

RESNET New Policy on Enhanced Effectiveness and Efficiency of HERS Index Quality Assurance

Scott Doyle, Laurel Elam and Billy Giblin

Agenda

Review the Five Board Policies on Effectiveness of QA

- ▶ Improve internal policies for Rating Provider tracking & reporting
- ▶ Implement a pilot program in partnership with a utility QA program
- ▶ Amend & Incentivize QA efforts
- ▶ Develop ongoing Quality Assurance Designee (QAD) training content
- ▶ Implement regular reporting from RESNET's automated QA tool

Background

The RESNET Board of Directors is dedicated to continuously improving the effectiveness of the quality of HERS Index ratings. To solidify the RESNET QA Program as the Gold Standard, the RESNET Board of Directors adopted five initiatives at their 2019 Spring Board Meeting.



Improve internal policies for Rating Provider tracking & reporting

RESNET shall develop internal policy improvements for Rating Provider tracking and reporting with the intent to reduce the overall time burden on quality assurance activities that do not add substantial value to the program.



Improve internal policies for Rating Provider tracking & reporting- Example

Annual QA Report Checklist is down to 6 items!

■ Removed listing of current rating software version

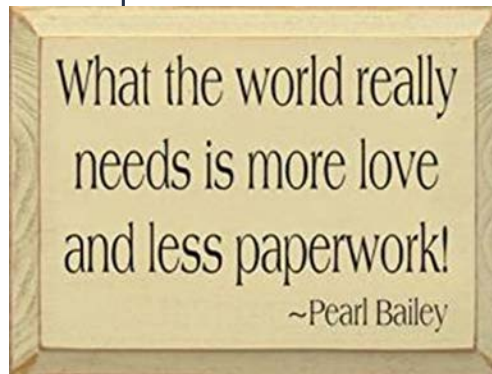
■ These items move to online QA review:

- ▶ Sample Rater Agreement
- ▶ Sampling Process
- ▶ ENERGY STAR QA Review

2018 Quality Assurance Report Review Checklist	
Item	Item Description
1	Sample Rater agreement in compliance with 102.1.2.6
1	Current copy of Provider's Rater and Rating Field Inspector (RFI) registry which includes tracking of the following: date of certification/recertification; date pass the Rater/RFI exam, date(s) passed CAZ exams, professional development hours.
2	Calibration Log
4	Current rating software version
3	Primary QAD and list of all delegates
4	Quarterly QA File Review on ten percent (10%) of each Rater's annual total number of ratings
5	Quarterly onsite QA Field Review on one percent (1%) of each Rater and RFI's annual total number of ratings
6	Sampling Providers Only- Confirm compliance with Quality Assurance provisions in Sections 903.4.1.3.4 for QA File Review and 904.4.2.6 for QA Field Review for sampled ratings.
8	Submit total number of sampled ratings, sample sets and the addresses of the homes that were used for sampling inspections. Describe how the QA Designee/Delegate confirmed that the sampling process, as defined in Chapter 6, is being properly followed
9	Number of ENERGY STAR Homes rated in 2018 per Rater & sample of a completed ENERGY STAR QA Checklist.
6	Explain any significant non-compliance reported to RESNET.

Improve internal policies for Rating Provider tracking & reporting- Example

- Feedback from QA Team streamlined reporting template
- Multiple templates are streamlined into one template
- If you track QA in the Registry, you just need to answer the 6 questions on the QA Report Review Checklist and submit this new template!



Improve internal policies for Rating Provider tracking & reporting

- RESNET Staff will continue to explore other areas where overall time burden can be amended on quality assurance activities that do not add substantial value to the program.
- We appreciated your feedback!



Implement a Pilot Program in Partnership with a Utility QA Program

RESNET shall develop and implement a pilot program in partnership with a utility program implementer, leveraging the field QA performed by implementer staff. The purpose of the pilot is to identify and resolve any barriers to leveraging utility program QA with the intent of eliminating redundancy and reducing the field QA cost burden for Rating Providers.



Implement a Pilot Program in Partnership with a Utility QA Program

- Pilot program with ICF Consulting
 - conducted from July 1, 2019 through December 31, 2019
 - recognize field QA reviews they conduct as part of their oversight of the utility incentive programs for Duke Progress and TNMP.
- A survey has been sent to participants to help determine if the pilot and potentially other pilots should continue.

Want to find out more? [Join us at this afternoon's session:](#)

Utility QA Pilot- Monday, 2/24/20 - 01:30 PM-03:00 PM, Arizona I



Amend & Incentivize QA Efforts

RESNET quality assurance efforts will be amended to support increases or reductions in quality assurance stringency based on performance. Further, these amendments shall incentivize and place more focus on the quality of the Providers' QA oversight and feedback to raters, not just the quantity.



Amend & Incentivize QA Efforts



- Priority of RESNET QA is to improve performance; not just issue citations.
- Draft proposal was sent to all Rating Providers for your feedback by 3/6/20.
- Two facets:
 - ▶ **Reducing QA fees** based upon excellent performance measures (opt-in)
 - ▶ Attainable, though may come with some cost
 - ▶ Incentivize behaviors that strengthen RESNET's QA Program
 - ▶ **Increasing QA fees** based on compliance issues identified in QA reviews and/or disciplinary actions
 - ▶ Tiers based on 5 or more action items, probation or suspension

Amend & Incentivize QA Efforts

Excellent Performance-Based Measures:

■ Tier I: greater than 50% of measures

■ Tier II: at least 80% of measures

■ *To qualify:

- ▷ remain in good standing
- ▷ no administrative probation over previous 12 months
- ▷ no disciplinary probation, suspension or substantiated complaints over previous 3 years.
- ▷ commit to a minimum of 25% “blind” or “ridealong redo” field QA reviews of the total required annual field QA (after rater’s initial final)

■ Compliance will be demonstrated via field QA reporting.



Amend & Incentivize QA Efforts

1. Provider uses an automated QA system to evaluate rating files for accuracy and/or errors. Automated QA system must be reviewed and approved by RESNET Staff if this measure is used. RESNET Staff review of automated QA system can be accomplished through Provider demonstration showing RESNET Staff the user (input) side of such systems through a GoToMeeting which would not require Staff to receive full access to the application or any back-end programming.



Amend & Incentivize QA Efforts

2. Method for validating a Rater's or RFI's time on a job site to establish reasonable length of time for task being performed.



Amend & Incentivize QA Efforts

3. For each Field QA review, QAD verifies and documents all available MRFs via time stamped, geo-tagged photos. Photos are archived and subject to RESNET review for 3 years.

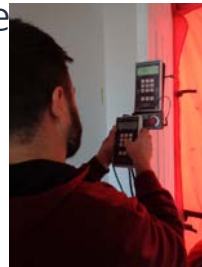
a. MRF specific photos listed on MRF Photos List

- ▷ photos with sufficient detail to confirm insulation thickness, type and grade for each unique building assembly
- ▷ heating, cooling, and hot water equipment (incl. nameplate, M/N)
- ▷ Mechanical Ventilation System (incl. nameplate, M/N, controls)
- ▷ Infiltration test result or automated test report
- ▷ Duck leakage test result(s) for each system
- ▷ Mechanical Ventilation System test result(s) for each system
- ▷ Building's front, back, right, left elevations
- ▷ Appliances (incl. nameplate, M/N)



Amend & Incentivize QA Efforts

4. QAD completes separate independent testing using their own manometer to confirm the rater/RFI's initial results. On blind QA, the QAD would inherently do all required performance testing with their own manometer. On ride-along finals (initial or redo), this measure requires that the QAD use their own manometer to verify the performance testing results after the rater or RFI has completed their testing. Remote QA reviews would be exempt from this measure.



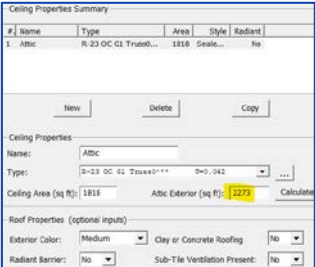
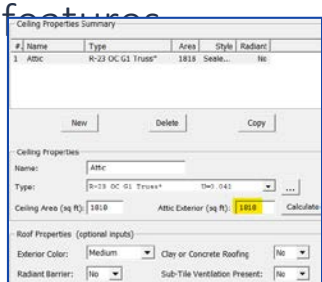
Amend & Incentivize QA Efforts

5. Each Rater/RFI performing pre-drywall inspections must receive at minimum one (1) pre-drywall field QA annually. This may be done remotely, following the RESNET Remote QA Protocol. Compliance will be demonstrated via field QA reporting.



Amend & Incentivize QA Efforts

6. QAD creates a unique energy model simulation for each field QA review using the information they collected on the field QA review or Remote field QA review as well as the information the rater or RFI collected at pre-drywall. The energy model that the QAD creates may either start with the file the rater created or be a QAD model. The energy model should include take-offs from the plans and field verification of all minimum rated



123456789 RATER
 123456789 RESNET QA

Rater---HERS 47

RESNET QA---HERS 49

Amend & Incentivize QA Efforts

7. All annual field and file QA review results are tracked in the RESNET Buildings Registry, including the submittal of the completed RESNET QA Review Checklist, (whether in the RESNET Excel version or reported from Provider’s incorporated QA system) for each rating included in the annual field and file QA reviews. The results of each QA review shall to be updated at least monthly into the RESNET Buildings Registry.



Amend & Incentivize QA Efforts

8. Rater receives a full written report from the QAD for each field review. The report goes well beyond pass/fail and includes detailed findings, positive reinforcement where appropriate, and corrective actions and mentoring when necessary.

■ Sample reports will be provided

A screenshot of a detailed QA report table. The table is organized into several columns, including 'Item', 'Pass/Fail', 'Findings', 'Corrective Action', and 'Mentoring'. It contains numerous rows of data, with some cells highlighted in yellow. The table appears to be a spreadsheet or a structured report format used for tracking field review results.

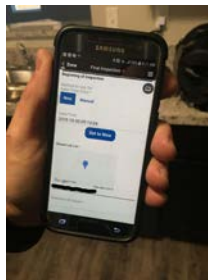
Amend & Incentivize QA Efforts

9. Method for tracking and verifying frequency and types of failures in QA reviews for Raters and RFIs. Items tracked will be submitted as part of the annual QA report submission and addressed in the ongoing training/mentoring of Raters and RFIs.

A screenshot of a spreadsheet application. The spreadsheet has a header row with several columns, some of which are highlighted in green. Below the header, there are several rows of data cells. The cells are colored in a pattern of light green, yellow, and grey, suggesting a data visualization or tracking system. The spreadsheet is displayed within a window with a blue border.

Amend & Incentivize QA Efforts

10. RaterPro App or RESNET-approved equivalent (used for electronic field data collection on all ratings). RESNET Staff review of electronic data collection can be accomplished through Provider demonstration showing RESNET Staff the user (input) side of such systems through a GoToMeeting which would not require Staff to receive full access to the application or any back-end programming.



Amend & Incentivize QA Efforts

11. All individuals, including certified Raters, who create or edit HERS Rating energy models have been trained on the RESNET accredited software tool(s) they use and have earned the RESNET certified HERS Modeler credential.



REM/RateTM

Amend & Incentivize QA Efforts

12. Provider requires ongoing Training/Mentoring of Raters and RFIs for a minimum four (4) hours annually, in addition to Professional Development specified in the MINHERS for recertification. Training should be relevant to the job of rater or RFI. Training needs may vary by organization or by individual based on the results of QA Field Reviews, File Reviews, automated QA tool results or other means. Training of Raters and RFIs by a RESNET Instructor, QAD, or lead Rater shall be specifically aimed at increasing the consistency and accuracy of ratings and may take different forms including:

- a. Field Mentoring
- b. Team Meetings



Amend & Incentivize QA Efforts

Compliance Issues:

- Non-compliance with RESNET quality assurance procedures by Providers will increase QA rating fees.
 - ▶ Tier A --- 5 or more action items from annual or online review or infield site visit (remain in place for 6 months)
 - ▶ Tier B --- probation (remain in place for 12 months)
 - ▶ Tier C --- suspension (remain in place for 12 months beyond end of suspension)



Amend & Incentivize QA Efforts

- We request input from Rating Providers and QADs
- Your input matters!
 - ▶ Comments until March 6th :
 - ▶ <https://www1.resnet.us/comments/comment.aspx?DocumentID=54>
- We appreciate your feedback so we can finalize the measures for this policy.



Develop ongoing Quality Assurance Designee (QAD) Training Content

RESNET Quality Assurance Staff shall develop, on an ongoing basis, Quality Assurance Designee (QAD) training content in order to more quickly disseminate information learned from RESNET enhanced quality oversight and to train new procedures established through future standard or policy changes.

Develop ongoing Quality Assurance Designer (QAD) Training Content

Compare



More Options Available

Flow Motion Activated Single-Handle Pull-Down Sprayer Kitchen Faucet with Motion Sensor in Brushed Nickel
Model# UB7000BN

[View the Flow Motion Activated Faucets](#)

★★★★★ (3669)

SPECIAL BUY \$149.00 ~~\$249.00~~
Save \$100.00 (40%)
Limit 3 per order

- ✓ Free delivery
- ⚠ Free ship to store for pickup
Loveland | Check nearby stores

Compare



More Options Available

MOEN Essie Touchless Single-Handle Pull-down Sprayer Kitchen Faucet in Spot Resist Stainless
Model# 87014EWSRS

★★★★★ (399)

\$269.00

- ✓ Free delivery
- ✓ 3 in stock at Loveland
Check nearby stores

Compare



More Options Available

Glacier Bay Nottely Touchless Single-Handle Pull-Down Kitchen Faucet with TurboSpray and FastMount in Stainless Steel
Model# HD67495-1008D2

★★★★★ (352)

SPECIAL BUY \$138.00 ~~\$198.00~~
Save \$59.40 (30%)
Limit 5 per order

- ✓ Free delivery
- ⚠ Free ship to store for pickup
Loveland | Check nearby stores

Develop ongoing Quality Assurance Designee (QAD) Training Content



How to Install a Touchless Kitchen Faucet | Ask This Old House
This Old House • 424K views • 3 years ago
Plumbing and heating expert Richard Trethewey helps a homeowner install a new, no-touch kitchen faucet. (See below for a ...



KOHLER Malleco Touchless Kitchen Faucet Installation #Kohler #FaucetInstallation #DIYProjectsByDave
winimow • 20K views • 11 months ago
In this video, Dave shows us how to install the KOHLER Malleco Touchless Kitchen Faucet. Please visit our blog at ...



How to install motion sensor Sink faucet by Glacier Bay
Sean Symons • 19K views • 1 year ago
Glacier Bay motion sensor kitchen sink faucet install ...



How to Install a Delta® Kitchen Faucet with Touch2O® Technology
Delta Faucet • 14K views • 9 months ago
Installing a Delta® pull-down kitchen faucet with Touch2O Technology is easy. Our friends Mike & Hannah walk you through it in ...



How to Install a Moen MotionSense Kitchen Faucet
Moen • 120K views • 7 years ago
Moen made every effort to ensure MotionSense is quick and straightforward to install. All connections are clearly labeled.

Develop ongoing Quality Assurance Designee (QAD) Training Content

Topics:

- 380-2019 Ventilation Testing Procedures
- Common Blower Door Issues
 - ▶ Garage Overhead Doors
 - ▶ Correction Factors
 - ▶ Sealed Attics/Crawlspaces
- Observation Techniques for QADs
- Common Mistakes Observed in Field QA



Develop ongoing Quality Assurance Designee (QAD) Training Content



Implement Regular Reporting from RESNET's Automated QA Tool

RESNET QA Staff shall implement regular reporting of QA Genie flag information. This information shall be communicated to the Rating Provider and the Primary QAD to support their ongoing QA activities.

Implement Regular Reporting from RESNET's Automated QA Tool

[Redacted]	
Total Ratings:	32
Provider(s):	[Redacted] (32 ratings)
Registration Type(s):	Sampled Rating (21 ratings) Confirmed Rating (11 ratings)
Home Type(s):	Low-rise Multi-family (20 ratings) Single-Family (10 ratings) Duplex (2 ratings)
Climate Zone(s):	5B - Cool - Dry (32 ratings)
State(s):	Colorado (32 ratings)
Software(s):	RemRate (32 ratings)

Flags	
Outlier:	46 (1.44 per rating)
Red:	0 (0.00 per rating)

- Most Common Flags**
- Blower Door Infiltration Units (65.63%)
 - Duct Leakage Testing (43.75%)
 - Mechanical Equipment Set to Default EAE (9.38%)
 - Rating registered 60+ days after rated date (3.13%)
 - Dishwasher EF or kWh/year (3.13%)
 - Conditioned Area (3.13%)
 - Water Heater EF (3.13%)
 - Estimate Supply Duct Surface Area (3.13%)
 - Number of Bedrooms (3.13%)
 - Crawlspace Foundation Walls (3.13%)

Implement Regular Reporting from RESNET's Automated QA Tool

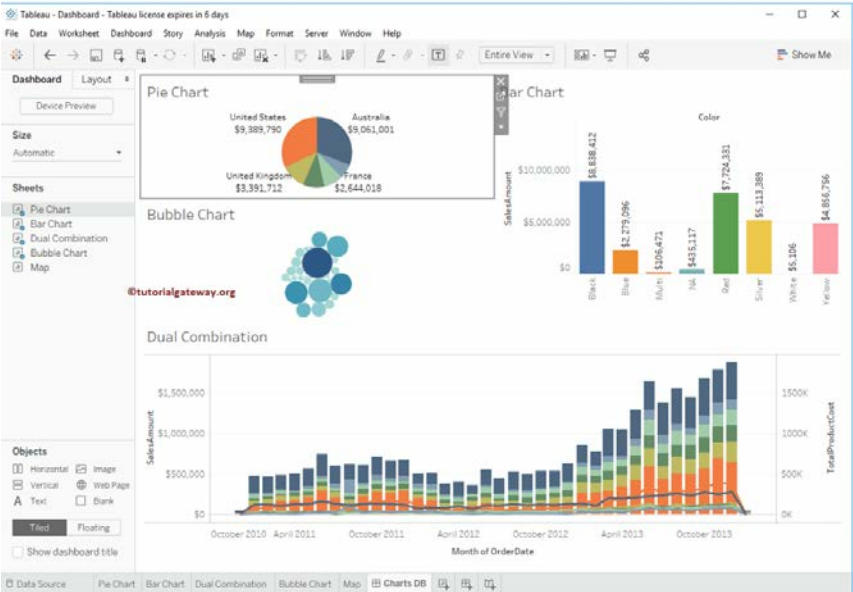
Total Ratings:	32
Provider(s):	[REDACTED] (32 ratings)
Registration Type(s):	Sampled Rating (21 ratings) Confirmed Rating (11 ratings)
Home Type(s):	Low-rise Multi-family (20 ratings) Single-Family (10 ratings) Duplex (2 ratings)
Climate Zone(s):	5B - Cool - Dry (32 ratings)

Most Common Flags

- Blower Door Infiltration Units (65.63%)
- Duct Leakage Testing (43.75%)
- Mechanical Equipment Set to Default EAE (9.38%)
- Rating registered 60+ days after rated date (3.13%)
- Dishwasher EF or kWh/year (3.13%)
- Conditioned Area (3.13%)
- Water Heater EF (3.13%)
- Estimate Supply Duct Surface Area (3.13%)
- Number of Bedrooms (3.13%)
- Crawlspace Foundation Walls (3.13%)

Crawlspace Foundation Walls (3.13%)

Implement Regular Reporting from RESNET's Automated QA Tool



When you can't figure out the HVAC Controls



Questions? Raise your paw...

