

Results of Electronic Ballot of RESNET Board of Directors on Adopting Standard Amendments

July 15, 2009

The following are the results of the electronic ballot of the RESNET Board:

1. Shall the RESNET Board Directors adopt the RESNET Technical Committee's proposed Auxiliary Elect Energy of Ground Source Heat Pumps amendment (Attachment A)?

<u>Yes (16)</u>	<u>No (0)</u>	<u>Abstain (0)</u>	<u>Not Voting (5)</u>
Ben Adams			Steve Byers
Dennis Creech			David Goldstein
Richard Faesy			Tom Hamilton
Philip Fairey			Michael Holtz
Andy Gordon			C.T. Loyd
Bruce Harley			
Mark Jansen			
Greg Nahn			
Lee O'Neal			
Kelly Parker			
Bill Prindle			
Robert Scott			
Daran Wastchak			
Erin Wignnis			
David Wilson			
Barb Yankie			

The amendment was approved by the board to be submitted to the RESNET Standards Revisions Committee for adoption.

2. Shall the RESNET Board Directors adopt the RESNET Training and Education Committee's June 30, 2009 revised proposed Rater Trainer and Quality Assurance Designee Professional Training amendment (Attachment B)?

<u>Yes (16)</u>	<u>No (0)</u>	<u>Abstain (0)</u>	<u>Not Voting (5)</u>
Ben Adams			Steve Byers
Dennis Creech			David Goldstein
Richard Faesy			Tom Hamilton

Philip Fairey
Andy Gordon
Bruce Harley
Mark Jansen
Greg Nahn
Lee O'Neal
Kelly Parker
Bill Prindle
Robert Scott
Daran Wastchak
Erin Wignnis
David Wilson
Barb Yankie

Michael Holtz
C.T. Loyd

Bruce Harley proposed a non-substantial editorial amendment to the proposed amendment (see attached WORD document) that was accepted. The revised amendment was approved by the board to be submitted to the RESNET Standards Revisions Committee for adoption.

3. Shall the RESNET Board Directors adopt the RESNET Training and Education Committee's June 30, 2009 revised proposed Certified Home Energy Rater Professional Development amendment (Appendix C)?

<u>Yes (11)</u>	<u>No (4)</u>	<u>Abstain (1)</u>	<u>Not Voting (5)</u>
Ben Adams	Andy Gordon	David Wilson	Steve Byers
Dennis Creech	Bruce Harley		David Goldstein
Richard Faesy	Greg Nahn		Tom Hamilton
Philip Fairey	Erin Wignnis		Michael Holtz
Mark Jansen			C.T. Loyd
Lee O'Neal			
Kelly Parker			
Bill Prindle			
Robert Scott			
Daran Wastchak			
Barb Yankie			

The amendment was approved by the board to be submitted to the RESNET Standards Revisions Committee for adoption.

4. Shall the RESNET Board Directors adopt the RESNET Training and Education Committee's June 30, 2009 revised proposed Rating Field Inspector Knowledge and Skills Set amendment (Appendix D)?

<u>Yes (14)</u>	<u>No (1)</u>	<u>Abstain (1)</u>	<u>Not Voting (5)</u>
Ben Adams	Greg Nahn	David Wilson	Steve Byers
Dennis Creech			David Goldstein

Richard Faesy
Philip Fairey
Andy Gordon
Bruce Harley
Mark Jansen
Lee O'Neal
Kelly Parker
Bill Prindle
Robert Scott
Daran Wastchak
Erin Wiggins
Barb Yankie

Tom Hamilton
Michael Holtz
C.T. Loyd

Bruce Harley and Erin Wiggins proposed non-substantial editorial amendments to the proposed amendment (see attached WORD document) that was accepted. The revised amendment was approved by the board to be submitted to the RESNET Standards Revisions Committee for adoption.

Attachment A

Amendment: Auxiliary Electric Energy of Ground Source Heat Pumps

Proponent:

RESNET Technical Committee

Applies to:

2006 Mortgage Industry National Home Energy Rating Systems Standards

Section 303.5 Operating Condition Assumptions

Section 303.7 Minimum Rated Features

Proposed Amendment

Insert the following, and renumber subsequent sections as necessary:

303.5.1.7 For ground-loop and ground-water heat pumps, the Auxiliary Electric Consumption shall be determined as follows:

$$\text{GSHP Auxiliary Electric Consumption (kWh/yr)} = \text{GSHP}_{\text{pump}} + \text{GSHP}_{\text{fan}}$$

Where:

GSHP_{pump} in watts is the observed pump nameplate data (Volts *Amps) for all hours of heat pump operation. Amps may be taken from nameplate as Run Load Amps (RLA) or Full Load Amps (FLA). Alternatively, pumping energy that is measured on-site with a watt-hour meter, or using measured V*A may be substituted. Such measured pumping energy may be further adjusted for on-site measured duty cycle during heat pump operation, when pumping is intermittent during continuous heat pump operation.

GSHP_{fan}: If ducts are attached to the system to deliver heating or cooling, the external fan energy in watts, GSHP_{fan} = (air flow in CFM * 0.5 CFM per watt), shall be added for all hours of heat pump operation. The air flow in CFM shall be (360 *

rated cooling btu/h / 12,000), where 360 is the air flow in CFM per ton (12 kbtu/h) of capacity..

Table 303.7.1(1) Minimum Rated Features

12. Heating Equipment	Equipment type, location, efficiency (AFUE, HSPF), auxiliary electric (Eae); <u>power consumption of ground fluid circulating pump(s) for ground-loop and ground-water heat pumps.</u>
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Background/Rationale:

Since the adoption of the 2006 RESNET standards, auxiliary electric energy has been a minimum rated feature for fossil-fuel heating equipment. For comparable treatment, auxiliary electric energy that is required for the operation of ground-source heat pumps should be included as a minimum rated feature. This amendment provides guidance for treatment of auxiliary electric energy in the reference and rated homes when a ground-source heat pump is present. Furthermore, the current ARI/ISO standard 13256 that is used to test these devices specifically excludes any fan power required to move air through ducts (rated at 0 external static pressure).

Attachment B

Applies to:

2006 Mortgage Industry National Home Energy Rating Standards Section 209

Amendment: Continuing Education

Proposed Amendment:

Delete entirely. Replace with:

209 Professional Development: Rater Trainer and Quality Assurance Designee

209.1 Rater Trainers

Rater Trainers annually shall complete a two hour RESNET roundtable on current information and complete **one** of the following activities:

- 209.1.1 Document 12 hours of attendance at the RESNET Conference or
- 209.1.2 Complete 12 hours of RESNET approved CEU's, or
- 209.1.3 Instruct a minimum of ten (10) rater certification classes.

209.2 Quality Assurance Designees

Quality Assurance Designees annually shall complete a two hour RESNET roundtable on current information and complete **one** of the following activities:

- 209.2.1 Document 12 hours of attendance at the RESNET Conference or
- 209.2.2 Complete 12 hours of RESNET approved CEU's, or
- 209.2.3 Documented field QA reviews minimum of 25 homes

209.3 A person that is both a Rater Trainer and Quality Assurance Designee shall have to complete both the two hour RESNET roundtable for a rater trainer and the two hour roundtable for quality assurance designees. The person selecting one of options in 209.1.1, 209.1.2, 209.2.1, or 209.2.2 will have the requirement met by attendance of one of the options.

Rationale:

Creates a more credible path for rater trainers and quality assurance designees to maintain their professional skills.

Attachment C

Proponent: RESNET Training and Education Committee

Applies to:

2006 Mortgage Industry National Home Energy Rating Standards Section
102.1.3.3

Amendment: Rater Continuing Education

Proposed Amendment:

102.1.3.3 ~~Continuing Education. Raters must have 12 hours of approved continuing education and training units approved by the rating provider every three years. Ten hours of the training must be approved by RESNET. Rater Professional Development. Raters shall one of the below three options:~~

102.3.3.1 Complete 18 hours of professional development every three years. The 18 hours to include completion of 18 hours of refresher course(s) offered by a RESNET Accredited Training Provider.

102.3.3.1.1 Course(s) would be approved by RESNET Training and Education Committee annually

102.3.3.1.2 Training and Education Committee would identify areas of importance

102.3.3.1.3 Instructor Exam required

OR

102.3.3.2 Documentation of 18 hours of attendance at a RESNET Conference in three years would fulfill this requirement.

OR

102.3.3.3 Pass the Rater Test every three years.

Rationale:

Creates a more credible path for raters to maintain their professional skills.

Attachment D

Proponent: RESNET Training and Education Committee

Applies to:

2006 Mortgage Industry National Home Energy Rating Standards Section
102.1.3.3

Amendment: Rater Continuing Education

Proposed Amendment:

102.1.3.3 ~~Continuing Education. Raters must have 12 hours of approved continuing education and training units approved by the rating provider every three years. Ten hours of the training must be approved by RESNET. Rater Professional Development. Raters shall~~ **complete** one of the below three options:

102.3.3.1 Complete 18 hours of professional development every three years. The 18 hours shall include completion of 18 hours of refresher course(s) offered by a RESNET Accredited Training Provider.

102.3.3.1.1 The course(s) shall be approved by RESNET Training and Education Committee annually

102.3.3.1.2 The training and Education Committee shall be responsible to identify areas of importance

102.3.3.1.3 An instructor Exam shall be required to administer the test

OR

102.3.3.2 Documentation of 18 hours of attendance at a RESNET Conference in three years.

OR

102.3.3.3 Pass the Rater Test every three years.

Rationale:

Creates a more credible path for raters to maintain their professional skills.