

**STATE OF CALIFORNIA  
ENERGY RESOURCES CONSERVATION  
AND DEVELOPMENT COMMISSION**

In the Matter Of	)	Order No. 08-910-11
	)	
California Energy Commission Authority to	)	Directing Staff to notify the California
Certify HERS Raters As Eligible Certifiers	)	Building Industry, HERS Providers,
of Energy Efficient Homes In California to	)	HERS Raters and Approved Software
Qualify for Federal Tax Credits using	)	Providers
Energy Performance Measurement	)	
Methods	)	

Background

Energy Policy Act of 2005

The Energy Policy Act of 2005 amended Section 45L of the Internal Revenue Code to establish the New Energy Efficient Home Federal Tax Credit. The statute allows an eligible contractor who constructs a qualified new energy efficient home to qualify for a tax credit of

\$2,000. The tax credit was extended through December 31, 2008 by subsequent statute.

A dwelling unit meets the energy savings required to qualify if it is certified to have annual heating and cooling energy consumption that is at least 50 percent below the annual level of heating and cooling energy consumption of a comparable dwelling unit, which is constructed in accordance with the 2004 Annual Supplement to the International Energy Conservation Code. At least 1/5 of those energy savings (10 percent heating and cooling energy consumption below the comparable dwelling unit) must result from building envelope component improvements.

Certification of qualified dwelling units must be made in accordance with guidance prescribed by the Internal Revenue Service (IRS), and that guidance must specify procedures and methods for calculating energy savings.

Initial IRS Guidance

On February 21, 2006, the Internal Revenue Service issued Notice 2006-27 to provide guidance for a process under which an eligible contractor may obtain a certification that a dwelling unit is an energy efficient home that satisfies the requirements of the statute. The notice also provided for a mechanism for determining eligible energy performance software that eligible certifiers could use to certify qualifying dwelling units and for IRS listing of eligible software. The Notice said that an eligible certifier is a person not related (within the meaning of Section 45(e) of the IRS Code) to the eligible contractor and has been accredited or otherwise authorized by the Residential Energy Services Network (RESNET) to use energy performance measurement methods

approved by RESNET. Notice 2006-27 also stated that an eligible certifier could be accredited or otherwise authorized by an "equivalent rating network" to use energy performance measurement methods approved by the "equivalent rating network," but did not clarify what organizations would be eligible to be an "equivalent rating network."

Notice 2006-27 also stated that IRS will create and maintain a public list of software programs that may be used to calculate energy consumption for purposes of providing certification that a dwelling unit qualifies for the tax credit. The Notice said that the software program must conform to the energy performance modeling rules prescribed in RESNET Publication No. 05- 001 and meet the tests for accreditation set up by RESNET through that publication.

On October 16, 2006 IRS issued Announcement 2006-88 to recognize that RESNET had revised its prescribed method for calculating energy consumption to provide more appropriate regional results. This Announcement authorized the use of RESNET Publication 06-001 to avail the public of those needed revisions.

#### Internal Revenue Service Guidance in Notice 2008-35

On March 24, 2008 the Internal Revenue Service issued Notice 2008-35 to clarify and supersede Notice 2006-27. Notice 2008-35 clarifies the meaning of "equivalent rating network" and permits calculation procedures other than those identified in Notice 2006-27 to be used to calculate energy consumption.

Notice 2008-35 states: "An equivalent rating network includes, in a state that has established energy efficiency standards under which a dwelling unit is required to achieve a specified aggregate level of heating and cooling energy consumption for any purpose (including compliance with building codes or eligibility for a state grant or tax credit), the state agency administering those standards. Thus, if the agency has accredited or otherwise authorized a person to use energy performance measurement methods approved by the agency for use in determining whether the state's energy efficiency standards are satisfied, the person so accredited or authorized qualifies as an eligible certifier."

Notice 2008-35 also states that for the purposes of certifying that a dwelling unit meets the energy efficiency requirements of the statute to qualify for the federal tax credit, "heating and cooling energy consumption must be calculated in accordance with the procedures prescribed in RESNET Publication 05-001, 06-001 or in accordance with an equivalent calculation procedure." It defines "equivalent calculation procedure" as "a procedure that produces results comparable to the results obtained under the procedures in RESNET Publication No. 05-001 or Publication No. 06-001."

#### California Energy Commission Policy, Authority and Law

California law places authority with the California Energy Commission for establishment of certification procedures for home energy raters, and separately for certification of energy performance measurement methods (both energy consumption

calculation software and field verification protocols and procedures) for showing compliance with the California Building Energy Efficiency Standards. The Energy Commission has developed through regulation extensive energy efficiency standards pursuant to California statutes that detail the procedures to be used for field verification of energy efficiency features and the capabilities and analytical methods that software must use to assess the impacts of these features. This system of rules is highly evolved through decades of development and refinement, is based on research of the energy use patterns in California buildings and the climate-specific construction practices of California builders, and is carefully designed to encourage builders to construct buildings to accomplish the goals of California energy policy. The rules were developed through extensive public proceedings in accordance with California administrative law.

California's detailed set of rules (both energy consumption calculation and field verification protocols and procedures) are used as the fundamental structure for virtually every new residential energy efficiency program operated in California. They are required by California law for demonstrating compliance with the performance approach of California's Building Energy Efficiency Standards, which apply to every new dwelling constructed in California.

They also are required by California law for determining eligibility for energy efficiency improvements beyond those required for Standards compliance to qualify for solar energy system incentives under the New Solar Homes Partnership administered by the Energy Commission. They are also required by the California Public Utilities Commission for determining eligibility for incentives for energy efficient new homes through the California ENERGY STAR® New Homes Program administered by each of the major investor-owned utilities.

The California building industry strongly supports these rules because they establish a level playing-field resulting in consistent, highly reliable tools and a consistent framework for choosing energy efficiency measures and getting them installed with high quality. These rules represent a "standard of care" that the building industry depends on to make choices that are consistent with California energy policy and reduce construction defects and exposure to liability.

Energy consumption software that has been approved by the Energy Commission for showing compliance with the California Building Energy Efficiency Standards can be easily adjusted to insure the fundamental objective of the enabling federal legislation that dwelling units are certified for tax credit purposes to provide a level of heating and cooling energy consumption that is at least 50 percent below that of a comparable dwelling unit constructed in accordance with the standards of Section 404 of the .2004 Supplement to the 2003 International Energy Conservation Code, and to have building envelope component improvements that provide for a heating and cooling energy consumption that is at least 10 percent below that of a comparable dwelling unit.

#### California Energy Performance Measurement Methods Are Recognized by RESNIET

RESNIET fully recognizes the primacy of the California Energy Commission created by California law to conduct energy consumption calculations, field verification protocols and

procedures, and certification of individuals to verify energy efficiency installations consistent with that California law.

The foundation of RESNET's policies and procedures for energy efficiency verification and certification is their Mortgage Industry National Home Energy Rating Standards. Section 101.2 of the RESNET Standards states:

**101.1.2 Relationship to State Law.** This standard specifically recognizes the authority of states that have laws requiring certification or licensing of home energy rating systems. To the extent that state laws differ from this standard, state laws shall govern.

RESNET's Publications 05-001 and 06-001 rely on the Mortgage Industry National Home Energy Rating Standards as the foundational standards for the federal tax credits. Section 2 of those Publications state:

## **2. Procedures for Verification of Eligibility for the Tax Credit**

### 2.1 Standard for Inspection of Homes

To be eligible for the federal tax credit for new homes every home shall be independently field tested to verify energy the performance (sic) of the home. To comply with the law, field verification of a qualifying home's energy performance shall be conducted in accordance with the "Mortgage Industry National Home Energy Rating Standards."

### 2.2 Procedures for Certifying Individuals Who Will Certify a Home's Compliance for the Tax Credit

Individuals authorized to certify a home's qualification for the tax credit must be trained and certified in accordance with the procedures contained in the Mortgage Industry National Home Energy Rating Standards.<sup>1</sup>

These provisions recognize that California's adopted energy consumption calculations, field verification protocols and procedures. and California approval of Home Energy Rating System (HERS) providers and certification of HERS raters to verify efficiency installations, are fully proper replacements for and actually are included within RESNET's Standards. Pursuant to RESNET's foundational standards, RESNET recognizes Energy Commission approved HERS providers and the HERS raters that they certify pursuant to California law. As a result, the Energy Commission approved HERS providers and certified HERS raters make up a substantial portion of RESNET's membership, rating accomplishment, and membership revenue, even substantially greater than might be anticipated given California's percentage of the national population.

### Commission Approved Software That Has Been Listed By the IRS

The Energy Commission has approved two energy consumption software programs for showing compliance with the 2005 Building Energy Performance Standards, Micropas Version 7.3, developed by Enercomp, Inc., and Energy Pro Version 4.4, developed by

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<sup>1</sup> In the RESNET Publications, Appendix A, Notes to Table 3.2(1), the following additional reference is made: (m) Tested duct leakage shall be determined and documented by a Certified Rater using the on-site inspection protocol specified by the 2006 Mortgage industry National Home Energy Rating Standards.

EnergySoft, LLC. The developers of both of these programs have revised these programs to be consistent with the prescriptions of RESNET Publication No. 06-001 and have been accredited by RESNET. IRS has listed both of these software programs for use by eligible certifiers for determining that a dwelling unit qualifies for the tax credit.

Because RESNET's rules related to calculations do not recognize the validity of California's policy to use time dependent valuation, and other aspects where the RESNET rules differ from Energy Commission modeling rules, these current programs are not optimal for encouraging consistency with California Standards compliance and the achievement of incentives programs goals in California. This inconsistency causes a misalignment between measure choices that would be made for other major California policy initiatives and discourages builder use of tax credit incentives that would otherwise reinforce and extend California's pursuit of policy initiatives.

Continued use in California of these current IRS-listed tax credit software programs may be adequate, particularly if the tax credit does not get extended! by federal legislation prior to its December 31, 2008 sunset date. However, Notice 2008-35 creates an opportunity to bring tax credit energy calculations fully into alignment with California's adopted rules for energy consumption calculation and field verification protocols and procedures. Thus, if the federal tax credits are extended, use of California rules and compliance programs could substantially increase the availability of the tax credits for highly energy efficient buildings in California.

#### California Energy Commission Findings

1. The California Energy Commission is an "equivalent rating network" as described in Notice 2008-35. (See, Pub. Resources Code, Secs. 25402 and 25402.1)
2. California law solely authorizes the California Energy Commission to establish certification procedures for home energy raters and quality assurance procedures to provide accurate ratings (See, Pub. Resources Code, Sec. 25942)
3. RESNET recognizes the primacy of state law with regard to the development of home energy rating standards and procedures. (RESNET, Mortgage Industry National Home Energy Rating Standards, Sec. 101.2. and the adoption by reference of those Standards in RESNET Publications 05-001 and 06-001)
4. California's energy performance measurement methods (both energy consumption calculation software and field verification protocols and procedures) are required by California law for demonstrating compliance with the performance approach of California's Building Energy Efficiency Standards.
5. California's energy performance measurement methods (both energy consumption calculation software and field verification protocols and procedures) are relied upon for the key California incentives programs aiming to achieve highly energy efficient new homes beyond the requirements of the state's building energy performance standards, both the New Solar Homes Partnership requirements set by the Energy Commission for energy efficiency improvements necessary to qualify for solar energy system incentives (See Pub. Resources Code Secs. 25782 and 25784) and the California ENERGY STAR®

New Homes Program administered by each of the major investor-owned utilities as authorized by the California Public Utilities Commission for incentives for energy efficient new homes.

6. The Energy Commission's energy performance measurement methods, which qualify California to be an "eligible certifier" under Notice 2008-35, are "equivalent calculation procedures" as that term is used in Notice 2008-35.
7. The tax credit qualification portions of the two energy consumption software programs for showing compliance with the 2005 Building Energy Performance Standards, Micropas Version 7.3, developed by Enercomp, Inc., and Energy Pro Version 4.4, developed by EnergySoft, LLC, which have been listed by the IRS are available currently for qualifying new homes for federal tax credits.
8. The Energy Commission would welcome software programs to be submitted for Energy Commission approval and subsequent IRS listing, which fully meet all California Building Energy Efficiency Standards approval requirements with modification only to define the reference building for tax credit purposes consistent with the 2004 International Energy Conservation Code. The Commission shall exercise its discretion under Section 103.1 of the 2004 International Energy Conservation Code to define the reference dwelling unit and configure and analyze the Standard Reference Design and the Proposed Design to insure consistency with California Building Energy Efficiency Standards rules for modeling each Building Component shown in IECC Table 404.5.2(1) and Table 404.5.2(2) and additional energy efficiency measures approved for showing compliance with California Building Energy Efficiency Standards in each California climate zone.

Direction to Commission Staff

Staff is directed to broadly notice IRS Notice 2008-35 and this Order to the state's building industry, HERS providers, HERS raters certified by those providers, Commission-approved software providers and energy consultants.

Dated: September 10, 2008

Signatures On File:

Jackalyne Pfannenstiel, Chairman  
James D. Boyd, Vice Chair  
Arthur H Rosenfeld, Commissioner  
Jeffrey D. Byron, Commissioner  
Karen Douglas, Commissioner