Management Agreement with the owner authorizing the property management company to act as the agent for the specific property. A copy of the Power of Attorney or the Management Agreement must be kept in the customer's files for that customer.

2.7 Treatment of Rental Units

2.7.1. Property Owner Approval

Rental units may not be treated until a written Property Owner Waiver has been received. This approval must cover the participation of the unit in the Program as well as the installation of specific measures. Such approval is valid for a period of 12 months from the date it is provided by the property owner. If approval of the legal owner is not received prior to the installation of measures, the Contractor will be required to reimburse the utility for all payments received from the utility for treating the unit(s) in question.

2.7.2. Eligibility of Rental Units for Certain Measures

Assuming that the permission of the property owner has been approved and that other eligibility conditions are met, rental units may be treated under the Program. However, the following policies relating to specific measures shall be applied.

- Rental units are eligible for evaporative coolers, air conditioners, refrigerators and hard-wired fixtures, to the extent that these measures continue to be provided under the LIEE Program.
- Rental units are not eligible for furnace replacements or major furnace repairs associated with the mitigation of NGAT fails. However, minor repairs and adjustments may be made to furnaces if these actions would improve the performance of the system at a minimal cost.
- Rental units are not eligible for water heater repairs and replacements associated with the mitigation of NGAT fails. However, services and adjustments may be made to water heaters if these actions would improve the performance of the system at a minimal cost.
- Evaporative coolers and hard-wired fixtures will be provided without charge to either the tenant or the landlord. Refrigerator and air conditioner replacements will also be provided at no charge to either the tenant or the landlord, except in the instance where the landlord owns the refrigerator or air conditioning unit that is replaced and also pays the utility bill. In these instances, the utilities may make payments to installation contractors that cover only part of the cost of replacement.

2.8 Previous Program Participation

In order to provide services to the widest range of low-income households possible, the utilities place certain restrictions on the participation of homes that have previously been treated under the LIEE Program. These restrictions are as follows.

- If utilities pre-screen customer lists before providing them to service providers, utilities may target homes that have not yet participated in the LIEE Program.

- In general, homes that have participated in the LIEE Program within the past 10 years are not eligible for services in the current program.[8] However, the following exceptions to this policy will be made. First, a home that has been treated under the LIEE program during the past 10 years will be considered eligible for ceiling insulation if the home needs this measure, and if ceiling insulation was previously deemed non-feasible for any reason other than customer refusal (e.g., knob and tube wiring) that has since been resolved or is no longer considered to result in non-feasibility. Second, a home that has received infiltration-reduction measures, and has not received a furnace replacement through the program, will be revisited if the customer calls the utility to report a malfunction of the furnace and the utility determines a hazardous condition exists[9]. Such homes will be eligible only for furnace repairs or replacement on the second visit. Third, a home that is currently income eligible, has been treated under the LIEE program, but has not received a refrigerator in the past 10 years, will be considered eligible to receive a refrigerator. Fourth, any unit that previously failed to pass a combustion appliance safety pre-test or a pre-weatherization NGAT assessment, and therefore did not receive infiltration-related measures, shall be considered eligible for the measures it did not receive if the test is subsequently passed during the 10-year window. In all four situations identified above, the home will be eligible for only those services listed under this exceptions policy.
- Another exception to the 10-year rule will be granted on a temporary basis in the SCE service area. Due to the fact that SCE's LIEE services were previously offered under a variety of programs rather than a single comprehensive program, and given that changes in eligible measures have recently occurred, participants in the SCE service area between 1997 and 2005 will be eligible to receive two measures in certain climate zones: central air conditioners in Climate Zones 14 and 15; and window/wall air conditioners in Climate Zone 10. These temporary exceptions relating to the SCE Program will be dropped after the 2008 Program Year.

2.9 Need for LIEE Services

A home must need a minimum number of Program services in order to be eligible for participation in the Program. For all homes meeting the minimum number of necessary measures, all feasible measures must be installed.

The following eligibility conditions shall be applied.

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8 As indicated in Section 2.9, the provision of CFLs and/or energy education does not constitute program participation in the context of this statement.

9 A hazardous condition shall be defined as any condition that in the normal course of business, a utility gas service person/energy tech would routinely shut off and/or cap the subject appliance prior to leaving the customer's home because it was not repairable within the utility's normal scope of work.

- In an area served by an investor-owned combined gas and electric utility (e.g., an area in which SDG&E or PG&E serves both electricity and natural gas) or an electric-only utility (SCE), the minimum would be either ceiling insulation, window/wall air conditioning, evaporative cooling, refrigerator replacement, or three other measures.[10]
- In an area served by an investor-owned gas utility but not an investor-owned electric utility, the minimum would be either ceiling insulation or three other measures that are covered under the gas utility's LIEE Program.
- In an area served by multiple investor-owned gas and electric utilities (e.g., the SCE-SoCalGas overlap area), the minimum number of measures will be defined as if the home were served by a combined gas and electric utility, and the utilities will use a referral system to ensure the installation of all feasible measures.

However, electric utility or dual fuel outreach/education personnel will install up to five (5) CFLs at the time of the assessment of the home. The provision of CFLs does not constitute program participation from the standpoint of determining future Program eligibility. That is, it does not restart the 10-year clock used to determine Program eligibility. However, the utilities will track the installation of CFLs in homes receiving only CFLs and will not pay for the installation of additional CFLs in these homes within a period of seven years.

For all homes meeting the minimum for necessary measures, all feasible measures must be installed.[11] As stipulated in the standard non-feasibility criteria, if a measure is already in place and operating properly, even if it does not meet the current Installation Standards for new installations, it should not be removed and replaced.

[10] For the purposes of determining the number of measures needed, all minor home repairs (combined) will count as a single measure.

[11] If a customer refuses a measure, that measure is considered non-feasible. See Section 7.

3

Customer Outreach and Customer Relations

3.1 Introduction

This section presents statewide LIEE policies and procedures in the areas of customer outreach and customer relations. Subsection 3.2 discusses policies relating to the recruitment of participants for the Program, while Subsection 3.3 focuses on the maintenance of proper relationships with customers. It should be understood that the policies in this section are supplemented by additional provisions in both specific and general terms and conditions included in formal agreements between utilities and contractors.

3.2 Customer Outreach

Contractors recruiting customers for participation in the LIEE Program are required to follow strict policies relating to customer outreach. Customer outreach policies cover promotional guidelines, limitations on representations made by contractors and their employees, outreach interactions, and tracking.

3.2.1. Promotional Guidelines

Only promotional materials approved by the Utility Program Manager may be used to promote participation in the LIEE Program.

3.2.2. Representations by Contractor and Contractor's Employees

Neither the contractor nor his/her employees may imply that they are employees of the Utility or affiliated with the Utility in any way other than through the LIEE Program.

3.2.3. Outreach Interaction

Outreach personnel must effectively contact and interact with a diverse set of customers. These personnel shall have available any necessary multilingual staff and/or translators.

3.3 Customer Relations

3.3.1. Introduction

It is imperative that both contractors and utility employees maintain proper customer relationships. The LIEE Program is a customer service program, and should be delivered accordingly. Specific polices with respect to customer relations are specified below.

3.3.2. Expedient Service

Service must be provided to participants in a reasonable time frame, as determined by the utility. Crews must inform customers of the approximate amount of time required for installations, inspections and gas appliance testing (if required), and shall provide services as expeditiously as possible.

3.3.3. Other Work

Only three types of work for participating customers may be billed to the LIEE Program: energy education, the installation of eligible measures, and the provision of eligible minor home repairs. The contractor is prohibited from selling other services to the customer or charging the customer for any other service.[1]

3.3.4. Staff Identification

All contractor or subcontractor employees who engage in customer contact must wear identification badges provided or approved by the utility at all times. Each badge must include a color photo of the employee. If the contractor produces badges, templates for identification badges will be provided by the utility. The contractor shall immediately return or destroy the ID badges of all personnel no longer working for the contractor or its subcontractors on the LIEE Program. In the event that the contractor destroys the badges, the contractor shall notify the Program Administrator in a timely fashion.

3.3.5. Crew Appearance

LIEE contractors are responsible for the courtesy and appearance of their employees. Discourteous personnel and unprofessional appearance will not be tolerated in this program and may constitute grounds for contract termination.

3.3.6. Clients 18 Years or Older

In general, contractors shall enter clients' residences only when adults, eighteen (18) years of age or older are present. The only exception to this rule is that contractors may enter the

[1] Note that this provision does not preclude the possibility of requiring a co-payment for the installation of one or more measures, if approved by the utility.

home of a customer under eighteen (18) years of age if the customer is married or has been declared an emancipated minor by the courts.

3.3.7. Customer Complaint Procedures

The contractor must make every effort to resolve customer complaints. The Contractor must notify the utility or its designee of the status of each complaint within 24 hours of the contractor's receipt of the complaint. If the complaint deals with customer safety, the contractor must resolve it within 24 hours. If the complaint does not relate to customer safety, the contractor must resolve the complaint to the satisfaction of the customer within 10 days of the receipt of the complaint. The acceptability of the contractor's resolution of complaints will be determined at the sole discretion of the utility. If the contractor has not resolved the complaint within the mandated period, the contractor shall notify the utility or its designee of this failure.

3.3.8. Substance Abuse and Smoking Policy

While at the customer sites, contractor personnel shall not be under the influence of drugs or alcohol nor be using drugs or alcohol when on the job. Smoking is prohibited within the residence being served at all times and on the customer's property without the customer's approval.

3.3.9. Incident Report

Contractors must immediately contact the utility or its designee if during a home visit there is damage to a customer's home and/or property or if the contractor's employee has been accused of an illegal act**.** Within 24 hours, the contractor will inform the utility or its designee of the resolutions of all such incidents.

4

Procedures for Pre-Installation Contacts

4.1 Introduction

This section describes the procedures to be followed by outreach workers and contractors during pre-installation visit or visits to a participating home. These procedures cover the provision of general program information, the collection of data on the household and the home, the administration of home energy education, the completion of the home energy audit, and the installation of CFLs.

4.2 Description of Program Services

In the course of the initial home visit, the outreach worker shall provide a thorough description of the program services available to the low-income household. At a minimum, this description must cover the following services:

- The LIEE Program, including program goals, eligibility requirements, eligible measures, and procedures. The procedures to be covered by this description must encompass energy education, available energy efficiency services and minor home repairs, general installation procedures, inspection procedures, and natural gas appliance testing procedures (if applicable).
- Other programs designed to repair/replace furnaces or install other energy efficiency measures (if these are offered as separate programs).
- The California Alternate Rates for Energy (CARE) Program. Outreach workers will also provide assistance in enrolling the customer in CARE if the customer chooses to participate in it.
- Other utility programs designed to provide services to low-income customers, including level-payment programs, medical baseline programs, and other energy efficiency programs for which the customer may be qualified.
- Similar programs offered by DCSD and other known energy related programs.

The outreach worker may also describe government programs like the Internal Revenue Service's earned income tax and the State of California's Healthy Families Program. At no time shall Program personnel promote or provide fee-based services to income-qualified applicants in lieu of free services offered under the LIEE Program.

4.3 Data Collection

During the initial interview, the outreach worker will also collect data needed to document eligibility and to meet tracking and reporting requirements. In general, information on the following factors must be collected:

- Name, address and phone number of applicant,
- Age and disability status of applicant or other permanent household member,
- Residence type and dwelling status,
- Referral information,
- Gas and/or electric account information,
- Appliance/HVAC system information, and
- Home square footage.

Demographic data may also be collected if offered by the customer.

4.4 In-Home Energy Education

In-home energy education will be provided to all income-eligible applicants whose dwellings require the minimum number of measures, using forms and checklists provided by the utilities. Energy education will cover five general areas: heating and cooling usage, water heating system usage, major electric and gas appliance usage, small appliance usage, and lighting usage. Topics to be covered in the course of energy education must include:

- The general levels of usage associated with specific end uses and appliances,
- The impacts on usage of individual energy efficiency measures offered through the LIEE Program or other Programs offered to low-income customers by the utility,
- Practices that diminish the savings from individual energy efficiency measures, as well as the potential cost of such practices,
- Ways of decreasing usage through changes in practices,
- Information on CARE, the Medical Baseline Program, and other available programs,
- Appliance safety information,
- The way to read a utility bill, and
- The procedures used to conduct natural gas appliance testing (if applicable).

4.5 In-Home Energy Assessment

An assessment of the structure will be completed on homes with income-qualifying applicants using a form provided by the utility. The assessment will identify measures to be installed through the Program. The presence of natural gas appliances will be determined. Assessment forms will be provided by the utility or approved by the utility if the contractor has an acceptable in-house form.

4.6 Installation of Compact Fluorescent Light Bulbs

The electric or dual-fuel utility outreach worker will install compact fluorescent light bulbs during the initial home visit. The number of compact fluorescent light bulbs installed will depend on unit type, feasibility and amount of time each lighting fixture is used (3.5 hours minimum); however, no more than five (5) bulbs may be installed in a home. Leaving compact fluorescent light bulbs with customers for installation at a later time is not allowed.

4.7 Other Responsibilities

Income documentation must be collected and property owner approval must be obtained prior to the installation of Program measures. These requirements are discussed in Section 2.

5

Program Measures for PY 2006

5.1 Introduction

This section identifies the energy efficiency measures available through the PY2006 LIEE Program and discusses the means by which changes in eligible measures are made over time. Subsection 5.2 focuses on measures offered under the PY2006 program, while Subsection 5.3 outlines the process that will be used to evaluate measures for inclusion in the Program in future years.

5.1. Program Measures for 2006

Table 5-1 indicates the specific Program measures that are eligible for the LIEE Program for PY 2006. Note that there are some restrictions on the eligibility of individual homes for some of these measures. See Section 7.

5.2. Consideration of Changes to Measure List

Utilities will jointly evaluate existing Program measures in the course of developing recommendations for subsequent year programs. The utilities evaluate these measures using all available information on both costs and benefits (including energy benefits as well as non-energy benefits), and develop a set of recommendations for CPUC approval. If warranted by the evidence, these recommendations may vary across climate zones. The utilities will also implement a process for considering new measures to be added to the Program. This process will entail the issuance of a solicitation for recommendations for new measures and the assessment of the cost-effectiveness of these measures.

Table 5-1: Eligible Measures for 2006

Measure	Eligibility
Ceiling Insulation	All Climate Zones and Residence Types
Low Flow Showerheads	All Climate Zones and Residence Types
Water Heater Insulation	All Climate Zones and Residence Types
Weather-Stripping Doors	All Climate Zones and Residence Types
Caulking	All Climate Zones and Residence Types
Outlet Cover Plate Gaskets	All Climate Zones and Residence Types
Faucet Aerators	All Climate Zones and Residence Types
Water Heater Pipe Insulation	All Climate Zones and Residence Types
Evaporative Coolers	Climate zones 10-16 only; single family and mobile homes only
Refrigerator Replacements	All Climate Zones and Residence Types
Evaporative Cooler and Air Conditioner Vent Covers	All Climate Zones and Residence Types
Hard-Wired Compact Fluorescent Lamp Porch Light Fixtures	All climate Zones, but Single Family Homes only
Thread-Based Compact Fluorescent Lamps	All climate Zones and Residence Types
High Efficiency Window/Wall Air Conditioners	Climate Zones 10-15 only
High Efficiency Central Air Conditioners	Climate Zones 14 and 15 only
Duct Testing and Sealing	All Climate Zones for Single Family and Mobile Homes with gas space heating; Only Climate Zones 10-16 for homes with electric space heating
Minor Home Repairs[1]	All Climate Zones and Residence Types

[1] There are multiple submeasures included under minor home repairs. Minor home repairs are constituted by services that either reduce infiltration (e.g., window repairs), mitigate a hazardous condition, or accommodate the installation of Program measures (e.g., attic venting). Furnace repairs and replacements fall under the category of minor home repairs, and are provided only when necessary to mitigate NGAT fails and pursuant to the installation of infiltration-reduction measures. Water heater repairs and replacements are also considered minor home repairs, and are provided only to mitigatge NGAT fails or to replace leaky water heaters. For the purposes of qualifying a home for the Program, all minor home repairs (combined) count as a single measure.

6

Minor Home Repairs

6.1 Introduction

This section describes the LIEE policies and procedures relating to minor home repairs. Section 6.2 discusses the specific minor home repairs provided through the LIEE Program. Section 6.3 describes Program limits on expenditures on general types of minor home repairs. Finally, Section 6.4 describes the prioritization criteria that will be used by Program Managers to prioritize repairs for a specific home when not all needed minor home repairs can be made within the constraints of the budget limits for that home.

6.2 Minor Home Repairs

Minor home repairs are repairs required to enable installation of weatherization measures, to reduce infiltration, or to mitigate a hazardous condition.

In *owner-occupied* homes receiving infiltration-reduction measures, minor home repairs include furnace repair or replacement and water heater repair or replacement, when necessary to mitigate natural gas appliance testing (NGAT) fails that cannot be corrected with service by utility gas service personnel (or their designated representative). Such NGAT fails may include, but are not limited to, CO above the action level, inadequate draft, unsafe flue/vent pipe/system, unacceptable flame or flame change when air handler comes on, a non-operable appliance, or the absence of a furnace in cases where another gas appliance is used for space heating.

In *all* homes receiving infiltration-reduction measures, minor home repairs also include other corrections needed to pass the NGAT protocol, including but not limited to, adding combustion and ventilation air (CVA) venting, and other corrections listed in Table 6-8. It is the general policy of the LIEE Program that these repairs must be made if they are needed and feasible, subject to budgetary limits. Table 6-1 through Table 6-8 present the minor home repairs that are provided under the LIEE Program. Table 6-1 lists general structural repairs. Table 6-2 enumerates repairs required to mitigate catastrophic envelope leaks. Table 6-3 lists repairs necessary to support the installation of ceiling insulation. Table 6-4 lists repairs required to support weather-stripping and caulking. Table 6-5 indicates repairs required to install attic ventilation. Table 6-6 lists repairs required to support the installation

of water heating measures. Finally, Table 6-7 enumerates repairs made to mitigate non-appliance hazards. Finally, Table 6-8 indicates repairs required to mitigate natural gas appliance fails.

Table 6-1: General Repairs

Small holes in interior surface of wall between conditioned and unconditioned Space ▪ Repair holes 1" in diameter or smaller ▪ Repair holes between 1" and 6"	**Windows** ▪ Replace glazing compound ▪ Replace glass ▪ Replace sash[1] ▪ Repair or replace mullions/muntins[1] ▪ Install new window (not just glass)[1] ▪ Install casing
Exterior wall ▪ Patch stucco (up to 36 sq. in.) ▪ Replace missing siding	

Table 6-2: Repairs Required to Mitigate Catastrophic Envelope Leaks

Large holes in interior surface of wall between conditioned and unconditioned Space[2,3] ▪ Repair large portion of drywall or plaster (up to 4 sq. ft.). ▪ Replace entire drywall or wood panels (up to 8 sq. ft.).	**Windows and Doors** ▪ Replace entire window[1] ▪ Replace entire door[1]

[1] Replaced only with Program Manager's approval on a case-by-case basis.

[2] Structural/framing members not included.

[3] Surface left in a prepared-for-paint condition.

Table 6-3: Repairs Required to Support Installation of Ceiling Insulation

Attic access ■ Install weather-stripping ■ Repair access panel ■ Replace molding around access ■ Cut new access hole/opening (interior only and only between joists)	**Retractable ladder** ■ Install cover ■ Install frame and cover ■ Weather-strip opening **Repair holes in ceiling**
Reconnect Duct **Seal Return Plenum** **Closet vent/ceiling** ■ Cover vent with flexible insulation ■ Install solid material to cover opening	**Exhaust vent** ■ Repair/replace bath vent pipe ■ Repair/replace kitchen vent pipe

Table 6-4: Repairs Required to Support Weather-stripping and Caulking

Door Replacement ■ Install door stops ■ Replace door ■ Replace door jamb ■ Plane bottom of door ■ Cut off bottom of door ■ Replace interior casing ■ Replace exterior casing ■ Replace complete pre-hung door unit ■ Adjust hinges ■ Replace hinges ■ Adjust loose screws ■ Replace lock ■ Replace existing night latch	**Door Replacement (cont.)** ■ Install/adjust striker plate ■ Repair/replace subseal[4] **Threshold Repairs/Replacement** ■ Install new threshold ■ Seal threshold ■ Install riser **Caulking Preparation** ■ Install backer rod ■ Clean surface of dirt and oils

[4] Subseal is directly under the riser which is directly under the threshold.

Table 6-5: Repairs Required to Install Attic Ventilation

Gable vent ■ Install new vent ■ Replace screen ■ Repair existing wooden vent	**Eave/soffit vent** ■ Clean screen ■ Replace screen ■ Install new vent
Turbine/dormer vent ■ Install new vent ■ Repair existing vent	

Table 6-6: Repairs Required to Install Water Heating Measures

■ Install combustion air vent ■ Install showerhead adapter

Table 6-7: Repairs Required to Mitigate Non-Appliance Hazards

■ Replace broken/cracked switch/outlet covers ■ Remove combustible and flammable materials from combustion air vent proper clearance zone.

Table 6-8: Repairs Required to Mitigate Natural Gas Appliance Fails

All Appliances ■ Repair gas leaks ■ Replace soldered gas connector	**Cooking Appliances** ■ Correct mobile home kitchen exhaust defect.
Furnaces ■ Correct CVA deficiency ■ Clear covered CVA vent opening/ screen ■ (Owner-Occupied) Repair or Replacement for non-op or NGAT Fail not correctable by Service	**Water Heaters** ■ Correct CVA deficiency ■ Extend vent pipe if termination is too close to evaporative cooler ■ Clear covered CVA vent opening/ screen ■ (Owner-Occupied) Repair or Replacement for non-op or NGAT Fail not correctable by Service

6.3 Limits on Minor Home Repairs

There are two types of limits on costs incurred for minor home repairs, including furnace repairs and replacements, water heater repairs and replacements, and other minor home repairs.

- ***Average Cost Limits.*** These are limits on the average cost of categories of service across all homes receiving the service in question. They are designed to provide overall cost control for the provision of these services.
- ***Individual Home Limits.*** These are defined as limits on the cost that can be incurred for an individual home without the specific approval of the utility Program Manager. Individual home limits are meant to provide for equity in the distribution of program funds across individual households but yet provide Program Managers enough flexibility to respond to individual customer needs and hardship situations.

These limits are presented in Table 6-9. It should be noted that the expenditure limits apply to all minor home repairs, including any actions taken to respond to gas leak/carbon monoxide emission problems identified during the utility's gas appliance testing procedures.

Table 6-9: Caps on Minor Home Repairs

Service	Average Cost per Home Receiving Service	Maximum Cost for Individual Home
Furnace Replacements Central Furnaces Wall/Floor/Direct Vent Furnaces	-	 $2,000[1] $1,500
Water Heater Repairs and Replacements (Total Combined Cost for home receiving one or the other)	$900	$1,250
Other Minor Home Repairs	$300	$750
Furnace Repairs (restriction on repair expenditures relative to cost of replacement) Central Furnaces Wall/Floor/Direct Vent Furnaces	-	 50%[1] 25%
Total of All Minor Home Repairs	-	$2,500

1 Does not include the costs of Title 24 compliance.

6.4 Prioritization of Minor Home Repairs

In the event that a contractor requests permission from the utility Program Manager to exceed the limit on minor home repairs, the Program Manager will base a decision on the status of the Contractor's minor home repair budget, the overall program budget, and the need for the repairs in question. If the Program Manager deems it necessary to limit expenditures on the home, measures will be prioritized using the following general priority list:

- Repairs needed to mitigate immediate hazards (e.g., repairs made to mitigate natural gas appliance testing (NGAT) fails, or door repairs where doors will not close or lock),
- Repairs needed to mitigate major infiltration sources (e.g., broken windows, holes in doors, etc.),
- Repairs required to permit the installation of a measure, and
- Other repairs.

7

Measure Installation Policies and Procedures

7.1 Introduction

This section presents LIEE policies for Program measures that are covered in the LIEE WIS Manual. Subsection 7.2 specifies general policies that apply to all measures, including contractor installation, installation standards, safety, site clean up, and other policies. Subsection 7.3 identifies non-feasibility criteria and other policies applicable to individual measures and minor home repairs. These measure-specific policies are also listed in the LIEE WIS Manual.

7.2 General Installation Policies

7.2.1. Introduction

Several general policies relating to the installation of Program measures must be followed by installation personnel. These policies are presented below.

7.2.2. Installation by Contractor

Measures must be installed by the contractor. Dropping off materials for later installation by the customer is not permitted under this Program.

7.2.3. Installation Standards

All measures must be installed in conformance with the California LIEE Installation Standards, as prescribed by two documents: *California Conventional Home Weatherization Installation Standards* and *California Mobile Home Weatherization Installation Standards.* These standards are intended to meet or exceed existing codes and regulations, and to conform to accepted building practices. When a conflict exists between these installation standards and local codes, the more stringent requirement shall take precedence. Copies of these installation standards manuals may be obtained by using the contact information provided in Section 1.3.

7.2.4. Safety

Contractors must plan and conduct all work in a manner that is consistent with the safety of persons and property. All work shall be conducted in compliance with reasonable and safe working practices and with applicable federal, state, and local laws. For instance, the Contractor is responsible for complete compliance with California Occupational Safety and Health Standards.

It is the responsibility of each program contractor to establish and maintain a safety program for all work undertaken for the LIEE Program. It is also the responsibility of each contractor to ensure that all employees observe safety rules by complying with all required safety precautions and regulations. Contractors must ensure that their staff members receive appropriate training in the safe and proper use of the tools associated with the installation of each LIEE Program measure.

7.2.5. Installation of Feasible Measures

It is the policy of the CPUC that LIEE Program Contractors must install all feasible measures unless they are specifically refused by the participating household. If the installer determines that a measure cannot be installed, the reason shall be recorded and made available to the utility or its designee.

7.2.6. Lead-Safe Practices

Lead-safe practices shall be employed when working with pre-1979 painted materials per Title 8 of the California Code of Regulations, Section 1532.1, and Title 17 of the California Code of Regulations, Section 36000, et seq.

7.2.7. Site Clean-Up Policies

The Contractor must maintain all work sites and related structures, equipment and facilities in a clean, orderly condition during all work conducted under the LIEE Program. Any unused or leftover materials, garbage and debris must be promptly removed from the customer's premises by the Contractor and disposed of at the Contractor's expense. The customer's premises must be left in a clean and orderly condition at the end of each day and at the completion of work.

7.2.8. Weatherization of Mobile Homes

Mobile homes with open combustion furnaces or water heaters drawing air from inside the conditioned space may not have infiltration reduction measures installed under the LIEE Program. In addition, ceiling insulation (and therefore attic duct reconnection) is not a measure for mobile homes.

7.3 Measure-Specific Policies

7.3.1. Introduction

This section describes Statewide LIEE policies and procedures that are specific to the installation of specific measures and minor home repairs. Two kinds of policies and procedures are covered: 1) non-feasibility criteria and 2) other policies and procedures. Non-feasibility criteria formalize conditions under which measures *may not* be installed in specific homes. In general, non-feasibility conditions refer to cases where a specific measure:

- Is present,
- Is refused by the customer,
- Cannot be physically installed,
- Cannot be installed without risk to the household or the contractor, or
- Is prohibited by code or Program policy.

Other policies and procedures are those policies which typically tell when, where, and under what circumstances a measure can be installed. Policies related to billing practices are excluded from this list, but may be covered by utility contracts with installation contractors.

Non-feasibility criteria and other policies and procedures are presented for the following LIEE Program measures and specific minor home repairs (MHRs):

- Caulking
- Weather Stripping Doors
- Ceiling Insulation
- Water Heater Insulation
- Water Heater Pipe Insulation
- Cover Plate Gaskets
- Energy Saver Showerheads
- Faucet Aerators
- Evaporative Cooler and Air Conditioner Vent Covers
- High Efficiency Window/Wall air conditioners
- High Efficiency Central Air Conditioners
- Exterior Door Replacement (MHR)
- Window Replacement (MHR)
- Glass Replacement (MHR)
- Thread-Based Compact Fluorescent Lamps
- Hard-Wired Compact Fluorescent Lamp Porch Light Fixtures
- Evaporative Cooler Installation
- Furnace Repair/Replacement (MHR)
- Water Heater Repair/Replacement (MHR)
- Refrigerator Replacement
- Duct Testing and Sealing[1]

[1] Duct testing and sealing is offered as a distinct measures, as well as a means of complying with Title 24 when alterations are made to the participating home. Different policies apply to these two applications.

7.3.2. Caulking

Non-Feasibility Criteria. Caulking shall not be applied:

- If the existing caulking is functioning properly, even if not installed in accordance with current Installation Standards,
- To cracks that do not penetrate the building envelope,
- To cracks that are too wide to be caulked (wider than 5/8") and must be repaired/patched, or
- If customer refuses caulking.

Other Policies. Three other policies relate to caulking.

- For homes with lapped siding, caulk shall be applied in standard locations such as door thresholds, door stops, and gaps between different materials, etc. However, seams between lapped siding must not be caulked.
- When exterior caulking is required above the first story, it shall be applied whenever the area requiring caulking is readily accessible.
- For mobile homes, caulking should be applied to the interior only.

7.3.3. Weather Stripping Doors

Non-Feasibility Criteria. Weather stripping shall not be applied:

- If the existing weather stripping is functioning properly, even if not installed in accordance with current Installation Standards**,**
- If the door is located between two conditioned or two unconditioned spaces,
- To doors in multi-unit dwellings that separate the living space from heated hallway,
- To doors and/or frames with a fire rating greater than 20 minutes,
- When a functional storm door is present, or
- If the customer refuses installation of weather stripping.

Weather stripping shall not be applied to appliance closet doors when:

- The combustion appliance receives air from conditioned space (i.e. combustion air grills are present in the enclosure door or wall), or

- Inadequate combustion air (as defined in the installation standards) is being supplied to the appliance.[2, 3]

Other Policies. Additional weather stripping policies include the following.

- The contractor may adjust existing weather stripping in lieu of replacement only if existing weather stripping is functional and creates a proper seal.
- Door shoe and threshold combinations must be installed unless proven to be non-feasible.
- A threshold should not be installed which exceeds 1" in height from the finished floor (1/2" in height for handicapped).
- When the installation of a door shoe and threshold combination is not feasible for the following reasons, an automatic sweep may be used:
  - Medical reasons, such as wheelchairs or walkers, require that the floor be as flat as possible,
  - Metal doors cannot be cut to accommodate a shoe,
  - Doors open outward and do not overlap a floor surface when closed. "Bumper" type thresholds may be used in this circumstance if a tripping hazard will not be created,
  - Finished floor is ceramic tile (100% seal at grout lines is not required),
  - The installation of a proper threshold requires carpet cutting or repair to wooden or concrete sills, and
  - The door is unusually expensive and might be aesthetically damaged by cutting.
- A stationary sweep can be used in lieu of an automatic sweep if a door shoe and threshold combination is not feasible and an automatic sweep cannot be installed.
- The use of flip up sweeps is not allowed.

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[2] This restriction covers two situations: when existing vents are inadequate, and when adequate vents cannot be added as a minor home repair.

[3] See the NGAT section of the Weatherization Installation Standards Manual.

7.3.4. Ceiling Insulation

Non-Feasibility Criteria Directly Related to Ceiling Insulation. Ceiling insulation shall not be installed if any of the following criteria is applicable.

- In accordance with Table 7-1, the existing insulation level precludes raising the R value.
- The roof is leaky or shows signs of water damage from leaks that have not been repaired.
- Adequate venting is not present and cannot be installed per installation standard attic ventilation guidelines.[4]
- Hazardous electrical wiring or other hazardous conditions are present.
- An enclosed cavity as defined in the installation standards is present.
- Exhaust vents terminating in the attic cannot be vented to the outside.[5]
- Disconnected or damaged space heating / cooling ducts are present and cannot be repaired.
- Attics having limited accessibility, as indicated when:
  - An inspector cannot gain safe physical access to all treated areas of the attic,
  - Clearance between top of ceiling joist and bottom of ridge board is less than 24 inches,
  - Structural obstructions, such as cross-members of truss systems, provide an opening of less than 18 inches, or
  - Access requires crawling over/under HVAC ducts, and clearance is less than 18 inches.
- The structure is unsound and will not support the weight of the insulation and installer.
- Knob-and-Tube (K&T) Wiring is present and:
  - Functioning knob-and-tube wiring cannot be certified safe by a C-10 contractor.
  - Abandoned K&T wiring is present that cannot be disconnected and certified as abandoned by a C-10 contractor.
  - Insulation over K&T wiring (live or abandoned) is prohibited by local codes.
- The customer refuses installation of ceiling insulation.

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4 An appendix to the Weatherization Installation Standards Manual addresses all aspects of vent area determination.

5 This covers two situations that are covered as minor home repairs: Reconnecting exhaust vents and/or addition of exterior venting as covered in the WIS manual.

Ceiling Insulation Levels. The level of insulation to be installed varies across CEC climate zones and existing insulation levels, as shown in Table 7-1.

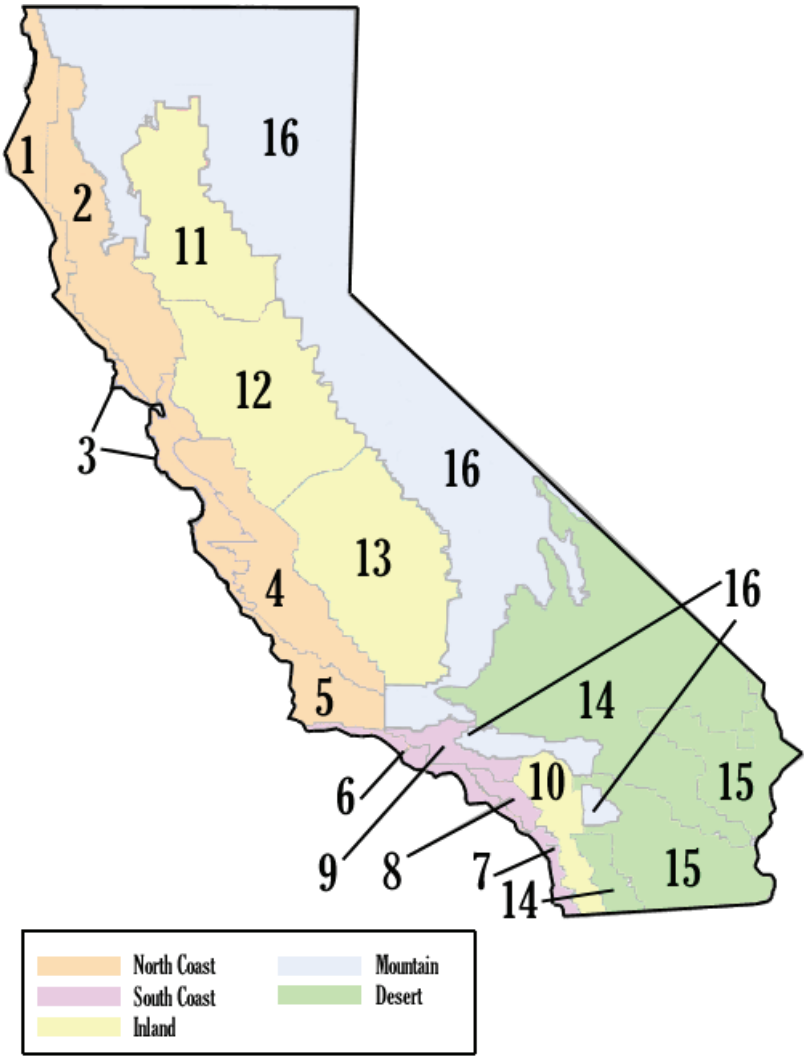
Table 7-1: Ceiling Insulation Additions

Climate Zone	Existing Insulation Level	Action
CEC Climate Zones 2 - 15	R-11 or less	Raise R-Value to R-30
	More than R-11	Do not install additional insulation
CEC Climate Zones 1 and 16	R-19 or less	Raise R-Value to R-38
	More than R-19	Do not install additional insulation

The actions listed in the third column of Table 7-1 refer to the final level of insulation, including any pre-existing values as well as insulation added under the program. These levels apply on a forward-looking basis; homes previously receiving lower levels of ceiling insulation under the LIEE program will not be revisited to bring insulation up to the new higher level.

Figure 7-1 depicts the sixteen CEC Climate Zones. Climate Zones 1 and 16 have heating degree-days in excess of 5,000. Appendix A contains a list of the locations contained in each CEC Climate Zone.

Figure 7-1: CEC Climate Zones



Other Policies Directly Related to Ceiling Insulation. The other key policies that directly apply to ceiling insulation include the following.

- In cases where local jurisdiction mandates more insulation than required by the LIEE Program, contractors may install higher levels only after forwarding documentation of the more stringent requirements to and obtaining written authorization from the LIEE Program Manager.

- When no attic access exists, contractors will install one prior to installing ceiling insulation. Minimum dimensions of the new opening shall be 30" x 22" or as required by local code.
- If the gable vent is used for attic access, it must be hinged and large enough (18" x 18" minimum) to provide access for the inspector.
- In the event holes are observed in attic firewalls while performing attic insulation, the prime contractor will document and notify the property owner of the existing condition.
- There is no minimum attic square footage required for ceiling insulation.
- Homes having (a) separate attics, or (b) contiguous attics consisting of different sections with various crawl clearances shall have insulation installed only in the sections which have the clearances specified above.
- Before insulation is installed, duct leaks shall be sealed, disconnections shall be reconnected, and needed duct repairs shall be made in accordance with the Duct Sealing Standards section of the Weatherization Installation Standards Manual.

Non-Feasibility Criteria Relating to Attic Ventilation. Attic Ventilation shall not be installed if:

- The existing venting already meets installation standards,
- Tiled hip roof without overhang, soffit, or accessible frieze blocks,
- Ceiling insulation is non-feasible,
- Roof-mounted vents are the only option for adding venting, but the roof is tile, wood shingles, or in poor condition (e.g. more than three layers of roofing, roof unable to support additional vents),
- The roof is a flat and/or built-up roof as defined in the installation standards, or
- The customer refuses installation of additional vents.

Other Policies Relating to Attic Ventilation. There are no other policies that apply to attic ventilation.

7.3.5. Water Heater Blankets

Non-Feasibility Criteria. A water heater blanket shall not be installed on <u>any</u> water heater if:

- The existing blanket is functioning properly, even if not installed in accordance with current Installation Standards,
- External insulation is specifically prohibited by the manufacturer,

- A T&P relief valve, or gas shutoff valve, is not present, or is not located within 6" of the tank,
- The T&P valve outlet is plugged or capped,
- The tank is exposed to the weather,
- A leak in the tank or water pipes is present,
- Plastic piping (e.g., CPVC) is present in the cold or hot water lines to/from the tank,
- The tank is located within 12" of a stove, range, or cook top,
- The water heater tank capacity is greater than 100 gallons, or
- The customer refuses installation of a water heater blanket.

A water heater blanket shall not be installed on a gas water heater if any of the following criteria are applicable.

- A gas leak is present.[6]
- The vent pipe and/or draft hood is not properly installed including:[8]
  - No draft hood is present,
  - Two draft hoods are present, or
  - The vent pipe is defective or missing.
- There is evidence of improper combustion and/or venting as characterized by: [8]
  - Large accumulation of soot near the draft hood or on the floor underneath, or
  - Scorching at the draft hood or combustion chamber.
- There is no appliance line (gas shut-off) valve present.
- The combustion air supply is improper or inadequate according to installation standards[7] as characterized by: [8]
  - The absence of both low and high vents (when required),
  - Vent size is too small,
  - Room volume is inadequate, or
  - The customer refuses modifications needed to create adequate combustion air supply.
- Both burner access doors are missing.[8]
- Internal insulation is R-12 or greater.
- Perimeter clearance prior to blanket installation is less than 4" between tank and door, and less than 1" on sides and back.

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6 When these conditions exist, installers must contact the designated utility personnel.

7 See the NGAT section of the Weatherization Installation Standards Manual.

A water heater blanket shall not be installed on an electric water heater if any of the following criteria are applicable.

- Hazardous electrical wiring/conditions are present.
- The thermostat cover plate(s) not present.
- Internal insulation is R-16 or greater.
- Perimeter clearance prior to blanket installation is less than 1" on the front, sides, and back.

Other Policies. Only water heaters supplying hot water to residential units receiving other program measures are eligible to receive water heater blankets.

7.3.6. Water Heater Pipe Insulation

Non-Feasibility Criteria. Water heater pipe insulation shall not be installed if:

- The existing pipe insulation is functioning properly, even if not installed in accordance with current Installation Standards,
- Leak is present in tank or water pipes,
- An unsafe condition is present that causes tank insulation to be nonfeasible.
- The water heater pipes are exposed to the elements (especially sunlight, which can quickly degrade the insulation),
- Less than 1 foot of continuous insulation can be installed,
- Plastic piping (e.g., CPVC) is present in the cold or hot water lines to/from the tank,
- Pipes are inaccessible or the configuration prevents proper installation, or
- The customer refuses installation of water heater pipe insulation.

Other Policies. There are no other policies relating to pipe insulation.

7.3.7. Cover Plate Gaskets

Non-Feasibility Criteria. Cover plate gaskets shall not be installed if any of the following criteria are applicable.

- There is evidence of electrical malfunction or hazard, such as:
  - Electrical box not permanently attached,
  - Loose electrical connection,
  - Signs of burning or charring or other evidence of hazardous wiring condition, or

  - In a mobile home, aluminum wiring is present.
- Gaskets are already present, even if not installed in accordance with current Installation Standards.
- The cover plate is located on a wall between two conditioned or two unconditioned areas.
- The cover plate is located behind furniture or major appliances that are too fragile or heavy to move.
- Removal of the cover plate will damage the wall surface (paint, wallpaper, etc.).
- The utility box is an odd size and standard gaskets will not work.
- The customer refuses installation of cover plate gaskets.

Other Policies. The following other policies apply to cover plate gaskets.

- All broken, cracked, or missing cover plates shall be replaced.
- All gaskets must be contractor-installed. No gaskets are to be left behind for customer installation.

7.3.8. Energy-Saver Showerheads

Non-Feasibility Criteria. Energy-saver (i.e. low-flow) showerheads shall not be installed if the following criteria are applicable.

- The existing showerhead(s):
  - Have a flow rate less than or equal to 3.0 gpm be functioning properly, even if not installed in accordance with current installation standards, or
  - Are required for medical reasons.
- The existing shower arm:
  - Is made of plastic (including ball joint, i.e., for Price Pfister®),
  - Is cracked, broken, or missing, or
  - Requires removal.
- The shower is not mechanically functional.
- Standard metal adapters (i.e. American Standard®, Gerber®, and Price Pfister®) will not work.
- Piping is in such poor condition that showerhead installation could cause plumbing problems.
- The customer refuses installation of low flow showerheads.

Other Policies. The following other policies apply to energy-saver (low-flow) showerheads.

- All existing showerheads with a flow rate greater than 3 gpm flow and not required for medical reasons shall be replaced with low-flow showerheads.
- Replaced showerheads may be left with the customer or the property manager only if requested.

7.3.9. Faucet Aerators[8]

Non-Feasibility Criteria. Faucet aerators may not be installed if:

- Aerators are already present and functioning properly, even if not installed in accordance with current Installation Standards,
- The faucet has a special fitting for attaching an appliance (e.g., portable dishwasher),
- The faucet does not provide hot water,
- The faucet or faucet threads are found to be damaged and/or leaky,
- Removal of the existing aerator is likely to cause damage to the aerator or the faucet,
- Standard aerators will not fit, or
- The customer refuses installation of faucet aerators.

Other Policies. There are no other policies with respect to faucet aerators.

7.3.10. Evaporative Cooler and Window/Wall Air Conditioner Vent Covers

Non-Feasibility Criteria for Evaporative Cooler Covers. Evaporative cooler covers shall not be installed if:

- An existing evaporative cooler vent cover is functioning properly, even if not installed in accordance with current Installation Standards,
- The vent(s) serving the evaporative cooler is (are) shared with a heating system,
- The evaporative cooler is ducted with multiple supply vents/registers, and it is impossible to equip all of them with covers,
- Water damage to the ceiling or wall area around the vent register is evident, prevents proper cover installation, and cannot be repaired,
- The vent/register opening is so close to the wall or ceiling that proper installation of the cover is impossible,
- Electrical wiring/plug/receptacle interferes with proper installation, and furring is not a feasible option,

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8 Faucet aerators are integrated into the energy-saver showerheads section of the WIS manual.

- An external cover is already present, or
- The customer refuses installation of evaporative cooler vent covers.

Non-Feasibility Criteria for Wall and Window Air Conditioner Unit Covers. Air conditioner covers shall not be installed if:

- An existing air conditioner vent cover is functioning properly, even if not installed in accordance with current Installation Standards,
- Water damage to the window or wall area around the unit/vent is evident, prevents proper cover installation, and cannot be repaired,
- The vent/unit is so close to the wall that proper installation of the cover is impossible, or
- The customer refuses installation of air conditioner vent covers.

Other Policies. The following other policies apply to evaporative cooler and window/wall air conditioner covers.

- A shop-built wooden vent cover can be used only when a commercially manufactured cover is not available.
- Each cover must be checked for proper fit. Removal and reinstallation must be demonstrated to the customer.
- In the cooling season when the cooler or window/wall air conditioner is in use, the Contractor can leave the cover uninstalled after the initial installation and customer instruction.

7.3.11. Exterior Door Replacements

Non-Feasibility Criteria. An exterior door shall not be replaced if:

- The door can be repaired rather than replaced,
- The door is structurally sound and provides an adequate barrier to infiltration,
- Door jamb is not structurally sound and cannot be repaired or replaced within the Minor Home Repair cap, or
- The customer refuses door replacement.

Other Policies. There are no other policies relating to door replacement.

7.3.12. Window Replacements

Non-Feasibility Criteria. An exterior window shall not be replaced if:

- The window can be repaired rather than replaced,
- The window is structurally sound and provides an adequate barrier to infiltration,
- The window is located above the first floor of a structure and installation will present unsafe working conditions,
- In mobile homes, window replacement will require removal of siding, OR
- The customer refuses door/window replacement.

Other Policies. All window replacements require written pre-approval from the LIEE Program Manager.

7.3.13. Glass Replacement

Non-Feasibility Criteria. Window glass shall not be replaced if:

- A small hole, ¼" or less, is present and can be patched with clear silicone or clear glass repair tape,
- There is only one crack less than 6" long, extending from edge to edge, that can not come loose from the frame to pose a safety hazard,
- The complete window will be replaced, or
- The customer refuses glass replacement.

Other Policies. The following other policies apply to glass replacement.

- When only one pane in a dual pane window is cracked, the unit does not require repair/replacement. If one pane of a dual-pane window is broken, all shards must be removed.
- Polycarbonate glazing is allowed only with written pre-approval from the LIEE Program Manager.

7.3.14. Thread-Based Compact Fluorescent Lamps (CFLs)

Non-Feasibility Criteria. A thread-based CFL shall not be installed:

- In a socket/fixture that is nonfunctional,
- In a fixture that already has a functional CFL,
- If hazardous conditions exist at the socket/fixture,
- In a circuit that is controlled by a solid-state timer,
- In a circuit that is controlled by a dimmer that is not compatible with available CFLs,
- In a fixture located in a storage room, closet, or multifamily common area,

- In any fixture that is not operable by the customer (i.e., on their electric meter/bill), or
- If the customer refuses installation of CFLs.

Other Policies. A maximum of five CFLs may be installed at any home.

7.3.15. Hard-Wired Compact Fluorescent Lamp Porch Light Fixtures

Non-Feasibility Criteria. A hard-wired CFL porch light fixture shall not be installed:

- If the existing location of the fixture is not suitable,
- If a thread-based CFL will fit in the existing fixture,
- In an electrical box that is substandard and/or cannot be properly secured,
- Where wiring is substandard, in a deteriorated condition, and/or rewiring is necessary,
- In a circuit that does not operate properly (e.g., defective switch),
- In a circuit that is controlled by a solid-state timer,
- In a circuit that is controlled by a dimmer that is not compatible with available hard-wired CFL fixtures,
- Existing fixture is in a wet location, and a grounding conductor is not available,
- If the existing fixture is not on the customer's electric meter/bill, or
- If the customer refuses installation of CFL fixture(s).

Other Policies. There are three other policies relating to hard-wired CFL porch light fixtures:

- Hard-wired CFL porch light fixtures may be installed only in single family non-mobile homes,
- No more than an average of three fixtures may be installed, and
- Replaced porch light fixtures may be left with the customer or the property manager only if requested.

7.3.16. Window/Wall Evaporative Cooler Installation

Non-Feasibility Criteria for Wall/Window Evaporative Coolers. A wall/window evaporative cooler shall not be installed if:

- The customer has an operational evaporative cooler,
- Proper electrical service is not present,

- Substandard wiring exists (e.g., ungrounded outlets or decayed insulation and/or exposed wires),
- Proper exhaust ventilation is not present,
- No feasible window or wall location is available,
- Exterior clearance requirements cannot be met,
- Egress requirements cannot be met,
- Wood windows are decayed or deteriorated,
- Siding is decayed or damaged, or
- The customer refuses installation of the evaporative cooler.

Other Policies. There are three other policies for this measure:

- Customer must have an operational refrigerated air conditioning unit,
- For single family homes and mobile homes, evaporative coolers are available only in CEC Climate Zones 10-16, and
- Evaporative coolers may not be installed in multi-family homes.

7.3.17. Furnace Repair and Replacement

Non-Feasibility Criteria for All Furnaces. A furnace shall not be repaired or replaced if:

- The property is renter-occupied,
- Fuel used by the existing unit is not supplied by the utility providing LIEE Program services,
- The existing furnace is inaccessible,
- Ducts cannot be brought into compliance with the Duct Sealing Section of the WIS Manual.
- No furnace is present and no natural gas line or electric outlet is available to accommodate the installation of a furnace,
- The customer refuses furnace repair or replacement,

Non-Feasibility Criteria for (Central/Ducted) Furnaces in Conventional Homes. A central furnace in a conventional home shall not be repaired or replaced if:

- For roof-mounted units, the roof is not structurally adequate to support the installation,
- Adequate access and/or combustion air cannot be provided, or

- Disconnected or damaged space heating ducts are present and cannot be repaired.

Non-Feasibility Criteria for (Central/Ducted) Furnaces in Mobile Homes. A central furnace in a mobile home shall not be repaired or replaced if:

- Required furnace drawing combustion air from outdoors, and/or furnace components or flue system that are listed and labeled for manufactured home installation, cannot be obtained,
- Adequate access and/or combustion air cannot be provided,
- Depressurization by the forced air unit's non-ducted return system adversely affects an open combustion appliance, and correction is not feasible,
- Disconnected ducts or catastrophic leaks are present and cannot reasonably be repaired, or
- A leaky belly-cavity or roof-cavity return exists and a central return system will not be installed.

Non-Feasibility Criteria for Wall/Floor (Non-Ducted) Furnaces. A wall or floor furnace shall not be repaired or replaced if:

- Adequate access and/or combustion air cannot be provided, or
- Existing open combustion appliance is in a location prohibited by the replacement unit instructions or local code, and relocation to an approved location is not feasible.

Non-Feasibility Criteria for Installation or Repairs Requiring Attic or Crawl Space Access. In the event that attic or crawl space access is required for the installation or repair of wall/floor furnaces, the installation or repair of a furnace will be considered nonfeasible if:

- Attic clearance is less than 24" between the top of ceiling joists and the bottom of the ridge board, or
- Crawl space clearance is less than 18" from the ground to the bottom of the floor joist system, or
- Any of the following conditions is present in the crawl space area where access is required: hazardous insect infestation; excessive ground moisture (standing water or mud); or sewage waste on ground or other unsanitary conditions posing a health and safety hazard.

Non-Feasibility Criteria for Central Air Conditioner Replacement. Central air conditioner replacement as part of furnace replacement is non-feasible if:

- The heating system can be repaired with the existing refrigeration equipment intact,
- For roof-mounted units, the roof is not structurally adequate to support the installation,
- Electrical service requirements cannot be met,
- Split system line set is inadequate, or
- System airflow is inadequate.
- In mobile homes, a leaky belly-cavity or roof-cavity return exists, and a central return system will not be installed.

Non-Feasibility Criteria for the Installation of Programmable/Setback Thermostats. Programmable/Setback Thermostats shall not be installed if:

- The furnace is not being replaced or repaired,
- The furnace is being repaired, and a properly functioning thermostat is present,
- A programmable/setback thermostat is already present and operational.
- The measure is refused by the customer.

Non-Feasibility Criteria for HVAC Air Filters. HVAC unit air filters shall not be replaced if:

- A serviceable filter is already present,
- The furnace will not be repaired,
- The types of filters provided by the program are specifically prohibited by the appliance manufacturer,
- Filter replacement would require removal of a flue, duct, or pipe, or
- The proper filter support or retaining device is not present and installation is not feasible.

Other Policies. The following other policies apply to furnace repairs and replacements.

- Furnace repair or replacement may be provided only when the appliance fails NGAT, and correction cannot be achieved with Service/Adjustment[9] by utility gas service personnel (or their designated representative).[10]

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[9] Service/Adjustment of an appliance entails providing services that are within the scope of the gas service department for customers in general.

[10] Note that NGAT fails include cases where a furnace is non-operable, or where no furnace is present in the case where another gas appliance is used for space heating.

- Furnace replacements and major furnace repairs may be provided only if the residence is owner-occupied. Service/Adjustment may also be conducted in renter-occupied homes.
- A furnace will not be replaced if Title 24 provisions relating to alternations cannot be satisfied.
- A furnace that is not abandoned or inaccessible and that cannot be made operable through servicing, fails the NGAT.
- Furnace repairs and replacements will be provided only if the fuel used by the furnace is supplied by the utility providing LIEE Program services.
- Furnace replacement will not include hazardous material abatement, major structural alteration, concrete work, painting, or floor covering.
- A central furnace may be repaired only if the cost of repairing the unit would be less than 50% of the cost of replacement. A wall, floor or direct vent furnace may be repaired only if the cost of repairing the unit would be less than 25% of the cost of replacement.
- An air conditioning unit may be replaced in conjunction with a furnace replacement if:
  - the unit being replaced is a combined forced air heating and central AC package system, also referred to as a dual-pack (i.e. the AC and furnace is manufactured as one unit and is housed in a single sheet metal housing); or
  - the furnace being replaced is part of a split forced air heating and AC system and the AC evaporative coil and/or the outside system cannot be matched with the new furnace. However, AC replacement must not require refrigerant line replacement.
- Replaced units must be de-manufactured in compliance with all laws and regulations.
- Installer must have a C-20 license.
- A programmable thermostat may be installed only if (a) a central furnace or central air conditioner is replaced (a programmable thermostat is required by Title 24 when a central heating system and/or a central air conditioner is replaced), or (b) a central furnace or central air conditioner is repaired and a properly-functioning thermostat is not present.
- Prior to installation, contractors installing programmable thermostats shall explain the operation of these thermostats and provide the customer an opportunity to refuse the measure.
- Thermostats may be moved to resolve short cycling problems in mobile homes.
- HVAC filters may be replaced only as part of central furnace repair or central air conditioner replacement.

- Contractors who replace filters must show customers how to remove, clean and re-install the filters.

7.3.18. Natural Gas Water Heater Repair or Replacement

Non-Feasibility Criteria for Natural Gas Water Heater Replacement . A natural gas water heater shall not be replaced if:

- The property is renter-occupied,
- Fuel used by the existing unit is not supplied by the utility providing LIEE Program services,
- The existing water heater is inaccessible,
- The drain line for the T&P valve or drain pan cannot be properly terminated outdoors or to an approved indoor drain if required by local code, or a gas shutoff valve and pressure relief valve cannot be installed in lieu of a T&P valve and drain line,
- Required access, clearance or combustion air cannot be provided,
- Structure/floor cannot properly and safely support the installation,
- No suitable mounting locations for seismic bracing are available,
- A safety hazard is present which cannot be repaired (e.g., vent system defect, nonconforming gas piping),
- A watertight pan cannot be installed under the unit when required,
- A plumbing condition exists which prevents achieving satisfactory water pipe connections,
- A whole house fan is present, the existing water heater is in the attic, and a closed combustion unit cannot be installed,
- The unit is a central water heater serving more than one unit, or
- The customer refuses water heater replacement.

Non-Feasibility Criteria for Natural Gas Water Heater Repair. A natural gas water heater shall not be repaired if:

- The property is renter-occupied,
- Fuel used by the existing unit is not supplied by the utility providing LIEE Program services,
- The existing water heater is inaccessible,
- Proper combustion air cannot be provided,
- A safety hazard is present which cannot be repaired,

- The unit is a central water heater serving more than one unit, or
- The customer refuses water heater repair.

Other Policies. The following other policies apply to water heater repairs and replacements:

- Water heater repair or replacement may be provided only when (a) the appliance fails NGAT, and correction cannot be achieved with Service/Adjustment by utility gas service personnel (or their designated representative) or (b) the tank has a water leak.
- Water heater replacements and major repairs may be provided only if the residence is owner-occupied. Service/Adjustment may also be conducted in renter-occupied homes.
- Water heater repairs and replacements will be provided only if the fuel used by the appliance is supplied by the utility providing LIEE Program services.
- Water heater replacement will not include hazardous material abatement, major structural alteration, concrete work, painting, or floor covering.
- A water heater may be repaired only if the cost of repairing the unit would be less than 50% of the cost of replacement.

7.3.19. Refrigerator Replacement

Non-Feasibility Criteria. Refrigerators shall not be replaced if:

- Any refrigerator to be removed was manufactured after 1992,
- The electrical outlet used by the existing refrigerator is not properly grounded and cannot be properly grounded,
- Floor is not level and cannot safely support a new refrigerator,
- The refrigerator is not accessible for removal (e.g., doors from room are too small, refrigerator is encased in tile),
- Hazardous electrical conditions exist at the outlet used by the existing refrigerator, or
- The customer refuses refrigerator replacement.

Other Policies. Other policies that apply to refrigerator replacement include the following.

- The minimum size for primary refrigerators replaced under the LIEE Program is 10 cubic feet.

- One of the refrigerators replaced under the Program must be a primary refrigerator. The primary refrigerator is the main refrigerator in the home, usually the kitchen refrigerator.
- The size of the replacement refrigerator shall be approximately equal to the size of the existing unit. When two refrigerators and/or freezers are exchanged for a single unit, the replacement unit may not be larger than the combined size of the two existing units, and may not be larger than 23 cubic feet.
- Space must be physically large enough to accommodate the new refrigerator, with entrance and passageways sufficient to allow removal of the existing refrigerator.
- Contractor shall dispose and recycle (de-manufacture) replaced refrigerators in an environmentally safe manner and in accordance with federal, state, and local regulations and codes. Contractor represents that it has knowledge of the Metal Discard Act, effective January 1, 1994, which prohibits disposal of refrigerators/freezers in landfills.

7.3.20. High Efficiency Window/Wall Air Conditioner

Non-feasibility Criteria. High efficiency window/wall air conditioners shall not be installed:

- If the air conditioner to be replaced is operational and is less than 15 years old..
- If electric service requirements cannot be met.
- If a structurally sound mounting platform and/or suitable mounting location is not available.
- If the measure is refused by the customer.

Other Policies. The following other policies apply to this measure:

- High efficiency window/wall air conditioners may be installed only in CEC Climate Zones 10-15 (see Appendix A for a list of cities comprising these Climate Zones).
- Replacement unit must have a minimum EER of 10.7.
- Replaced units must be de-manufactured in compliance with all laws and regulations.
- All units must be adequately supported and braced.

7.3.21. High Efficiency Central Air Conditioners

Non-feasibility Criteria. The replacement of high efficiency air conditioners will be considered non-feasible if:

- The existing air conditioner is not operational.

- The central AC has a SEER greater than 9.0.
- The property is renter-occupied,
- Existing system is a combined HVAC unit and the unit has not passed the pre-weatherization NGAT,
- For a roof-mounted unit, the roof is not structurally adequate to support the installation,
- Electrical service requirements cannot be met,
- Ducts cannot be brought into compliance with the Duct Sealing Section of the WIS Manual.
- Existing HVAC unit is a combined fuel unit and the gas is not provided by one of the IOUs,
- Duct system is inadequate,
- Split system refrigerant line set is inadequate, or
- Customer refuses.

The unit is a mobile home, and either of the following conditions is present:

- Depressurization by the FAU non-ducted return system adversely affects an open combustion appliance, and correction is not feasible, or
- Abandonment of a leaky belly-cavity or roof-cavity return is required but not feasible.

In the event that the replacement of the central air conditioning system requires attic or crawl space access, replacement will be considered non-feasible if:

- Attic crawl clearances do not meet required minimums:
  - Clearance between top of ceiling joist and bottom of ridge board is less than 24 inches, or
  - Access requires crawling over/under HVAC ducts, and clearance is less than 18 inches.
- Crawl space clearance is less than 18” from the ground to the bottom of the floor joist system,
- There is hazardous insect or pest infestation,
- There is excessive ground moisture (standing water or mud),
- There is sewage waste on the ground or other unsanitary conditions posing a health and safety hazard.

Non-feasibility Criteria for Programmable/Setback Thermostats. Programmable /Setback Thermostats shall not be installed:

- If a programmable/setback thermostat is already present and operational.
- If the measure is refused by the customer.

Other Policies. The following other policies will apply to central air conditioner replacements:

- Central air conditioner replacements will be offered only in Title 24 climate zones 14 and 15.
- A programmable/setback thermostat may be installed only if a central air conditioner is replaced (a programmable thermostat is required by Title 24 when a central air conditioning system is replaced).
- Prior to installation, contractors installing programmable thermostats shall explain the operation of these thermostats and provide the customer an opportunity to refuse the measure.
- Thermostats may be moved to resolve short cycling problems in mobile homes.
- HVAC filters may be replaced only as part of central furnace repair or central air conditioner replacement.
- Contractors who replace filters must show customers how to remove, clean and re-install the filters.
- Replacement of refrigerant line sets is beyond the scope of this Program.

7.3.22. Duct Testing and Sealing as a Program Measure

Non-feasibility Criteria for Duct Testing as a Program Measure. Duct testing as a program measure will be considered non-feasible if:

- Ductwork contains excessive damage or deterioration that would preclude proper testing,
- If the replacement of 40 or more feet of duct in unconditioned space would be necessary,
- Ductwork contains or is made of asbestos,
- Ductwork is insulated or sealed with asbestos,
- Ductwork is inaccessible or an unsafe condition exists, causing duct testing to be unfeasible,
- A hazardous condition exists requiring repair or replacement per NGAT policy, and repair/replacement is not feasible,
- Forced air heating unit is inoperative and cannot be repaired,
- Forced air heating unit is abandoned or inaccessible, or

- The customer refuses.

Non-feasibility Criteria for Duct Sealing as a Program Measure. Duct sealing as a program measure will be considered non-feasible if:

- Duct leakage is below the threshold leakage per the Duct Testing and Sealing Form,
- Replacement of 40 or more feet of duct in unconditioned space would be necessary,
- A natural gas appliance hazard exists, and repair is not feasible,
- Duct system has been abandoned,
- Duct system is damaged and deteriorated beyond repair,
- A health or safety hazard is present, such as insect infestation, hazardous electrical wiring, or structural hazard, which prevents safe access to the duct system,
- Ducts and/or components are made of or insulated with asbestos,
- Access to the duct system does not meet minimum accessibility criteria specified in the Program Policy & Procedures Manual,
- For ducts in the crawl space: sewage waste is on the ground, or excessive ground moisture (standing water or mud) is present,
- Forced air heating unit is inoperative and cannot be repaired,
- Forced air heating unit is abandoned or inaccessible, or
- Customer refuses.

Other Policies. The following other policies will apply to duct testing and sealing when conducted as a free-standing measure:

- Duct testing and sealing as a measure will be offered only in Single Family and Mobile Homes,
- Duct testing and sealing as a measure will be offered in all Climate Zones for Homes with Natural Gas Space Heating provided by the IOU,
- For homes with electric space heat provided by the IOU, duct testing and sealing as a measure will be offered only in Climate Zones 10-16,
- Duct sealing is not required unless initial leakage is at least 28% of airflow.
- In order to be considered as a Program measure, potential duct leakage reduction must be at least 13% of total fan flow.
- For a duct system to be considered sealed, (a) the duct leakage reduction must equal or exceed 13% of airflow; (b) the final duct leakage must be reduced to less than 15% of airflow, or, if this cannot be reached, all accessible duct leaks must be sealed as verified by smoke tests.

- The utility or its designee will verify initial and final duct leakage rates, in accordance with the procedures in the Duct Testing Standards of the WIS Manual.

7.3.23. Duct Testing and Sealing as a Means of Title 24 Compliance

Non-feasibility Criteria. Since Title 24 is a state law, there are no Program non-feasibility criteria. When required by Title 24, duct testing and sealing must conform to all provisions of Title 24 (applicable to conventional homes but not mobile homes).

Other Policies. The provision of duct testing and sealing as a means of Title 24 compliance will be governed by the following other policies:

- Beginning October 1, 2005, when "alterations" are made to HVAC systems in conventional homes located in climate zones 2 & 9-16, the following requirements for duct testing and duct sealing apply:
  1) HVAC Contractors must:
     a) Ensure that duct leakage is at an acceptable level—which involves duct testing and, as needed, duct sealing, <u>or</u>
     b) Utilize a Title 24 High Efficiency Alternative in lieu of duct testing and sealing.
  2) When duct testing and sealing is performed:
     a) All accessible ducts must be sealed by the HVAC Contractor, and
     b) A minimum of 1 in 7 of each contractor's completed installations must be verified by a HERS Rater to be in compliance with Title 24 Standards.
  3) *<u>Exceptions</u>:* Duct testing and sealing requirements do <u>not</u> apply when:
     a) Total length of ducts located in unconditioned space is less than 40 linear feet.
     b) Ducts are constructed, insulated, or sealed with asbestos.
     c.) Ducts have been previously verified by a HERS rate to be incompliance with Title 24.
- HERS verification of duct testing and sealing is tied to the building permit process. Under Title 24, a building permit for an HVAC alteration cannot be finalized until a form CF-6R has been completed and submitted to the HERS rater and a form CF-4R is completed by a HERS Rater and submitted to the Building Department.
- The Title 24 definition of an HVAC "alteration" is:
  1) Installation or replacement of an HVAC <u>unit</u> (central furnace and/or air conditioner or heat pump), <u>or</u>
  2) Replacement of any of the following major HVAC <u>components</u> (the entire component, not a part within the component):

a) Air handler
b) Condenser (outdoor unit)
c) Indoor coil
d) Furnace heat exchanger
e) More than 40 feet of new ductwork in unconditioned space

By contrast, a "repair" is servicing an HVAC unit or fixing/replacing a defective part within a major component—such as the fan motor or blade within the air handler, or the compressor or cooling fan motor or blade within the condenser (outdoor unit). "Repairs" are not within the scope of Title 24 standards and do not mandate duct testing and sealing.

- When Title 24 duct testing and duct sealing is required, final duct leakage must be in conformance with the following criteria:

  Primary Duct Leakage Options

  1) Measured duct leakage shall be less than 15% of fan flow, or
  2) Measured duct leakage shall be reduced by more than 60% compared to measured duct leakage prior to the alteration, with visual inspection and smoke test by a HERS Rater performed to verify that all accessible leaks have been sealed.

  Secondary Duct Leakage Option. If it is not possible to meet the duct sealing options listed above:

  1) All accessible duct leaks shall be sealed, and
  2) A HERS Rater shall verify that all accessible leaks have been sealed by performing a visual inspection and a smoke test.

- When a primary duct leakage option is selected, conformance with Title 24 duct leakage criteria must be verified by a HERS Rater for a minimum of 1 in 7 jobs completed by each HVAC contractor. However, Title 24 gives the homeowner the option to request HERS verification for his/her home, rather than being part of a 1-in-7 sample.
- When the secondary duct leakage option is selected, 100% HERS verification is required.

8

Inspection Policies

8.1 Introduction

This section summarizes the inspection policies used in the LIEE Program to ensure safety and quality control in the installation of measures and minor home repairs. Subsection 8.2 discusses the designation of the responsibilities for inspections. Subsection 8.3 describes policies relating to pre-installation inspections. Subsection 8.4 presents policies on post-installation inspections.

8.2 Inspection Personnel

Utilities will use in-house personnel, contract employees, or contractors to conduct inspections. However, each utility will undertake in-house either the prime contractor (administration) function or the inspection function, but not both, with the very limited exceptions discussed in D. 00-07-020.

8.3 Pre-Installation Inspection

The four investor-owned utilities have different pre-installation inspection policies, as follows**:**

- PG&E performs pre-inspections on 5% of the homes receiving program services. PG&E's Energy Specialist performs a measure evaluation at the time of the energy education and assessment. While still on the customer's premises, the Energy Specialist will call PG&E's Central Inspection Program's toll free number and report the proposed weatherization measures and quantities, report the type and operating status of all combustion appliances present, and if a pre-inspection is selected, coordinate the pre-inspection appointment with the customer and PG&E. At the time of the PG&E visit, the inspector will confirm that the measures identified by the Energy Specialist are feasible, the quantities are accurate, and no feasible measures were overlooked. Additionally, they will verify that a refrigerator application was filled out and check the refrigerator outlet for proper wiring. In homes that are eligible for infiltration-reduction measures, PG&E verifies that the Pre-NGAT steps have been taken. PG&E performs pre-inspections on 100% of the homes that are eligible for infiltration-reduction

measures and on homes that are served with combustion fuels other than PG&E natural gas. In those homes with non-PG&E combustion fuels, PG&E will perform a Combustion Appliance Test and based on the test results will identify which of the feasible measures can be installed. If PG&E is unable to complete a Combustion Appliance Test, the home will be reported to the contractor as eligible for non-infiltration-reduction measures only.

- SDG&E has its program management prime contractor do an initial combustion air assessment and an initial assessment of the need for measures, prior to assigning a home for installation by the installation subcontractor. The subcontractor then does a more detailed audit and reconciles any discrepancies in its audit findings with the prime program management contractor. SDG&E has its inspectors conduct a "job start" inspection in up to 100% of all units prior to measure installations in multifamily complexes.
- In the SoCalGas weatherization program, the installation contractor (or a subcontractor) does the initial measure assessment. SoCalGas does not have a pre-inspection process conducted separate from outreach and assessment. However, furnace and water heater replacements require pre-authorization. Every service provider under the program contracts with or hires personnel to income qualify customers for the program. These outreach and assessment personnel are required to attend extensive training, which provides them with the tools for qualifying customers and assessing the measures that are feasible to install under program guidelines. The certified outreach and assessment personnel recruit customers for the service providers and are responsible for qualifying the customer and the dwelling. They also provide energy education to the customer and perform an assessment (pre-inspection) of the home for feasible measures to be installed. The customer is advised of the measures identified for installation but is told that the installation contractor will make final determination for feasibility of installation.
- SCE does not have a pre-inspection process. However, through its assessment process, customers' homes are evaluated for conditions favorable to measure installation. In order for outreach personnel to conduct home assessments for SCE's Energy Management Assistance (EMA) program they must receive certification for home assessment services by attending an EMA Assessment Workshop. Upon passing the written exam, the assessor is given a certificate that allows him/her to perform assessments. Assessors then examine low-income customers' homes for all qualifying measures. This assessment process is a "check and balance" system that assures the right conditions are present for measure installation. The assessment form is then processed and referred to the appropriate contractor for the measure installation. To ensure program integrity SCE has a contracted inspection agency perform random inspections on treated customer homes..

8.4 Post-Installation Inspection

8.4.1 General Polices on Post-Installation Inspection

Post-installation inspections are used to assure that Contractors install measures in accordance with the Installation Standards of the LIEE Program. In this subsection, specific polices relating to post-installation inspections are presented. These policies encompass the types of pass rates used in program administration, the frequency of post-installation inspections, the treatment of hazardous fails, resolution of disputes relating to inspections, charges for reinspection, inspection waivers, and minor job corrections.

8.4.2 Types of Pass Rates

Utilities or their designees will collect information on both per-home and per-measure pass rates. Per-home pass rates will be used for the purposes of determining minimum sample sizes for tracking performance. Per-measure pass rates will be used to tailor training and technical assistance for contractors, as well as to manage programs in a prudent manner.

8.4.3 Post-Installation Inspection Frequency

Utilities or their inspection contractors will inspect all ceiling insulation and furnace repair/replacement jobs. For all other jobs not involving ceiling insulation or furnace repair/replacement, random inspections will be conducted for a sample of dwelling units. Minimum sample sizes will be determined for each contractor, and will depend upon the contractor's past pass rates and the total number of units allocated to the contractor. Minimum sample sizes are shown in Table 8-1. Note that these sample sizes are designed to provide 90% confidence that the true pass rate is within 5% of the estimated value.

Table 8-1: Minimum Sample Sizes for Inspections (90%/±5% precision)

	Number of Homes Allocated to Contractor					
Pass Rate	**200**	**500**	**1000**	**2000**	**5000**	**10000**
0.70	140	241	317	377	425	444
0.75	129	210	265	306	337	348
0.80	115	176	213	239	257	264
0.85	98	139	161	175	184	188
0.90	76	97	108	114	118	119
0.95	45	51	54	56	57	57

Utilities or their inspection contractors may exceed these minimum sample sizes if, in the judgment of the administrator, larger sample sizes are necessary to preserve program quality control. Circumstances that may justify larger sample sizes include, but are not limited to, the following.

1. If the utility's program or the amount of additional post-inspections undertaken is small enough so that the additional post inspections can be conducted without substantially increasing overall program expenditures.
2. If a particular contractor exhibits a pattern of inspection failures that justifies inspection of a higher percentage of jobs.
3. If a contractor is on a quality improvement plan which requires them to improve their inspection pass rates.
4. If contractor crews are newly trained or new to the program, and require closer field supervision and on the job training.
5. If a contractor's installation crews are not sure of the program inspection standards, as exhibited in failed inspection results.
6. If a contractor's allocation of homes covers multiple counties.
7. If post-inspections are done in conjunction with post-installation natural gas appliance tests.[1]
8. If larger sample sizes are necessary to resolve disputes with contractors over estimated billing fail rates."

Utilities will keep records of actual inspection frequencies by contractor.

8.4.4 Hazardous Fails

Contractors are required to correct hazardous fails within 24 hours of notification by the utility and/or its inspector. Note: Treatment of fails relating to natural gas appliance testing will be considered later after natural gas appliance testing policies have been further considered.

8.4.5 Failed Inspection Dispute Resolution

Dispute resolution practices of the utilities require the use of a neutral third party arbitrator in instances where utility personnel are used to perform the inspections. Utilities who use utility personnel for the inspection function are required to either 1) have available at least two professional arbitration services to hear and determine appropriate action on any unresolved dispute between LIEE service providers and the utility or 2) provide language in

[1] The rational here is that there are economies associated with conducting post-installation inspections and post-installation natural gas appliance testing.

their contracts with LIEE service providers that the selection of an arbitrator must be mutually acceptable to both parties. The costs of such service shall be paid by the party which "loses" the arbitration. Utility personnel may, however, attempt to mediate or facilitate resolution of issues between utility inspectors and contractors, as long as a third party arbitrator is available for the final resolution of any unresolved disputes, as described above.

Utilities that do not use utility personnel for either the inspection function or LIEE contracting work may, but are not required to, employ the dispute resolution procedures described above. Instead, in those instances where a dispute arises between outside inspectors and contractors, the utility may utilize in-house personnel to hear and determine appropriate action on any unresolved dispute between LIEE service providers and inspectors. The costs of such service shall be paid by the party that "loses" the arbitration.

8.4.6 Failure to Install Feasible Measures

In the event that a contractor fails to correctly install a feasible measure, it will be accorded the following treatment.

- If the measure is installed, but installed incorrectly, the job will be given a fail.
- If the measure is not installed at all, but is included in the invoice for the dwelling, the job will be given a fail.
- If the measure is not installed at all, but is not included on the invoice and not on a pre-approval list, the job will be issued a correction. In the event that this correction is not made within 10 calendar days, the correction will revert to a job fail.
- If the measure is included on a pre-approval list but not installed, the job will receive a fail.

8.4.7 Charge for Reinspection

The utility will levy a charge in the event that a job fail or a job correction is issued and the contractor contests this action. If the failure or correction is upheld, the utility will charge the contractor for the reinspection of the job by the utility arbitrator. If the utility uses an inspection contractor and the job fail or correction is reversed, the utility will charge the inspection contractor for the reinspection of the job by the utility arbitrator, and will reimburse the installation contractor for any direct costs associated with the reinspection of the job.

8.4.8 Inspection Waivers

Policies on inspection waivers vary between mandatory and non-mandatory inspections, as follows.

- ***Mandatory inspections*** are those required for projects in which ceiling insulation is installed. An attempt will be made to inspect all such projects prior to making final approval of payment to the weatherization contractor. For mandatory inspections, three attempts will be made to arrange for a post-installation inspection within 30 calendar days of the notification of job completion. After three such attempts, the inspection provider will send a certified letter to the participant asking for permission to inspect the home. If the participant does not respond to this certified letter within two weeks, the inspection provider need not conduct the inspection prior to making final approval of payment for the weatherization job.[2]
- ***Non-mandatory inspections*** relate to projects not involving ceiling insulation. They are non-mandatory in the sense that only a sample of projects must be inspected. A non-mandatory inspection of a sampled project may be waived by the utility after three attempts to contact the participant, provided that the inspection provider replaces this project with another and completes a sufficient number of inspections as provided in the policy on post inspection frequency (see above).

8.4.9 Post Installation Job Correction Policies

Inspectors will be permitted to make minor corrections at the site. Minor job corrections will be limited to corrections that satisfy the following conditions.

- The error is the only error found at the site.
- Are not associated with errors that create hazardous conditions.
- Can be made with tools typically carried by inspectors (e.g., screwdrivers, putty knives, etc.).
- Can be made with materials normally carried by inspectors (e.g., screws, glazing compound, etc.).
- Can be carried out within a few minutes by inspectors.
- Can be accomplished at a minimum of inconvenience to inspectors.

In the event that a minor correction is made, the inspector will record it. Each time a minor job correction is made, the contractor will be notified. Minor corrections will become part of the contractor's record. Inspector reports will be entered into a database, and reports on contractor performance will be monitored.

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[2] Even though SoCalGas pays the contractor prior to inspection, an adjustment to the payment may be made if an inspection reveals problems. Our interpretation is that the final approval of the SoCalGas payment is thus not made until after an inspection, presuming that an inspection can be made.

A maximum number of such post-installation minor corrections will be determined for each contractor and each measure. This maximum will be either three corrections, or 0.5% of the total number of a contractor's allocation of participants expected to be inspected, whichever is greater.

Inspection providers will develop monthly reports on minor job corrections by contractor and measure. In the event that a third party contractor conducts inspections, the contractor will submit these reports to the utility on a regular basis, as specified in the contract between the utility and the third party inspector. As soon as a report indicates that a contractor has exceeded the maximum allowable number of job corrections for a specific measure during the program year, that contractor will be informed by the utility that no further minor job corrections will be made by inspectors on installations of the measure in question during the program year. Inspectors will also be informed that they should no longer perform minor job corrections on the measure in question for that particular contractor for the measure in question for the remainder of the year.

Minor corrections associated with a specific weatherization measure in a specific program year will not be counted as inspection failures for the contractor until the contractor is notified that the maximum number of allowable minor job corrections has been exceeded. Subsequent problems associated with the installation of the measure will be counted as fails in inspection records, and the contractor will be required to revisit the site to make corrections.

In the event that a Contractor's overall performance falls short of Program standards, a corrective action plan may be instituted. Such a corrective action plan may be required if the Contractor fails to do one or more of the following.

- Meet production standards.
- Complete work on time.
- Achieve and maintain an overall pass rate of 90% of all homes.
- Correct hazardous fails within 24 hours.
- Correct non-hazardous job fails within 30 calendar days.
- Provide field supervision.
- Submit accurate and legible invoices or other job related paperwork.

In the event that a corrective action plan is instituted for a Contractor, minor job corrections will no longer be performed for that Contractor during the remainder of the Program Year.

9

Contractor Eligibility

9.1 Introduction

This section outlines contractor eligibility conditions under the LIEE Program. Subsection 9.2 deals with insurance requirements. Subsection 9.3 relates to licensing requirements. The purpose of this section is to provide general information on these requirements. It may not include all of the requirements specified in the contracts between contractors and Program Administrators.

9.2 Insurance Requirements

Contractors shall maintain insurance in full force and effect during the life of the contract with LIEE, with responsible insurance carriers authorized to do business in California and having a Best Insurance Guide (or equivalent) rating of not less than A:VII. All policies shall be endorsed to require at least 30 days notice to the utility of any change or cancellation. Original certificates of insurance shall be provided to the Program Administrator prior to the commencement of any work for this program.

The following insurance shall be provided:

- Workers' Compensation and Employer's Liability Insurance,
- Comprehensive General Liability Insurance, and
- Comprehensive Automobile Liability Insurance.

Required amounts of coverage will be provided by the utility. The Program Administrator shall be named as an additional insured in each policy except for Workers' Compensation. Contractors are also required to ensure that all subcontractors, if approved, maintain the same levels and types of insurance and are not employed in LIEE if insurance has lapsed.

Workers' Compensation Insurance is required to maintain a contractor's license in good standing with the Contractors State License Board (CSLB). The CSLB will suspend the contractor's license of any contractor whose insurance lapses or is canceled. It is the responsibility of each LIEE contractor to provide documentation that all required insurance is

in effect. This includes but is not limited to providing LIEE staff with new Certificates of Insurance, as necessary, at the renewal date of insurance.

When records indicate a lapse of insurance coverage, contractors will be immediately suspended from working in LIEE.

9.3 Licensing Requirements

Any organization or company contracting with a Program Administrator under the LIEE Program must comply with all applicable federal, state and local laws and regulations, as well as with utility guidelines. Contractors and subcontractors must also comply with any applicable CSLB licensing requirements, including current requirements for elelctrical, plumbing and HVAC, and must remain in good standing with the CSLB.

10

Natural Gas Appliance Testing

10.1 Introduction

This section summarizes the statewide policy on LIEE Program natural gas appliance testing (NGAT). Subsection 10.2 discusses the circumstances when such testing must be conducted. Subsection 10.3 presents the general protocols that are followed in the course of natural gas appliance testing. Subsection 10.4 addresses the timing of testing. Subsection 10.5 considers actions to be taken when one or more test is failed by appliances in a participating home. Subsection 10.6 discusses the types of personnel used for the assessments. Finally, Subsection 10.7 provides NGAT nonfeasibility criteria.

Note that specific standards for these natural gas appliance testing (NGAT) protocols are described in the *LIEE Weatherization Installations Standards (WIS) Manual*.

10.2 Applicability of Natural Gas Appliance Testing

10.2.1. General Applicability

In general, natural gas appliance testing will be conducted for all homes that receive infiltration reduction measures and that have at least one natural gas appliance affecting the living space.[1] In addition, the repair and replacement of a natural gas furnace or water heater involves appliance testing. See the Natural Gas Appliance Testing section in the California Weatherization Installation Standards for Conventional Homes or Mobile Homes, as applicable.

10.2.2. Applicability to Combustion Fuels other than IOU Natural Gas

Homes with non-IOU (e.g., propane) space heating fuels are not eligible for infiltration reduction measures. As a consequence, they are not eligible for natural gas appliance testing. Homes with IOU space heating but which use a non-IOU combustion fuel for another appliance (say, water heating) are also ineligible for NGAT due to the inability of the IOUs to service combustion appliances using non-IOU fuels. The IOUs will refer these latter homes to local LIHEAP agencies to conduct testing and do any repairs or replacement of

[1] The NGAT section of the LIEE *WIS Manual* describes the conditions under which an appliance is determined to affect the living space.

non-IOU combustion fuel appliances and charge such services to the LIHEAP agencies' CSD-funded weatherization programs. Whether the LIHEAP agencies would also install infiltration reduction measures, or any other weatherization measures under their LIHEAP programs, would be subject to voluntary agreements freely entered into by the IOUs and the local LIHEAP agencies.

Any agreement between an IOU and a local LIHEAP agency which does not contract with that IOU to provide weatherization services under the IOU's LIEE program will be voluntarily negotiated on a case-by-case basis, given different geographic areas served, and different situations which might occur in different parts of each IOU's service area.

In any part of a given IOU service area where the local LIHEAP agency chooses NOT to enter into such an agreement, the IOU will continue to install all feasible non-infiltration weatherization measures under its LIEE program, then refer customers to the local LIHEAP agency if they want to have their non-IOU fuel combustion appliances tested, repaired or replaced, and/or want to have infiltration reduction measures installed by the LIHEAP agency.

10.3 Natural Gas Appliance Testing Protocols

10.3.1. General Protocols

General natural gas appliance testing (NGAT) protocols are presented below. Note again that detailed procedures are described in the NGAT section of the *LIEE Weatherization Installation Standards Manual*. The types of checks conducted as part of NGAT are described in this section.

10.3.2. Pre-Weatherization Evaluations of Gas Appliances

In order to avoid cases in which post-weatherization NGAT would discover nonconforming conditions that (a) preclude installation of infiltration reduction measures, and (b) cannot be corrected within the scope of the program, some pre-weatherization evaluations of gas appliances are performed as part of the initial home assessment. Pre-weatherization appliance evaluations include the following components:

- ***Gas Leaks.*** Each gas-burning appliance is checked for the presence of gas leaks. When a natural-gas leak is found, the utility is contacted for gas service repairs. Non-IOU gas leaks are treated in accordance with utility-specific policies. All gas leaks must be repaired before weatherization commences.
- ***Combustion and Ventilation Air (CVA) Evaluations.*** CVA is evaluated for furnaces and water heaters to determine if it is adequate and, if inadequate, whether correction is feasible/possible.

- ***Flue and Vent Pipe Termination Evaluations.*** Flue and vent pipe terminations are checked to determine if any violate NGAT criteria and, if nonconforming, whether correction is feasible.
- ***Appliance Operation and Accessibility.*** All gas-burning appliances are checked to determine whether (a) they are accessible for testing, and (b) they are operable. Non-operable natural gas appliances are referred to the appropriate utility service department.
- ***Unvented Space Heater.*** The dwelling is checked for presence of an unvented combustion appliance used for heating the living space (which will preclude installation of infiltration reduction measures if not removed/eliminated).
- ***Whole House Fan.*** When a whole house fan exhausting into the attic is present, the attic is checked for the presence of a gas water heater or gas furnace with standing pilot (which will preclude installation of infiltration reduction measures).
- ***Gas Clothes Dryer.*** If located within the living space, the clothes dryer moisture exhaust is checked to determine if it is properly vented outdoors. If not properly vented outdoors, infiltration reduction measures will not be installed. This restriction does not apply to a gas clothes dryer located in an attached garage.
- ***Gas Range with Heater/Incinerator.*** When a gas range has a built-in space heater and/or incinerator, if the appliance is not properly vented outdoors, infiltration reduction measures will not be installed.
- ***Water Heater in Bedroom.*** If an open combustion water heater is present in a sleeping area, infiltration reduction measures will not be installed.
- ***Mobile Homes.*** Additional checks will be made in mobile homes to determine if (a) gas cooking is present and the kitchen exhaust to outdoors is nonconforming, (b) an open combustion space or water heater is present within the living space, and (c) an exterior-accessed appliance enclosure has unacceptable isolation of furnace return air. Item (a) may be corrected as a Minor Home Repair. Items (b) and (c) preclude installation of infiltration reduction measures.

Required corrections will be performed before weatherization commences. The owner will be informed of conditions that preclude installation of infiltration reduction measures and cannot be remedied by the LIEE program (e.g., exhausting clothes dryers outdoors, and repair or replacement of appliances and gas vents for which repair or replacement is not available).

10.3.3. Post-Weatherization Natural Gas Appliance Testing (NGAT)

After completion of weatherization that includes infiltration reduction measures, NGAT is performed for all natural gas appliances affecting the living space. Post-weatherization NGAT includes the following components:

- ***Visual Examinations.*** Visual examination steps include the following: flue and vent system checks; appliance component checks; re-check for gas leaks, inoperable or inaccessible appliances, nonconforming appliances, and whole house fan vented into attic; and check for properly-blocked fireplace damper if gas log is used as the primary heat source.
- ***Combustion and Ventilation Air (CVA) Verification.*** CVA adequacy is verified.
- ***Carbon Monoxide (CO) Tests.*** A variety of ambient carbon monoxide tests are conducted on natural gas appliances. The specific nature of these tests is considered in 10.3.4.
- ***Draft Tests.*** Smoke tests are used to check for proper drafting of appliances for which these tests are applicable (e.g., open combustion natural draft space and water heaters and gas logs).

10.3.4. Ambient CO Testing of Natural Gas Appliances

The assessment of non-IOU gas appliances was considered above. For IOU-fueled gas appliances (appliances using natural gas provided by SDG&E, PG&E or SoCal Gas), ambient CO testing is conducted using the following protocols:

- ***Space Heating Appliances.*** Appliance Ambient CO Test is performed for all space heating appliances.
- ***Water Heaters.*** Appliance ambient CO Test is also performed for water heaters in a location defined in the WIS as affecting the living space.
- ***Cooking Appliances.*** Room Ambient CO tests are performed in the kitchen separately during operation of each cooking appliance component (cook top, oven, and broiler).
- ***Gas Logs.*** Exhaust gas CO test is conducted inside the top edge of the fireplace opening on gas logs.
- ***Clothes Dryers.*** No CO tests are conducted on gas clothes dryers.

10.3.5. Disposition of Appliance Fails/Problems

If a problem is identified through the application of the overall natural gas appliance testing protocol (i.e., elevated CO, inadequate draft, or defect causing an unsafe condition), the case will be referred for resolution to qualified utility-trained personnel or a contractor licensed to repair appliances. Such resolution may involve the use of flue CO testing as well as other procedures.

10.4 Timing of Combustion Appliance Testing

10.4.1. Homes with Natural Gas Appliances

For homes with natural gas appliances, post-weatherization NGAT protocols are conducted after weatherization. Post-weatherization NGAT shall be conducted within five (5) working days from the date that infiltration reduction measures are installed.

10.4.2. Homes for which Infiltration Reduction is Simulated

Temporary sealing/blocking of defective windows and doors, in order to perform post-weatherization NGAT, is allowed when required materials (such as specialty glass or special-order windows or doors) are not available to be installed concurrently with the other weatherization measures. NGAT will be conducted with the defect sealed/blocked (e.g., with plastic sheeting) to simulate infiltration reduction achieved by the completed window/door repair/replacement. A repeat of NGAT following the completed repair/replacement is not required.

10.5 Actions to be Taken When Appliances Fail NGAT

The following actions will be taken when appliances fail NGAT:

- In owner-occupied homes, natural gas space heaters failing one or more of the tests covered by the NGAT protocol will be provided with Service/Adjustment and, if necessary, will be repaired or replaced subject to Program policies and procedures.[2]
- In owner-occupied homes, natural gas water heaters failing one or more of the tests covered by the NGAT protocol will be provided with Service/Adjustment and, if necessary, will be repaired or replaced subject to Program policies and procedures.[3]
- In owner-occupied homes, non-program appliances[4] failing one or more of the tests covered by the NGAT protocols will be provided with Service/Adjustment .[5] If Service/Adjustment does not correct the problem in question, the appliance will be tagged, shut off, and/or capped and reported to the owner.
- In renter-occupied homes, appliances failing one or more of the tests covered by the NGAT protocol will be provided with Service/Adjustment.[6] If Service/Adjustment

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[2] Note that the absence of a furnace in cases where another gas appliance is used for space heating will constitute an NGAT fail.

[3] A water heater with a leaky tank will be considered to fail NGAT.

[4] Appliances for which LIEE repair or replacement is not available.

[5] In this context, Service/Adjustment of an appliance entails providing services that are within the scope of the gas service department for customers in general.

does not correct the problem in question, the appliance be will be tagged, shut off, and/or capped and reported to the tenant and the landlord.

10.6 Personnel Performing Natural Gas Appliance Assessments and Testing

The utilities have the option of conducting natural gas appliance assessments and testing using in-house staff or contracting with third parties to provide these services.

10.7 Nonfeasibility Criteria for Natural Gas Appliance Testing

Nonfeasibility Criteria for Natural Gas Appliance Testing for the Entire Dwelling. Natural Gas Appliance Testing shall not be conducted in a dwelling when:

- No infiltration-reduction measures are installed,
- No natural gas appliance affecting the living space is present.
- A non-IOU combustion fuel is used for space heating**.**

Nonfeasibility Criteria for Natural Gas Appliance Testing for Individual Appliances. Natural Gas Appliance Testing shall not be conducted for an appliance if it:

- Is abandoned.
- Is inaccessible.
- Uses non-IOU combustion fuel.

CERTIFICATE OF SERVICE

I hereby certify that a copy of **RESPONSE OF SAN DIEGO GAS AND ELECTRIC COMPANY TO THE ADMINISTRATIVE LAW JUDGE'S FOURTH RULING SEEKING FURTHER INFORMATION FROM THE LARGE INVESTOR-OWNED UTILITIES' 2009 – 2011 LOW INCOME ENERGY EFFICIENCY/CARE APPLICATIONS** has been electronically mailed to each party of record of the service list in A.08-05-022, A.08-05-024, A.08-05-025, A.08-05-026. Any party on the service list who has not provided an electronic mail address was served by placing copies in properly addressed and sealed envelopes and by depositing such envelopes in the United States Mail with first-class postage prepaid.

Copies were also sent via Federal Express to Administrative Law Judges Sarah R. Thomas and Commissioner Dian Grueneich.

Executed this 20th day of August, 2008 at San Diego, California.

/s/ Jenny Norin
Jenny Norin