## **RESNET Proposed Amendment**

**Proposal Title:** Uniform reporting requirements for Energy Savings Values (ESV) calculations

**Proponent:** ENERGY STAR for Homes Program – Modified by RESNET

**Technical Committee** 

## **Proposed Changes:**

**303.3.3** If ratings are conducted to evaluate energy saving improvements to the home, the following requirements will apply in addition to the information set forth under Section 303.3.2 of this Standard, each rating report shall include

**303.3.3.1** The estimated annual energy cost savings for the home reconfigured to include those improvements;

303.3.31 The annual energy cost savings for the Rated a home shall be estimated calculated by comparing the projected annual energy use cost of the Rated Hhome with to the projected annual energy use cost of a reference home. For new homes in which the results will be used to apply for an Energy Efficient Mortgage (EEM), the most recent HERS reference home shall be used as the baseline, except when an alternative reference home is specified by the lender or program underwriter. For existing homes in which the results will be used to apply for an Energy Improvement Mortgage (EIM) the unimproved home shall be used as the baseline. For savings calculations unrelated to EEM's or EIM's, the user may select any reference home as the baseline. either the RESNET representation of the 1993 Model Energy Code's Standard Design Home for new homes or with the original home for existing homes. The monthly energy savings for the improved home shall be equal to the annual energy savings for the home divided by 12.

<u>303.3.3.2</u> The <u>estimated</u> monthly energy <u>cost</u> savings for the <u>Rated</u> improved home shall be equal to the annual energy <u>cost</u> savings for the <u>home</u> divided by 12.

**303.3.3.2** The Energy Value of for the Rated improved homes (e.g., present value of the energy cost savings) shall be calculated as follows:

**303.3.3.23.1** For Fannie Mae energy efficient mortgages the present value factor shall be calculated as:

$$pvf = [1 - (1 + r)^{n}] / r$$

where:

pvf = present value factor

r = prevailing mortgage rate (<u>i.e.</u>, Assumed Rate)

n = weighted life of the measures (23 years)

To determine the Energy Value of <u>for</u> the <u>Rated</u> improved home, the present value factor (pvf) shall be multiplied by the annual energy <u>cost</u> savings.

**303.3.3.23.2** For Fannie Mae energy efficient mortgage products, the <u>prevailing mortgage rate</u> financing interest rate (i.e., Assumed Rate) shall be provided by RESNET annually from the information provided by Fannie Mae.

**303.3.3.2**<u>3</u>.3 A weighted lifetime of 23 years shall be used in determining the present value factor for the energy cost savings.

**303.3.3.4** For FHA and Freddie Mac energy mortgages, the present worth of energy savings shall be calculated by taking the net annual energy savings (the annual energy savings minus the annual maintenance costs) times the present value factor developed by the U.S. Department of Housing and Urban Development. The present value factor is contained in the "HUD Mortgage Letter 93-13", as posted on RESNET's web site at <a href="http://www.natresnet.org/resources/lender/lhandbook/hud\_93-13.htm">http://www.natresnet.org/resources/lender/lhandbook/hud\_93-13.htm</a>.

## 303.3.3.5 Each rating report shall include:

- The estimated monthly energy cost savings for the Rated home;
- The Energy Value for the Rated home;
- For FHA and Freddie Mac energy mortgages, the present worth of energy savings;
- The weighted lifetime of the measures that was used to determine the present value factor;
- The prevailing mortgage rate (i.,e., Assumed Rate) that was used to determine the present value factor;
- The utility rates that were used to determine the estimated annual energy cost savings. The following units shall apply, as applicable to the fuel type(s) used by the Rated home: \$ per kWh for electricity, \$ per therm for natural gas, and \$ per gallon for fuel oil;
- The reference home from which annual energy cost savings were calculated (e.g., 1993 MEC, 2006 IECC, 2006 HERS)
- A reference to the methodology used to calculate the values on the report. Specifically, the report shall reference "Section 303.3.3 of RESNET's 2006 Mortgage Industry National Homes Energy Rating Systems Standards"

## Justification:

The proposed language was prepared with three goals in mind:

1. The current reporting requirements for energy savings and energy values do not encompass many of the underlying assumptions that are used. To increase transparency and reduce the potential for oversights by loan officers and Providers, an expanded list of reporting requirements is proposed. These additional reporting requirements could be included in a footnote, such as:

"The Energy Savings Value is based on a 6.21% interest rate, \$0.075 per kWh of electric consumption, \$1.15 per therm of gas consumption, 23 year weighted life of measures, using calculation procedures in section 303.3.3 of RESNET's 2006 Mortgage Industry National Homes Energy Rating Systems Standards and the HERS 2006 reference home as a baseline for calculating the savings".

- When calculating the annual energy cost savings, the baseline from which savings are to be measured has been revised. The existing language reference the "the RESNET representation of the 1993 Model Energy Code's Standard Design Home ", while the proposed language would allow for the use of any standardized baseline (e.g., 1993 MEC, 2006 IECC, 2006 HERS).
- 3. Grammatical changes have been made to enhance the consistency, clarity, and readability of this section.