

## **"Setting the Standard for Sampling" The Path of Developing an Industry Sampling Standard**

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**Panel:** Lee O'Neal, NSpects, Ltd.

David Wilson, Energy Rated Homes of Utah

Sam Rashkin, EPA Energy Star for Homes



### **Presentation Outline**

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- ☐ Background Information
- ☐ High-lights of "Issues Paper"
- ☐ High-lights of "Proposed Framework for Standards"
- ☐ EPA Comments
- ☐ What's Left
- ☐ Panel Discussion

## Sampling Standards Drafting Committee

**Ben Adams**, MaGrann Associates  
**Eric Borsting**, ConSol  
**Philip Fairey**, Florida Solar Energy Center  
**Steve Gleaves**, PowerMetric Energy Services  
**Bruce Harley**, Conservation Services Group  
**Kathy Howard**, Energy Sense  
**Lee O'Neal**, Nspects  
**Kelly Parker**, Guaranteed Watt Saver Systems  
**Daran Wastchak**, D.R. Wastchak, LLC  
**David Wilson**, Energy Rated Homes of Utah

**Steve Baden** and **Claudia Brovick**, RESNET staff

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March 1, 2005

## Background Information

- ☐ Where sampling started/came from
- ☐ The great debate
- ☐ EPA Proposed Protocol
  - RESNET comments taken, not all adopted
  - Published and in effect January 1, 2004
  - Requested that RESNET create and adopt an accreditation standard for Sampling Providers
- ☐ RESNET Sampling Task Force
  - January 2004 – “Sampling Provider Accreditation Standards Exploration Task Force” created (42 volunteer members)
  - March 1<sup>st</sup> 2004 – “Sampling Standard Drafting Subcommittee” first meeting at RESNET Conference
  - Compiled all Comments: from EPA’s process + any new comments

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## Background Information

- ❑ RESNET Sampling Task Force
  - Monthly-weekly teleconferences to work through each issue from comments (22 + 5 added during teleconferences)
  - Separate parallel effort to create all new Protocol/Framework for sampling standard
  - November 2004 - Full Task Force Votes on "Issues Paper" (Consensus on 21 of 22 issues)
  - December 2004 - RESNET Board Review & Vote on "Issues Paper"
  - January 2005 – Full Task Force Votes on "Proposed Framework"
  - January 2005 – "Issues Paper" + "Proposed Framework" Submitted to EPA

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## High-lights of Issues Paper

- ❑ Sampling Provider requirements:
  - Must complete a minimum of 20 confirmed ratings that have been documented as accurate
  - Pass a RESNET administered sampling provider test
- ❑ Revisions to the quality assurance, technical and training standards need to be made to integrate Framework
- ❑ Specifications for the minimum rated features for the rated homes must be communicated to the personnel or trades responsible for completing the work
- ❑ If an option or change in the design of the structure is made that is different from the projected ratings and that would impact the threshold specifications, then that home must be individually analyzed

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### High-lights of Proposed Framework

- ❑ Rating on a home using sampling “does not constitute a confirmed HERS rating on any home”
- ❑ Defined terms: “Sample Set” in lieu of “batch”, “Sample Controls” in lieu of tests and inspections
- ❑ No more numerical value defining who can and can not sample (i.e. “build at least 85 homes per year”):
  - Homes must be of the same construction type using the same envelope systems
  - Same trade contractors must be used who have passed 7 consecutive homes without a failure
- ❑ Sampling may be applied to any sample set of homes within the same subdivision or metropolitan area and climate zone
- ❑ All Sample Controls must be completed within 30 days

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### High-lights of Proposed Framework

- ❑ Sampling Controls must be completed at a minimum ratio of 1 in 7 within a Sample Set
- ❑ Sample Controls can be completed all on a single home or spread across several homes within a Sample Set
- ❑ Before starting sampling in a new community or subdivision, builder must complete 7 consecutive homes without a failure in that subdivision
- ❑ Sampling continues until a “failure” occurs, construction type or envelope systems change, or trade contractors change
- ❑ When an “initial failure” occurs, the failed item(s) shall be tested or inspected in two (2) additional homes selected from the same sample set and shall be at the same point in the construction process as the original home

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## High-lights of Proposed Framework

- ❑ When an “additional failure” occurs, the failed item(s) shall be tested or inspected in four (4) additional homes selected from the same sample set and shall be at the same point in the construction process as the original home.
- ❑ A builder must again complete 7 consecutive homes without a failure before continuing with sampling if:
  - Three (3) “additional failures” occur within a three (3) month period;
  - Construction type or envelope systems change, or trade contractors change

## EPA Comments

- ❑ Requiring a builder to first pass 7 consecutive homes before starting sampling is overly burdensome
- ❑ The selection of additional homes to test and inspect that are “at the same point in the construction process as the original home” is too vague and may be impossible to implement.  
Recommended alternate language:  
*When an initial/additional failure occurs, the failed item(s) shall be tested or inspected in two/four additional homes selected from the same sample set. Field verification for any measures that will be closed in during the construction process must be timed so additional testing and inspections can occur before they are closed in and prohibitively expensive to correct.*
- ❑ Want to know more about “documentation” that is required for a provider’s 20 confirmed ratings leading to them being able to do sampling
- ❑ Want to know more about the content of the “sampling provider test”

## What's Left

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### ☐ Remaining Steps:

- March 2005 – Standards drafting begins
- April – Task Force Reviews draft standard
- May – Draft standard submitted to RESNET Board for approval
- June-July – Public comment period (RESNET membership)
- August – Standards Drafting Committee/Task Force makes any changes based on comments
- September – Final standard submitted to RESNET Board for approval
- January 1, 2006 – New sampling standard goes into effect

## Panel Discussion

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- ☐ **Lee O'Neal**, NSpects, Ltd.
- ☐ **David Wilson**, Energy Rated Homes of Utah
- ☐ **Sam Rashkin**, EPA Energy Star for Homes