

# **Industry Forum on Proposed Changes to the National Home Energy Rating Standards**

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# Time Lines for Adopting National Rating Standards Amendments

- **January 26**                      **Proposed Amendments Posted on RESNET Web Site**
- **March 3**                        **Industry Forum on Proposed Amendments**
- **March/April**                   **Public Comment Process**
- **May**                              **Drafting Committee Considers Comments**
- **June**                             **RESNET Board Makes Recommendations to Standards Revision Committee**
- **July**                              **Amendments Adopted**

# To Down Load and Comment on Proposed Amendments

[www.natresnet.org/amend/](http://www.natresnet.org/amend/)

# Rating Program Administration Amendments

## ADMIN: 2004-01 “Rater Financial Interest Disclosure

- **Standardize Disclosure Form That Raters Must Complete and Give to Their Clients on Their Financial Interest in the Home Being Rated.**
- **Requires Rating Providers to Disclose on Request from Builder/Homeowner**

# Rating Program Administration Amendments

**ADMIN: 2004-02 “Testing and Verification  
of Rating Software Programs”**

- **Requires Rating Providers Use Only  
Rating Software Accredited Through  
RESNET Software Verification Process**

# Rating Program Administration Amendments

## ADMIN: 2004-03 “Rating Software Documentation”

- **Requires Rating Providers to Document that the Program will use a RESNET Accredited Rating Software Program as part of the Rating Provider Application.**

# Rating Program Administration Amendments

**ADMIN: 2004-04 “Using Updated Rating Software”**

- **Requires Rating Providers to Use Latest Version of Rating Software Program.**
- **Grandfather clause**

# Rating Program Administration Amendments

**ADMIN: 2004-05 “Period of Rating  
Provider Accreditation”**

- **Requires Annual Renewal of Rating  
Providers Accreditation.**



# Rating Program Administration Amendments

## ADMIN: 2004-06 “Rater Continuing Education Requirements”

- Mandates that 10 of the 12 Hours of Required Rater Continuing Education be Approved by RESNET.

# Rater Training Amendments

## TNG: 2004-01 “Rater Trainer Testing”

- Requires that Rater Trainers Must Pass RESNET National Core Test.

# Rater Training Amendments

**TNG: 2004-02 “Administration of National Rater Test”**

- **Provides for RESNET to Administer Rater National Core Test.**

# Rater Training Amendments

**TNG: 2004-03 “Rater Training Provider Accreditation Committee”**

- **Provides for RESNET Board to Appoint Members of Committee.**

# Rater Training Amendments

**TNG: 2004-04 “Data Analysts and Data Collectors”**

- **Allows raters to use data analysts and collectors.**

# Rater Training Amendments

## TNG: 2004-05 “Minimum Rater Competencies”

- Mandates that the rater national core test include energy and building science concepts.

# HERS Reference Home

REF: 2004-01 “Amending the Rating Reference Home”

- Establishes the HERS Reference Home as equivalent to the proposed DOE Residential IECC Code Change (RICC)

# Quality Assurance

## QA: 2004-01 “Rater Quality Assurance Procedures”

- Establishes quality assurance procedures for Rating Providers, including
  - Code of Ethics
  - Quality Assurance Designee
  - Review of ratings
  - RESNET Ethics Committee
  - Submission and disposition of complaints



# Expanded HERS Score

**EXP: 2004-01 “Incorporating lighting, appliances and on-site energy production in the rating score”**

- **Establishes technical guidelines and procedures for expanding the rated features of the rated home.**

# Expanded HERS Score

- **HERS “Classic” score based on**
  - Heating
  - Cooling
  - Hot water
- **HERS “Expanded” score based on**
  - “Expanded denominator” method
  - Heating, cooling, hot water,
  - Lighting and certain appliances, and
  - On-site power generation.

# Expanded HERS Score

- **“Classic” HERS score will be mandatory for all rating reports**
- **“Expanded” HERS score will be a second score that is optional as determined by:**
  - HERS Provider
  - Programmatic requirements
  - Rater, if not specified by one of the above

# Technical Amendments

## TECH: 2004-01 - Insulation Inspection Procedures

- Provides procedures for assessing and applying insulation installation quality -- good, fair, poor
- Establishes standards for degrading insulation R-value due to compression

# Technical Amendments

## TECH: 2004-02 - Definition of Standards for Measuring House and Duct Tightness

- Amends Appendix A: On-site Inspection Procedures
- Establishes standard testing procedures for measuring air infiltration and duct leakage
- Establishes door, vent, damper positions during testing

# Technical Amendments

## TECH: 2004-03 - Blower Door Test Procedures

- Amends Appendix A: On-site Inspection Procedures
- Requires that all pressure testing equipment be annually field tested for calibration, or re-calibrated
- HERS provider must maintain a log of testing/calibration.

# Technical Amendments

## TECH: 2004-04 - Surface Area: Procedures for Measuring for Floor Dimensions

- Establishes uniform method of calculating conditioned floor area of home -- ANSI Z765-1996.

# Technical Amendments

## TECH: 2004-05 - Auxiliary Energy Consumption

- Includes furnace/boiler auxiliary energy consumption (i.e., combustion/blower fans) in HERS rating score
- Establishes reference/default consumption
- Should provide credit for ECM motors



# Technical Amendments

## TECH: 2004-06 - Coefficients for Oil Heat

- **Changes nMEUL a,b coefficients for heating oil to be same as natural gas**
- **Eliminates differences in HERS score associated with different heating fuel**

# Technical Amendments

## TECH: 2004-07 - Renewable Energy Sources in the Reference Home

- Specifically removes from the HERS reference home any renewable energy systems present in the rated home

# Technical Amendments

## TECH: 2004-08 - Natural Ventilation in Reference Home

- Establishes standard ventilation strategy for both reference and rated home
- Ensures consistency for this occupant behavior issue

# Technical Amendments

## TECH: 2004-09 - Discount Rate and the Life of Measures by a Rating Provider for Fannie Mae Energy Efficient Mortgages

- **Clarifies source of data for EEM PV calculation**
  - RESNET to provide discount rate annually
  - Established default cost-weighted life of measures -- 23 years

# Technical Amendments

## TECH: 2004-10 - Standardize Economic Calculation of Present Value for Energy Mortgages

- Establishes how EEM PV shall be calculated
  - Fannie Mae's Energy Value and Annual Energy Savings
  - FHA and Freddie Mac's Present Worth of Energy Savings

# Technical Amendments

## TECH: 2004-11 - Default Framing Factors for Enclosed Elements

- Establishes default framing factors for wall, floors, ceilings

# Technical Amendments

## TECH: 2004-12 - HEIR for Heat Pumps

- Establishes consistent method of converting HSPF and SEER to inputs appropriate for models that separately model compressor/evaporator/fan/defrost (e.g., DOE-2)

# Technical Amendments

## TECH: 2004-13 - Correction of Local Climate Conditions and Proper Sizing for Heat Pumps and Air Conditioners

- Requires that software adjust HSPF and SEER to account for climate and mis-sizing of equipment
- Establishes rule base for determining design loads



# Technical Amendments

## TECH: 2004-14 - Bio Mass Fuels Efficiencies

- Establishes all data and rules needed to include wood burning stoves in the HERS process
- Establishes reference/default values
- Defines when they should be included in rating

# Technical Amendments

## TECH: 2004-15 - Home Inspection Standards

- Establishes minimum content requirement for on-site inspection procedural manual that providers must supply to raters

# Technical Amendments

## TECH: 2004-16 - Location of HVAC Systems in Reference Home

- Establishes where the HVAC system is to be located in the HERS reference home -- inside conditioned space
- Eliminates counter-intuitive result of lower rating score when moving equipment inside conditioned space

# Technical Amendments

## TECH: 2004-17 - Definition of Home

- Refines definition of home
- Includes individual units in small multi-family buildings

# Technical Amendments

## TECH: 2004-18 - Future Guidelines

- Deletes section that dealt with additional software requirements to be phased in
- All requirements dealt with elsewhere

# Discussion Timelines

<b>HERS Reference Home</b>	<b>40 min</b>
<b>Quality Assurance</b>	<b>20 min</b>
<b>Expanded Score</b>	<b>10 min</b>
<b>Other Technical Amendments</b>	<b>20 min</b>
<b>Program Administration</b>	<b>10 min</b>
<b>Training</b>	<b>5 min</b>
<b>BOPS</b>	<b>5 min</b>