

**Comments Received During the Stakeholder Feedback Periods for
ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements**



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

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ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Organization Name: Advanced Energy

Respondent Last Name: Coulter

Respondent First Name: Jonathan

Comments:

General

- 1) Do you have any general feedback on EPA's proposed enhancements to the ENERGY STAR Certification System's Quality Assurance and Quality Control (QAQC) requirements?

On behalf of the Advanced Energy staff and our various roles in third-party oversight activities (e.g., from former ENERGY STAR New Homes HERS Providers and current SystemVision administrator to our ISO 17025 & 17065 accredited services), we welcome the collaborative, continuous improvement to the program requirements, especially related to "quality assurance" activities focused on the certification process.

- 2) Can you foresee any unintended consequences from implementing any of these elements?

1. Possible time delays as HCO databases get created.
2. Possible trickle down price increases (to home buyers, raters, builders, developers, HCO) for cost to implement/create HCO databases.

- 3) Are there significant implementation challenges for any proposed elements that EPA needs to consider?

None at this time.

- 4) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?

If not being referenced already, would reviewing "ISO 19011: Guidelines for auditing management systems" help with this effort?

Centralized collection of ENERGY STAR checklist data in HCO database

- 1) For the sake of consistency, when digital data collection software is used by Raters to complete the ENERGY STAR checklists, should EPA require that it be based on an EPA-created data schema/stylesheet and/or should EPA require HCOs to operate a review and approval process for such software to ensure ENERGY STAR checklists are accurately translated to digital formats?

We defer to the proposed "working group of developer stakeholders" for recommendations.

- 2) Do you have additional general feedback on this topic?

We suggest that the approved HQUITO's have visual access to an HCO database to allow them to provide efficient, effective and economical QA/QC of their HVAC members as well as possible technical alignment with other stakeholders.

Centralized Collection of Rater Photos in HCO Database

- 1) Beyond photos of installed checklist measure, are there other photos that would provide significant QAQC value, such as elevation photos or Rater 'selfies' during the on-site inspections?

Possibly testing equipment or link to detailed testing equipment information.

- 2) How should HCOs address situations where mandatory photos are unavailable, for example due to accidental data loss?

Consider requiring the HCO to transition the Rater to probationary status and/or defer to the proposed "working group of developer stakeholders" for recommendations

- 3) Do you have additional general feedback on this topic?

None at this time.

Formalized List of Automated Validations in Approved Rating Software and Databases

- 1) Do you have additional general feedback on this topic?



ENERGY STAR Certification System

Quality Assurance and Quality Control Enhancements

Comments Received

Keep doing what you're already doing with other program requirements and updates (e.g., transparency of version control, redline versions, webinar & other related resources).

Printing ENERGY STAR Certificates and Labels Exclusively in Approved Rating Software

- 1) Do partners find value in the ENERGY STAR label sticker and what is your reaction to the concept of eliminating the sticker, making it optional, and/or replacing it with a preprinted QR-code format that would link to a web address lookup?

Yes we find value in the some amount of information on the label that is not technology dependent, especially in rural locations that have spotty cell/internet coverage.

- 2) Do you have additional general feedback on this topic?

None at this time.

Performing Quality Control of Installed Features During File Review Step

- 1) Is it practical for QC reviewers to complete File Review activities prior to the time of certification?

Yes, we think so...the cost/frustration/stress of rework grows the further along the in the construction process. Additionally, if there are professional KSA (noted below) that a rater is working on or opportunities for improvement (OFI) trends that are trying to be improved for final testing, then this could help with positive reinforcement for incremental improvements to the older process.

- 2) If not, are there concrete reasons the File Review could not at least be completed within 10 business days of certification?

None that we see at this time.

- 3) Do you have additional general feedback on this topic?

None at this time.

Adding "Skills and Knowledge" Check as Purpose of Field Evaluations

- 1) Are the proposed minimum rates of Field Evaluation appropriate to ensure Raters maintain adequate skills and knowledge of the latest policies, protocols, and program requirements?

We think this currently is a good foundation while making the upgrade to a database platform. We defer to the proposed "working group of developer stakeholders" for whether to also incorporate changes here, now or wait until a future time after database impacts have been ironed out.

- 2) Do you have additional general feedback on this topic?

We like the continued long-term vision of the ENERGY STAR new homes team and the collaborative tactics on how to achieve them. We appreciate the long lead time for program changes as well as the balance between rolling out many changes at once or a few at a time.

Layering On HCO Direct (Non-Delegated) Quality Control Review

- 1) Is the rate of 0.5% HCO direct File Review an appropriate and practical frequency given that the scope is a detailed human review?

We feel like this is a low number, especially for new raters and/or raters under a new provider

- 2) Do you have additional general feedback on this topic?

We hope that this new HCO database will also provide more efficient, effective and economical oversight activities by the HCOs.

Requiring Builders to Facilitate HCO Site Visits

- 1) What issues (e.g., legal, liability, scheduling) do builder partners foresee with HCO personnel directly arranging site visits and how can those considerations be addressed?

(financial, too) A proposed idea to the "working group of developer stakeholders", could a date/time slot be added to the database to capture when, in the future, the final test visit is scheduled. This may be a way to minimize scheduling challenges.

- 2) Do you have additional general feedback on this topic?



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

None at this time.

Thank you for this opportunity for input and keep up the great work!



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Organization Name: Arcxis

Respondent Last Name: Vitro

Respondent First Name: Chris

Comments:

General

- 1) Do you have any general feedback on EPA's proposed enhancements to the ENERGY STAR Certification System's Quality Assurance and Quality Control (QAQC) requirements?

We support the general initiative overall as we recognize the need for better quality controls in the industry but have some reservations on specific criteria. Additionally, the increased cost associated with these enhancements could potentially either drive builder's away from the E* program altogether, but either way will ultimately pass on the cost to the consumer.

- 2) Can you foresee any unintended consequences from implementing any of these elements?

A specific concern is impacts on builder client's timelines. With the small window a Rating Provider has to deliver certification results and submit for tax credits/rebates, the expectation that certain File QA be performed prior to registering the file to the HCO could potentially have unintended consequences such as delayed closings.

The overhead associated with this process. The additional 10-15 photo requirement, although would provide better data for File QA, will decrease efficiency in the field which with high volume rating providers, would require additional capacity and reconfiguring of digital data collection application.

- 3) Are there significant implementation challenges for any proposed elements that EPA needs to consider?

The 100% collection of E* checklists would need to be supported through an API or equivalent to prevent the need for manual transfer from proprietary digital field collection applications.

- 4) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?

[Add comments]

Centralized collection of ENERGY STAR checklist data in HCO database

- 1) For the sake of consistency, when digital data collection software is used by Raters to complete the ENERGY STAR checklists, should EPA require that it be based on an EPA-created data schema/stylesheet and/or should EPA require HCOs to operate a review and approval process for such software to ensure ENERGY STAR checklists are accurately translated to digital formats?

Those using proprietary data collection applications would need a solution that works with their tools.

- 2) Do you have additional general feedback on this topic?

[Add comments]

Centralized Collection of Rater Photos in HCO Database

- 1) Beyond photos of installed checklist measure, are there other photos that would provide significant QAQC value, such as elevation photos or Rater 'selfies' during the on-site inspections?

We could always require more data/photos that would enhance the ability to deliver a quality QC process, but we also have to consider the time and overhead invested to perform these tasks.

- 2) How should HCOs address situations where mandatory photos are unavailable, for example due to accidental data loss?

Since this would typically be an anomaly and not the norm, there must be a level of trust associated with certain mishaps.

- 3) Do you have additional general feedback on this topic?

[Add comments]

Formalized List of Automated Validations in Approved Rating Software and Databases



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

- 1) Do you have additional general feedback on this topic?

[Add comments]

Printing ENERGY STAR Certificates and Labels Exclusively in Approved Rating Software

- 1) Do partners find value in the ENERGY STAR label sticker and what is your reaction to the concept of eliminating the sticker, making it optional, and/or replacing it with a preprinted QR-code format that would link to a web address lookup?

We support eliminating the sticker and converting to a digital version. We have found that the use of pre-printed versions of the sticker can be obtained and abused by other parties.

- 2) Do you have additional general feedback on this topic?

There needs to be a level of flexibility as ratings can be rescinded, discrepancies found in QA, and reasons that a home may need it's certification re-reviewed after the fact. This may be post sticker installation.

Performing Quality Control of Installed Features During File Review Step

- 1) Is it practical for QC reviewers to complete File Review activities prior to the time of certification?

Question addressed in General

- 2) If not, are there concrete reasons the File Review could not at least be completed within 10 business days of certification?

This is more reasonable than prior to certification, but requires an ongoing File QA process that not all QA providers have the bandwidth to perform.

- 3) Do you have additional general feedback on this topic?

[Add comments]

Adding "Skills and Knowledge" Check as Purpose of Field Evaluations

- 1) Are the proposed minimum rates of Field Evaluation appropriate to ensure Raters maintain adequate skills and knowledge of the latest policies, protocols, and program requirements?

This rate is considered satisfactory.

- 2) Do you have additional general feedback on this topic?

[Add comments]

Layering On HCO Direct (Non-Delegated) Quality Control Review

- 1) Is the rate of 0.5% HCO direct File Review an appropriate and practical frequency given that the scope is a detailed human review?

- 2) Do you have additional general feedback on this topic?

We support this initiative but feel the frequency should not be proportionate to the number of ratings. Possibly be periodic and designed to do a deep dive into a rating company on a set interval; recommendation of every 3-5 years. Another suggestion could be an additional set of criteria for providers being qualified to become providers. An audit of their practices should be part of the approval process prior to being approved as a new provider. Also, any egregious violations should transfer from one provider to another through their certifications.

Requiring Builders to Facilitate HCO Site Visits

- 1) What issues (e.g., legal, liability, scheduling) do builder partners foresee with HCO personnel directly arranging site visits and how can those considerations be addressed?

This would provide scheduling complications as the rough site visits generally get covered day of or after home inspected, and many builders have very tight closing windows in relation to their final site visits.

- 2) Do you have additional general feedback on this topic?

[Add comments]



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Organization Name: ATS Engineers, Inspectors & Surveyors

Respondent Last Name: Loyd

Respondent First Name: C.T.

Comments:

General

- 1) Do you have any general feedback on EPA's proposed enhancements to the ENERGY STAR Certification System's Quality Assurance and Quality Control (QAQC) requirements?

My first thought, will this reduce the risk of another rogue company committing fraud? And my second thought, besides add in the picture requirement, probably not. Stop using Rater and use Verifier, since not all Verifiers are not under RESNET.

- 2) Can you foresee any unintended consequences from implementing any of these elements?

Other than RESNET being upset, no.

- 3) Are there significant implementation challenges for any proposed elements that EPA needs to consider?

I believe some of the photographs are redundant.

- 4) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?

No

Centralized collection of ENERGY STAR checklist data in HCO database

- 1) For the sake of consistency, when digital data collection software is used by Raters to complete the ENERGY STAR checklists, should EPA require that it be based on an EPA-created data schema/styleset and/or should EPA require HCOs to operate a review and approval process for such software to ensure ENERGY STAR checklists are accurately translated to digital formats?

Either works

- 2) Do you have additional general feedback on this topic?

No

Centralized Collection of Rater Photos in HCO Database

- 1) Beyond photos of installed checklist measure, are there other photos that would provide significant QAQC value, such as elevation photos or Rater 'selfies' during the on-site inspections?

Selfie would be fine, just not redundant photos. Most phones and tablets limit how small a photo can be made and depending on location, a large number of moderately size photos can be troublesome to upload, based on available wireless internet speeds.

- 2) How should HCOs address situations where mandatory photos are unavailable, for example due to accidental data loss?

I think the exception, versus the rule, wouldn't warrant doing anything. Beyond, possibly closer HCO review of that verifier

- 3) Do you have additional general feedback on this topic?

No

Formalized List of Automated Validations in Approved Rating Software and Databases

- 1) Do you have additional general feedback on this topic?

QA is always based on a known process or data requirement. The automated checks should be such that all users understand what they are, and that they assist in error detection to determine if additional training is needed on the system requirements and/ or data collection/calculation process. Not to catch low character individuals, intentionally abusing the system.

Printing ENERGY STAR Certificates and Labels Exclusively in Approved Rating Software



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

- 1) Do partners find value in the ENERGY STAR label sticker and what is your reaction to the concept of eliminating the sticker, making it optional, and/or replacing it with a preprinted QR-code format that would link to a web address lookup?

[100% support it.]

- 2) Do you have additional general feedback on this topic?

No

Performing Quality Control of Installed Features During File Review Step

- 1) Is it practical for QC reviewers to complete File Review activities prior to the time of certification?

All things are possible, but not all things are cost effective. Depends on the volume and staffing (huge issue). Are you asking for 100% of files or the 10% of files receiving QA?

- 2) If not, are there concrete reasons the File Review could not at least be completed within 10 business days of certification?

No, again. Are we talking 100% file review or the 10%.

- 3) Do you have additional general feedback on this topic?

No

Adding “Skills and Knowledge” Check as Purpose of Field Evaluations

- 1) Are the proposed minimum rates of Field Evaluation appropriate to ensure Raters maintain adequate skills and knowledge of the latest policies, protocols, and program requirements?

Yes, if legitimately performed. No, if not.

- 2) Do you have additional general feedback on this topic?

No

Layering On HCO Direct (Non-Delegated) Quality Control Review

- 1) Is the rate of 0.5% HCO direct File Review an appropriate and practical frequency given that the scope is a detailed human review?

Yes, if randomized and legitimately performed. No, if not

- 2) Do you have additional general feedback on this topic?

No

Requiring Builders to Facilitate HCO Site Visits

- 1) What issues (e.g., legal, liability, scheduling) do builder partners foresee with HCO personnel directly arranging site visits and how can those considerations be addressed?

100% support, no need for Verifier involvement.

- 2) Do you have additional general feedback on this topic?

[Add comments]



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Organization Name: Building Efficiency Resources (BER)

Respondent Last Name: Hayes

Respondent First Name: Darrell

Comments:

General

- 1) Do you have any general feedback on EPA's proposed enhancements to the ENERGY STAR Certification System's Quality Assurance and Quality Control (QAQC) requirements?

BER agrees with ENERGY STAR taking steps to ensure complete and accurate reporting of compliant homes

- 2) Can you foresee any unintended consequences from implementing any of these elements?

Additional timestamped photos, above and beyond photos of minimum rated features, may increase the amount of time it takes Raters to complete ENERGY STAR homes in areas with a poor cellphone (GPS) signal. Proposed enhancements will also increase the amount of time it takes to complete File and Field QA on ENERGY STAR homes.

- 3) Are there significant implementation challenges for any proposed elements that EPA needs to consider?

- a) There may be challenges intergrading proposed enhancements with existing RESNET Checklist and/or RESNET QA app.
- b) We are concerned about common space measures being properly documented and the information being organized and submitted to perform streamlined and effective file QA without requiring the MF Workbook (or a simplified data collection tool just for common spaces). While Raters appreciate the reduced burden that comes with not having to fill out the Workbook for the ERI path, it is unclear to us how data is being collected and compared to targets/requirements for items outside the scope of the dwelling unit energy model. HERS Providers will be challenged to review common space ventilation and central exhaust testing data, U/R calculations of common space assemblies, common space lighting measures and equipment details because the information is not required to be supplied in a clear, organized, and consistent format.
- c) Additionally, QAD's need additional training from the program on how to review and interpret the data for common spaces and central systems. Many of these commercial standards, protocols and construction types are not within the current scope of the training and certification. To set projects up for success and to make QA effective, fair, and not financially burdensome, we need everyone to be on the same page with what is required to be collected, provided, and reviewed. We recommend that the program consider the following: All projects, regardless of certification path, must complete the workbook to document common space features AND, 1) All projects, regardless of certification path, need final review and approval by an MRO for the purpose of reviewing the common space workbook features and a separate third-party set of eyes on ERI models OR, 2) ERI Providers operating under HCOs, must pursue specific training and credentialing for implementing the ESMFNC Program, with a specific focus on common space features and other variables that are unlike standard residential projects. AND 3) if pursuing 2, each ERI Provider operating under an HCO needs staff trained "ESMFNC QAD" that is separate from the design and certification teams for the ERI Provider, who can do more impartial reviews of ESMFNC projects.

- 4) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?

None

Centralized collection of ENERGY STAR checklist data in HCO database

- 1) For the sake of consistency, when digital data collection software is used by Raters to complete the ENERGY STAR checklists, should EPA require that it be based on an EPA-created data schema/stylesheet and/or should EPA require HCOs to operate a review and approval process for such software to ensure ENERGY STAR checklists are accurately translated to digital formats?

EPA should require it be based on an EPA-created data scheme/Stylesheet

- 2) Do you have additional general feedback on this topic?

None



ENERGY STAR Certification System

Quality Assurance and Quality Control Enhancements

Comments Received

Centralized Collection of Rater Photos in HCO Database

- 1) Beyond photos of installed checklist measure, are there other photos that would provide significant QAQC value, such as elevation photos or Rater 'selfies' during the on-site inspections?
BER agree with the new photo requirements.
- 2) How should HCOs address situations where mandatory photos are unavailable, for example due to accidental data loss?
The HCO should require to provide photos during the final Inspection without exception. If the Final inspection photos are missing, the Rater should be required to return to the home to get the required photo documentation. In the event of Pre-drywall photos are lost, ENERGY STAR should develop a process where IR thermal photos could be acceptable but with a penalty to the energy rating and/or ENERGY STAR certification in the event of Pre-drywall photos missing.
- 3) Do you have additional general feedback on this topic?
How will the QA Providers confirm the identity of the Rater/RFI seen in the selfie photos? It is not an HCO requirement to have photos of each Rater/RFI to compare the photo's to.

Formalized List of Automated Validations in Approved Rating Software and Databases

- 1) Do you have additional general feedback on this topic?
BER agree with a formalized list of automated validations.

Printing ENERGY STAR Certificates and Labels Exclusively in Approved Rating Software

- 1) Do partners find value in the ENERGY STAR label sticker and what is your reaction to the concept of eliminating the sticker, making it optional, and/or replacing it with a preprinted QR-code format that would link to a web address lookup?
BER agree with making this requirement optional.
- 2) Do you have additional general feedback on this topic?
None

Performing Quality Control of Installed Features During File Review Step

- 1) Is it practical for QC reviewers to complete File Review activities prior to the time of certification?
YES
- 2) If not, are there concrete reasons the File Review could not at least be completed within 10 business days of certification?
NO
- 3) Do you have additional general feedback on this topic?
None

Adding "Skills and Knowledge" Check as Purpose of Field Evaluations

- 1) Are the proposed minimum rates of Field Evaluation appropriate to ensure Raters maintain adequate skills and knowledge of the latest policies, protocols, and program requirements?
Raters should be required to maintain a high level of understanding of the latest Energy Star policies, protocols, and program requirements through an approved ENERGY STAR training program or continued education process. If a Rater does not participate in the rating of an Energy Star home or does not have any professional development credits for 12 consecutive months, then they must pass a Graded Field Evaluation in the presence of a QAD from a QA Provider approved by the HCO. If a rater does not participate in the rating of an ENERGY STAR home or have any continued education credits for 3 years or more, then they must pass an approved ENERGY STAR training program AND pass a Graded Field Evaluation in the presence of a QAD from a QA Provider approved by the HCO.
- 2) Do you have additional general feedback on this topic?
Builder partners should maintain a basic understanding of the latest ENERGY STAR policies, protocols, and program requirements through an approved Energy Star training program or continued education process for builders. If a



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

builder does not participate in the construction of an Energy Star home or have any continued education credits for 3 years or more, then they must pass an approved ENERGY STAR training program for builders.

Layering On HCO Direct (Non-Delegated) Quality Control Review

- 1) Is the rate of 0.5% HCO direct File Review an appropriate and practical frequency given that the scope is a detailed human review?

BER support a rate 1% HCO direct file review.

- 2) Do you have additional general feedback on this topic?

None

Requiring Builders to Facilitate HCO Site Visits

- 1) What issues (e.g., legal, liability, scheduling) do builder partners foresee with HCO personnel directly arranging site visits and how can those considerations be addressed?

The HCO may need to provided liability insurance, similar to Raters, prior to scheduling site visits with the builders.

- 2) Do you have additional general feedback on this topic?

None



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Organization Name: Building Science Institute, Ltd. Co.

Respondent Last Name: Dillon

Respondent First Name: Brett

Comments:

General

- 1) Do you have any general feedback on EPA's proposed enhancements to the ENERGY STAR Certification System's Quality Assurance and Quality Control (QAQC) requirements?

BSI fully supports the US EPA's proposed enhancements to the QAQC requirements for the ENERGY STAR® Certification System

- 2) Can you foresee any unintended consequences from implementing any of these elements?

Since BSI has already implemented the vast majority of these elements in our home energy rating system, and we've been operational for more than a year, we have not seen any unintended consequences from implementation so far.

- 3) Are there significant implementation challenges for any proposed elements that EPA needs to consider?

If a legacy Home Certification Organization has to implement these elements, the significant challenges the EPA will need to consider are the amount of time it would take them to change their culture and the amount of time it would take to implement new or updated technology.

- 4) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?

All software tools that generate ENERGY STAR® labels, certificates, and compliance must pass the ENERGY STAR® Software Test administered by NREL. Specifically looking at the ENERGY STAR® Target Index.

The use of probability statistics, with a backup of human review when there are flagged items, should be allowed for file reviews, in lieu of a fixed percentage.

Require approved software tools to use the NREL-developed ANSI 301 ruleset to calculate the ERI for ENERGY STAR®.

All verification activities must be performed by qualified energy raters, field inspectors, and/or energy modelers. An energy rater shall not be allowed to remote video call a builder superintendent and have them verify items unless the entire call is recorded and uploaded to the centralized collection of Rater photos.

Centralized collection of ENERGY STAR checklist data in HCO database

- 1) For the sake of consistency, when digital data collection software is used by Raters to complete the ENERGY STAR checklists, should EPA require that it be based on an EPA-created data schema/stylesheet and/or should EPA require HCOs to operate a review and approval process for such software to ensure ENERGY STAR checklists are accurately translated to digital formats?

It is not necessary for the US EPA to create a data schema/stylesheet and the US EPA should require HCOs to review and approve software to ensure ENERGY STAR checklists are accurately translated to digital formats.

- 2) Do you have additional general feedback on this topic?

If the ENERGY STAR® program documentation requirements are based on an annual revision schedule, the US EPA should create a specific data schema that we can map to.

Centralized Collection of Rater Photos in HCO Database

- 1) Beyond photos of installed checklist measure, are there other photos that would provide significant QAQC value, such as elevation photos or Rater 'selfies' during the on-site inspections?

Rater 'selfies' and elevations should be required.

Explicitly require photographs documenting ENERGY STAR® checklist items, including performance test results displayed on the testing equipment.

Additional photo requirements we recommend:

- Photographs of external static pressure tests.

- Photograph of filter in HVAC and whole-house mechanical ventilation equipment

- 2) How should HCOs address situations where mandatory photos are unavailable, for example due to accidental data loss? Use a secure system that requires backups. The capability to sync photos to a cloud storage solution at the completion of an inspection.



ENERGY STAR Certification System

Quality Assurance and Quality Control Enhancements

Comments Received

- 3) Do you have additional general feedback on this topic?
BSI is already capable, though everything that gets finalized should have a 6-month transition time and no more.

Formalized List of Automated Validations in Approved Rating Software and Databases

- 1) Do you have additional general feedback on this topic?
BSI already uses over 400 automated validations based on a formalized list we developed, so we fully support this element.

Printing ENERGY STAR Certificates and Labels Exclusively in Approved Rating Software

- 1) Do partners find value in the ENERGY STAR label sticker and what is your reaction to the concept of eliminating the sticker, making it optional, and/or replacing it with a preprinted QR-code format that would link to a web address lookup?
The physical label and certificate should still be required. Either the Rater applies the label or the builder downloads the certificate for that specific house from the HCO-approved software tool or ENERGY STAR® partner portal. The QR code should connect to the page where a home can be searched for.
- 2) Do you have additional general feedback on this topic?
BSI fully supports this element and firmly believes the label and certificates should be issued only by the HCO who is solely responsible and accountable for the home's certification under the current HCO requirements.

Performing Quality Control of Installed Features During File Review Step

- 1) Is it practical for QC reviewers to complete File Review activities prior to the time of certification?
Since BSI already does this, we have found there is no reason a File Review should not be completed prior to certification. Certification, in a proper quality management system, happens AFTER the quality management work has been completed. It's difficult, if not impossible, to drive forward whilst looking backward and NOT run into major problems...which the industry already has demonstrated time and time again.
- 2) If not, are there concrete reasons the File Review could not at least be completed within 10 business days of certification?
[Add comments]
- 3) Do you have additional general feedback on this topic?
BSI firmly believes this element is critical to maintain the integrity of the ENERGY STAR program.

Adding "Skills and Knowledge" Check as Purpose of Field Evaluations

- 1) Are the proposed minimum rates of Field Evaluation appropriate to ensure Raters maintain adequate skills and knowledge of the latest policies, protocols, and program requirements?
BSI supports 1 per year per Rater/RFI, unless additional field assessments are required due to issues uncovered during the course of quality management work. This works in our home energy rating system due to the transparency baked into the system which allows us full visibility into all the inspection activities of each project and verifier.
- 2) Do you have additional general feedback on this topic?
BSI believes there should be a requirement for both a pre-drywall (with insulation installed) and final stage assessment, and each should be performed on different houses.

Layering On HCO Direct (Non-Delegated) Quality Control Review

- 1) Is the rate of 0.5% HCO direct File Review an appropriate and practical frequency given that the scope is a detailed human review?
BSI performs all of the file reviews directly already. The use of probability statistics (95% confidence interval, 5% margin of error), with a backup of human review by the HCO when there are flagged items (minimum rated features AND program items), should be allowed for file reviews, in lieu of a fixed percentage, particularly when the HCO-approved software tool has demonstrated compliance with the "Software Review Form For ENERGY STAR Energy Rating Index-Based Compliance Paths" and has over 400 data validation checks built in.
We believe that 0.5% HCO direct File Review is not appropriate and should be closer to 5%.
At the very least, HCO Staff members should review all flagged files for human review, on top of a statistically significant sample per division of a company that is performed by the delegated QAQC reviewers. It should be based on the subset of home files already reviewed by a delegated QAQC reviewer, in addition to any home files that have been flagged and should be distributed proportionally by Rater, field inspector, and/or software analyst.
- 2) Do you have additional general feedback on this topic?



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

BSI believes that HCO's must be held accountable for the certification of homes and people, and the diffusion of responsibility and accountability leads to confusion and failures that threaten the integrity of quality management systems.

Requiring Builders to Facilitate HCO Site Visits

- 1) What issues (e.g., legal, liability, scheduling) do builder partners foresee with HCO personnel directly arranging site visits and how can those considerations be addressed?
[Add comments]
- 2) Do you have additional general feedback on this topic?

BSI works with our clients to facilitate site visits. Due to the transparency baked into our home energy rating system, we have high confidence in the quality of the work performed by our clients and provide builders access to review that work as well so we can cooperatively improve the quality of the homes and prevent errors and mistakes. For this reason, our clients and builders so far have not seen any issues in arranging site visits for us, although scheduling can be a bit tricky sometimes.



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Organization Name: CalCERTS

Respondent Last Name: Choo

Respondent First Name: David

Comments:

General

- 1) Do you have any general feedback on EPA's proposed enhancements to the ENERGY STAR Certification System's Quality Assurance and Quality Control (QAQC) requirements?

CalCERTS extends our gratitude to the EPA for the opportunity to comment on the QAQC proposal. We have had a long and fruitful relationship with the EPA and are committed to supporting enhancements to QAQC.

The following comments are specific to the California marketplace.

Data Validation

CalCERTS supports software validation and review of 100% 'black-and-white' machine-verifiable items. We support the EPA in producing a formalized list of automated validation points.

Because CA is unique in its requirement to use state-mandated energy modeling software, the validations can't be introduced into the software. However, having a list of those points would allow for data point validation after the energy model has been uploaded (as required by CA energy code requirements) to a data registry, such as the CalCERTS Registry. With this type of data validation, we support the idea of reducing the current volume requirement of human file review. Data validation is a smart cost-effective way to ensure program oversight.

Both data validation and human review, have strengths and weaknesses and a combination of both would be best for ensuring overall program compliance.

Requiring validation of data points prescribed by the EPA can be a lengthy process that will be influenced by the CA Building Energy Efficiency Standards. Because the CA BEES program is administered in a three-year code cycle, our California data registries must be built and approved for each code cycle. We ask that at a minimum, validation requirements be required at the beginning of the implementation of a new code cycle. The next implementation date is Jan 1, 2026. It would be ideal for the requirements to go into effect 6 months after the initial implementation of the new CA BEES code to account for delays of code enactment and likely errors once the code is implemented.

Blind Field QA

CalCERTS has always been a proponent of Blind Field QA. We define a Blind Field QA as one that is not announced to the Rater or Rating Company involved in the Energy Star certification.

In the last 8 years, CalCERTS has conducted over 10,000 QA Reviews. The majority of these have been Blind Field QAs. Our QA experience includes file QA, data validation, data audits, live "skills and knowledge" checks, and represent every type of residential energy code related project conceivable throughout California. CalCERTS can provide data and analytics on the efficacy of these Blind QAs to the EPA if helpful.



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

We have found that Blind Field QA is one of the most helpful tools in maintaining the quality of overall compliance. Because the Rater and Rating company is unaware of when the QA might occur, there is a consistent credible threat of discovery. The work must always be truthful, complete, and accurate because it might be audited at any time.

We strongly agree with RESNET's recent response that Blind QA Reviews "would be of higher value than the current process and would be especially helpful as an investigative tool".

The significant disadvantage of Blind QA is the difficulty of coordinating with Builders and Project Superintendents. Because final energy code compliance documentation occurs near the final or after final stage of construction, the window in which a QA can be conducted is very small, sometimes only a few days. However, if the EPA were to mandate these types of reviews, it would further facilitate coordination between the HCOs and superintendents who would come to understand this as a standard operating procedure. The incentives behind a verified Energy Star Label help further incentivize partner coordination.

The current requirement of 1% Field QA of each Rater is extremely difficult to achieve and sometimes impossible. We request that the requirement be changed to 1% of each Rating Company with a minimum of one for each Rater per year or per CA BEES code cycle QA requirements. We have found that the overall inspection quality is less based on Rater performance, and more on Rating Company ethos and processes. We also suggest that Blind QA be given greater consideration when compared to other QA methods with a reduced overall requirement when Blind QA is the primary method of oversight by the HCO.

Pre-Drywall QA

While we are for Pre-Drywall QA, we are weary of a "requirement" that a certain percentage of QA be specifically Pre-Drywall QA. In CA, we recommend that an HCO be given the flexibility to conduct a certain percentage of QA to be specifically Pre-Drywall. As an example, "An HCO shall have the option to conduct 30% of Field QA as Pre- Drywall."

We recommend Pre-Drywall QA occur with a minimum one for each Rater per year or per CA BEES code cycle QA requirements. This would align with the California Energy Commission proposal to do the same starting the next BEES code cycle, Jan 1, 2026. The CA proposed process for Jan 1, 2026 is a "Shadow Audit" where the Rater is graded using a specific CEC approved checklist without intervention or interruption from QA staff. The repercussion for failing is substantial with significant disciplinary requirements that can lead to permanent decertification in the state of CA. Further, the 2025 CA BEES QA program has multiple requirements to induce discovery that go beyond the EPA QAQC proposed language.

- 2) Can you foresee any unintended consequences from implementing any of these elements?

Rating companies, not just HCOs will need time to accommodate the new QAQC requirements. It is likely the HCOs will be able to accommodate these changes faster than the Rating companies can hire staff and adjust their technology and operating procedures to align. CalCERTS advocates for the EPA to weigh feedback from Raters and Rating companies on feasible timelines.

- 3) Are there significant implementation challenges for any proposed elements that EPA needs to consider?

EPA may need staff resources to ensure compliance by HCOs. Historically there have been significant discrepancies in the oversight conducted by verification oversight organizations in California. To ensure the investments in programming



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

and oversight resources are prudent, all HCO or HCO partners must be held to an agreed-upon baseline standard with these QAQC requirements.

- 4) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?

[Add comments]

Centralized collection of ENERGY STAR checklist data in HCO database

- 1) For the sake of consistency, when digital data collection software is used by Raters to complete the ENERGY STAR checklists, should EPA require that it be based on an EPA-created data schema/stylesheets and/or should EPA require HCOs to operate a review and approval process for such software to ensure ENERGY STAR checklists are accurately translated to digital formats?

The CEC and CalCERTS have extensive experience working with schemas under the CA BEES program. Through the years, we've found that the most effective and efficient process is that the vendor (Rating Company / Rater) control the data schema used for intake. Software tools should be used to determine how 3rd party data collection software communicates with their platform, which puts the authority of approval under the HCO's jurisdiction. The HCO and the EPA should be granted permission to review and/or revoke 3rd party data collection software found to be in question with the program guidelines. This process should be transparent to the HCO and the EPA to confirm compliance.

Especially in CA, requiring validation of data points prescribed by the EPA can be a lengthy programming process that is influenced by the CA Building Energy Efficiency Standards program. Because the CA BEES program is administered in a three year code cycle, our registry must be built and approved or each code cycle. We ask that at a minimum, if validation requirements are required, that it occur at the beginning of the implementation of a new code cycle. The next implementation date is Jan 1, 2026. It would be ideal for the requirements to go into effect 6 months after initial implementation of the new CA BEES code.

- 2) Do you have additional general feedback on this topic?

Because of the compliance workflow in CA, CalCERTS already requires the collection of all ENERGY STAR checklists directly in our data registry. Our process includes the ability for users to input all data directly onto forms programmed to be nearly identical to EPA forms. With this data collection happening directly on our registry, we have no need for an EPA data schema, so there would be no transmission of checklist data from a 3rd Party.

In specialized markets like CA, it would be prudent for the HCO to show that validations and data checks are occurring according to EPA program requirements, but the process itself should be developed by individual HCOs. This way, HCOs have the flexibility to innovate, but must prove the innovation meets EPA requirements.

Centralized Collection of Rater Photos in HCO Database

- 1) Beyond photos of installed checklist measure, are there other photos that would provide significant QAQC value, such as elevation photos or Rater 'selfies' during the on-site inspections?

CalCERTS supports RESNET's response regarding this topic.

- 2) How should HCOs address situations where mandatory photos are unavailable, for example due to accidental data loss?

CalCERTS supports RESNET's response regarding this topic.



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

- 3) Do you have additional general feedback on this topic?

Regarding the proposal of photo storage. If the purpose of photos are primarily for Quality Assurance review, we recommend a shorter storage period of one year from the date of ENERGY STAR certification. Once reviewed, storing photos for an extended period can be considered an unsupported cost. These costs include those associated with potential litigation, storage, security, and privacy. An HCO should retain its records of photo reviews for several years, rather than holding storage-intensive photos for several years

Formalized List of Automated Validations in Approved Rating Software and Databases

- 1) Do you have additional general feedback on this topic?

CalCERTS supports the idea of digitization of ENERGY STAR checklist data as well as Design Reports provided data validation can be implemented. In order for data validation to be implemented, we encourage the idea that Design Reports be produced in software platforms such as those produced by CodedEnergy, Wrightsoft, Energy Gauge. We encourage a requirement that Design Report software produce XML type data for HCO IT groups to import for streamlined validation.

Printing ENERGY STAR Certificates and Labels Exclusively in Approved Rating Software

- 1) Do partners find value in the ENERGY STAR label sticker and what is your reaction to the concept of eliminating the sticker, making it optional, and/or replacing it with a preprinted QR-code format that would link to a web address lookup?
CalCERTS agrees that the Energy Star sticker is an unnecessary component of the program. Timeframes for rating turnaround post final inspection, are very tight. A sticker requirement adds an additional level of coordination and cost that is unnecessary. With homes being reported to a publicly available digital registry, there is no additional value of a sticker. Modern home buyers looking to use this certification to make decisions would get the value from a realtor or MLS system providing the information rather than seeing the sticker in the panel.
- 2) Do you have additional general feedback on this topic?

The terminology “certificates and labels exclusively in approved rating software” does not align with the CA process. The approved rating software workflow is not followed in CA, as the program uses a state-specific workflow, which involves the CEC-approved HERS data registry. The software is designed and controlled by the CEC and there are no plans to incorporate a label system into the software. In CA, certificates and labels should be exclusively provided by an HCO as opposed to approved rating software.

Performing Quality Control of Installed Features During File Review Step

- 1) Is it practical for QC reviewers to complete File Review activities prior to the time of certification?

We understand the proposal to conduct File Review prior to certification as a means to identify and correct errors before issuing certificates. We have concern with the practicality of implementing such a Quality Control step in California. The following is to provide context.

Specifically with the California marketplace, any newly constructed building must first be modeled to meet specific energy efficiency requirements as per the Building Energy Efficiency Standards of CA. This process has 3 stages through the construction process.



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

- Certificate of Compliance
 - This document contains the energy plan. The energy plan is produced by an Energy Modeler that is distinct from a Rater in CA. The energy plan must go through a series of state mandated software checks and then be approved by the AHJ (Authority Having Jurisdiction). Those plans are submitted to CalCERTS (CA HERS Provider), and a very specific process of oversight and documentation must be followed by all stakeholders.
 - Any change in the original plan requires a resubmission to the AHJ and CalCERTS.
- Certificate of Installation
 - Under the penalty of perjury, each installed energy feature (HVAC, fenestration, insulation, etc.) must have accompanying documentation signed by the responsible trade or builder.
 - Many of these features are inspected by AHJ inspectors.
- Certificate of Verification
 - Specific features of the energy code, must be verified or diagnostically tested by 3rd party inspectors under the supervision of CalCERTS.
 - The Quality Assurance process in CA has been largely based on Blind Field QA review.

Outside of the Certificate of Compliance, documentation is typically registered at final after inspections and corrections are completed. Because of the Blind QA process, there is typically a very small window of time where a Field QA can be completed.

CA approved energy modeling software is not capable of modeling specific duct leakage targets or ventilation rates and must follow CA mandatory building code requirements. CA Compliance Raters double as ENERGY STAR Raters and are aware that newly constructed residences may on rare occasion (less than 10% of homes) have to meet a more stringent duct leakage or ventilation requirement. This is reviewed in the QA process and generally occurs at final or after final (QA Checklist Items 6.4, 6.5, 7.1)

Because of the unique nature of the CA market, it would require a shift in mindset of the entire industry to accommodate QA reviews prior to certification, except if an exemption were made to the QA Checklist File Review items 6.4, 6.5, 7.1.

Without these exemptions, or some work around, the claw-back requirement could cause significant disruption to the industry.

We encourage the EPA to consider an exemption to the previously mentioned items for CA only. This would allow CalCERTS to perform File Review early in the process to reduce the chance of non-ENERGY STAR compliant homes. We believe this is in line with the EPA's goals of oversight early in the construction process.

2) If not, are there concrete reasons the File Review could not at least be completed within 10 business days of certification?

Responded in question #1.

3) Do you have additional general feedback on this topic?



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

HCO IT System Randomization of File Review Selection:

We believe a computerized random selection system for file review to be fair and equitable. Because of the uniqueness of the CA market, the focus should be on the overall quality being produced by Rating Companies and Builders as opposed to a check on individual Rater. In CA, Raters operate more like an RFI and are distinct from the Energy Modeler.

Adding “Skills and Knowledge” Check as Purpose of Field Evaluations

- 1) Are the proposed minimum rates of Field Evaluation appropriate to ensure Raters maintain adequate skills and knowledge of the latest policies, protocols, and program requirements?

CalCERTS is looking forward to reviewing feedback from the Rater Community before providing further input on this topic. Mentoring and continued training are an essential part of CalCERTS' ongoing efforts to support Raters as an HCO. This is especially important in jurisdictions like CA, where standards change every three years and the above code requirements follow.

- 2) Do you have additional general feedback on this topic?

Layering On HCO Direct (Non-Delegated) Quality Control Review

- 1) Is the rate of 0.5% HCO direct File Review an appropriate and practical frequency given that the scope is a detailed human review?

[Add comments]

- 2) Do you have additional general feedback on this topic?

Requiring Builders to Facilitate HCO Site Visits

- 1) What issues (e.g., legal, liability, scheduling) do builder partners foresee with HCO personnel directly arranging site visits and how can those considerations be addressed?

- 2) Do you have additional general feedback on this topic?

CalCERTS fully supports the EPAs efforts to evolve the QAQC program for ENERGY STAR and anticipates offering more feedback and potential new solutions after feedback from Raters and Rater Companies is compiled. We may amend our comments and suggestions after review of partner and stakeholder feedback,



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Organization Name: CHEERS

Respondent Last Name: Starr

Respondent First Name: Rob

Comments:

General

- 1) Do you have any general feedback on EPA's proposed enhancements to the ENERGY STAR Certification System's Quality Assurance and Quality Control (QAQC) requirements?

CHEERS supports the EPA's commitment to improving the QAQC program. Advancements in technology allow for a more centralized and streamlined process that will benefit all stakeholders.

- 2) Can you foresee any unintended consequences from implementing any of these elements?

[Add comments]

- 3) Are there significant implementation challenges for any proposed elements that EPA needs to consider?

When determining how long implementing a new technology feature in the HERS industry should take, triple your initial estimate. We have experienced this directly several times.

- 4) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?

[Add comments]

Centralized collection of ENERGY STAR checklist data in HCO database

- 1) For the sake of consistency, when digital data collection software is used by Raters to complete the ENERGY STAR checklists, should EPA require that it be based on an EPA-created data schema/stylesheet and/or should EPA require HCOs to operate a review and approval process for such software to ensure ENERGY STAR checklists are accurately translated to digital formats?

CHEERS supports the use of an industry standard data schema created and maintained by the EPA. This will allow the EPA to roll out updates to all groups seamlessly which can then be incorporated into each HCO's system.

- 2) Do you have additional general feedback on this topic?

If standard schemas are implemented, consider providing schema revisions on a published schedule (annually, biannually, etc.). This would greatly help with resource planning for the HCOs.

Centralized Collection of Rater Photos in HCO Database

- 1) Beyond photos of installed checklist measure, are there other photos that would provide significant QAQC value, such as elevation photos or Rater 'selfies' during the on-site inspections?

CHEERS recommends that Raters also document all diagnostic test results as they are displayed on the testing equipment utilizing the geotagging capabilities of the smart device to document the location. Tools can be incorporated into the QAQC review process that will place these photos directly on a map for location verification purposes.

- 2) How should HCOs address situations where mandatory photos are unavailable, for example due to accidental data loss?

As with any technology, there will be situations where it will fail. However, these should be the exception and treated as such. If photos are not available for a specific site, the QAQC reviewer should review the broader scope of work for that Rater and attempt to determine if this is an isolated incident or evidence of foul play and then proceed accordingly.

- 3) Do you have additional general feedback on this topic?

[Add comments]

Formalized List of Automated Validations in Approved Rating Software and Databases

- 1) Do you have additional general feedback on this topic?



ENERGY STAR Certification System

Quality Assurance and Quality Control Enhancements

Comments Received

CHEERS supports automated validations as an additional level of review prior to final submission. This validation will reduce the amount of human error that may make it through the data entry process and ultimately result in a failed QAQC review.

Printing ENERGY STAR Certificates and Labels Exclusively in Approved Rating Software

- 1) Do partners find value in the ENERGY STAR label sticker and what is your reaction to the concept of eliminating the sticker, making it optional, and/or replacing it with a preprinted QR-code format that would link to a web address lookup?

Incorporating a QR code to link the ES label to a unique web address would nearly eliminate any chance of label forgery. That said, we do not have a sense if ES label is a material concern in the field. CHEERS would support a QR code implementation if that became a requirement.

- 2) Do you have additional general feedback on this topic?

If the requirement for the issuance of a label were to remain, CHEERS strongly suggests a requirement in which the label be issued solely by the certifying HCO. With the HCO being solely responsible for certification, they should also control the issuance of related documents, such as the certificates and labels.

Performing Quality Control of Installed Features During File Review Step

- 1) Is it practical for QC reviewers to complete File Review activities prior to the time of certification?

CHEERS does not believe this is reasonable across all project types.

- 2) If not, are there concrete reasons the File Review could not at least be completed within 10 business days of certification?

CHEERS does not believe a delay of up to 10 business days prior to issuance of certification is an unreasonable amount of time. This delay would only affect those sites selected for review and should progress through that process in much less time. This slight delay would be preferred over the revocation of the certification due to QAQC failures after certification has been issued.

- 3) Do you have additional general feedback on this topic?

[Add comments]

Adding “Skills and Knowledge” Check as Purpose of Field Evaluations

- 1) Are the proposed minimum rates of Field Evaluation appropriate to ensure Raters maintain adequate skills and knowledge of the latest policies, protocols, and program requirements?

The proposed minimum rates are sufficient to maintain the skills and knowledge required. This, of course, is dependent on the level of engagement by the Rater. A Rater that is actively seeking to improve and stay up to date will be successful under the proposed requirements.

- 2) Do you have additional general feedback on this topic?

CHEERS supports a hybrid model for Field Evaluations that allows for flexibility in both the Raters and QAQC staffs schedules. The use of Shadow Audits where the QAQC staff and Rater are on site at the same time or utilize technology to video conference are both good options for that “in-person” evaluation.

Layering On HCO Direct (Non-Delegated) Quality Control Review

- 1) Is the rate of 0.5% HCO direct File Review an appropriate and practical frequency given that the scope is a detailed human review?

CHEERS suggests increasing the HCO direct file review to a level closer to 3.0%. If the HCO is ultimately responsible for the ENERGY STAR certification and corresponding reporting, certificates, and labels, then the HCO should be constantly and comfortably in the details of the homes it is certifying. Raising the direct file review threshold supports this notion.

- 2) Do you have additional general feedback on this topic?

While QAD’s are expected to operate in an ethical fashion, not all will be beyond reproach. A non de minimis level of review by the HCO should be required and the data from those reviews will inform future discussions and program guidelines of the QAQC program.



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Requiring Builders to Facilitate HCO Site Visits

- 1) What issues (e.g., legal, liability, scheduling) do builder partners foresee with HCO personnel directly arranging site visits and how can those considerations be addressed?

Scheduling is most difficult issue in our experience. There is a very tight timing window in which a home can be inspected at rough and final. Many times, verification personnel are given same day notifications to do their inspections. Adding in the availability (or lack thereof) of QA staff exponentially complicates the issue. We have yet to find a magic bullet that addresses the issue.

- 2) Do you have additional general feedback on this topic?

CHEERS recognizes that QA staff face challenges with site access. We are open to participating in the process to find a workable solution.



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Organization Name: GWS

Respondent Last Name: Parker

Respondent First Name: Kelly

Comments:

General

- 1) Do you have any general feedback on EPA's proposed enhancements to the ENERGY STAR Certification System's Quality Assurance and Quality Control (QAQC) requirements?
Generally good enhancements except for some detailed comments below.
- 2) Can you foresee any unintended consequences from implementing any of these elements?
Yes-lower quality control of field raters by loosening the standards for ratings over 100 to only 2 annually on site
- 3) Are there significant implementation challenges for any proposed elements that EPA needs to consider?
Change it back to 1% for over 100 evaluations annual
- 4) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?
[Add comments]

Centralized collection of ENERGY STAR checklist data in HCO database

- 1) For the sake of consistency, when digital data collection software is used by Raters to complete the ENERGY STAR checklists, should EPA require that it be based on an EPA-created data schema/stylesheet and/or should EPA require HCOs to operate a review and approval process for such software to ensure ENERGY STAR checklists are accurately translated to digital formats?
[Add comments]
- 2) Do you have additional general feedback on this topic?
[Add comments]

Centralized Collection of Rater Photos in HCO Database

- 1) Beyond photos of installed checklist measure, are there other photos that would provide significant QAQC value, such as elevation photos or Rater 'selfies' during the on-site inspections?
Delete requirement to have HVAC contractor photo the installation of the refrigerant. Delete any requirement for HVAC confirmation by HVAC contractor-put responsibility on rater.
- 2) How should HCOs address situations where mandatory photos are unavailable, for example due to accidental data loss?
[Add comments]
- 3) Do you have additional general feedback on this topic?
[Add comments]

Formalized List of Automated Validations in Approved Rating Software and Databases

- 1) Do you have additional general feedback on this topic?
[Add comments]

Printing ENERGY STAR Certificates and Labels Exclusively in Approved Rating Software

- 1) Do partners find value in the ENERGY STAR label sticker and what is your reaction to the concept of eliminating the sticker, making it optional, and/or replacing it with a preprinted QR-code format that would link to a web address lookup?
[Add comments]
- 2) Do you have additional general feedback on this topic?



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

[Add comments]

Performing Quality Control of Installed Features During File Review Step

- 1) Is it practical for QC reviewers to complete File Review activities prior to the time of certification?
No. If done before certification then components will need to be reviewed and verified at certification so QA Reviewer must touch file twice.
- 2) If not, are there concrete reasons the File Review could not at least be completed within 10 business days of certification?
We have to use pictures to verify component and equipment installed and this is not available until final inspection. If file review is only on file review that is ok but not on as built building.
- 3) Do you have additional general feedback on this topic?
See above.

Adding “Skills and Knowledge” Check as Purpose of Field Evaluations

- 1) Are the proposed minimum rates of Field Evaluation appropriate to ensure Raters maintain adequate skills and knowledge of the latest policies, protocols, and program requirements?
NO....should change back raters doing over 100 ratings to 1 percent not 2 per year.
least one (1) (1 percent of homes at the pre-drywall stage and one (1) home at the final stage per year submitted by each individual rater;; for a total of at least two (2) annual field evaluations.
(1) home at the final stage per year submitted by each individual rater;; for a total of at least two (2)
There is something wrong-When I copy and paste it shows up as 1% a year (not crossed out) . When I read the document it shows up as only 1 predrywall and 1 final for a total of 2 (1% is crossed out) . BRING BACK THE 1% field check of all types of inspections 50% predrywall and 50% final.
- 2) Do you have additional general feedback on this topic?
Need clarity on red lines on document. Field QA should be 1 percent of all inspections with a limit of 50% predrywall and 50% final inspections. I show it to read EPA has changed it to only 2 annual field inspections for raters OVER 100 Evaluations-this is not enough.

Layering On HCO Direct (Non-Delegated) Quality Control Review

- 1) Is the rate of 0.5% HCO direct File Review an appropriate and practical frequency given that the scope is a detailed human review?
For large volume raters yes. For low volume still need 10%-they don't submit enough to keep experienced.
- 2) Do you have additional general feedback on this topic?
[Add comments]

Requiring Builders to Facilitate HCO Site Visits

- 1) What issues (e.g., legal, liability, scheduling) do builder partners foresee with HCO personnel directly arranging site visits and how can those considerations be addressed?
[Add comments]
- 2) Do you have additional general feedback on this topic?
[Add comments]

Kelly Parker, P.E.

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ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

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ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Organization Name: JKP Energy Inspections, LLC

Respondent Last Name: Johnson

Respondent First Name: Katie

Comments:

General

- 1) Do you have any general feedback on EPA's proposed enhancements to the ENERGY STAR Certification System's Quality Assurance and Quality Control (QAQC) requirements?
We think this is a great idea and will improve our industry.
- 2) Can you foresee any unintended consequences from implementing any of these elements?
No
- 3) Are there significant implementation challenges for any proposed elements that EPA needs to consider?
Only concern would be that the integration with software doesn't work, its tedious or takes a lot of time
- 4) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?
No

Centralized collection of ENERGY STAR checklist data in HCO database

- 1) For the sake of consistency, when digital data collection software is used by Raters to complete the ENERGY STAR checklists, should EPA require that it be based on an EPA-created data schema/stylesheet and/or should EPA require HCOs to operate a review and approval process for such software to ensure ENERGY STAR checklists are accurately translated to digital formats?
I think it is a good idea for a software to make sure the information is getting translated correctly.
- 2) Do you have additional general feedback on this topic?
No

Centralized Collection of Rater Photos in HCO Database

- 1) Beyond photos of installed checklist measure, are there other photos that would provide significant QAQC value, such as elevation photos or Rater 'selfies' during the on-site inspections?
No. If they are timestamped and geolocated that should be fine
- 2) How should HCOs address situations where mandatory photos are unavailable, for example due to accidental data loss?
Depends what the concern is. If it is proving that the inspection was completed, we track our field staff with GPS for mileage purposes so we can see where they went and for how long.
- 3) Do you have additional general feedback on this topic?
No.

Formalized List of Automated Validations in Approved Rating Software and Databases

- 1) Do you have additional general feedback on this topic?
No.

Printing ENERGY STAR Certificates and Labels Exclusively in Approved Rating Software

- 1) Do partners find value in the ENERGY STAR label sticker and what is your reaction to the concept of eliminating the sticker, making it optional, and/or replacing it with a preprinted QR-code format that would link to a web address lookup?
Please please please get rid of the physical labels! It takes a ton of time to print and is a waste of postage. Builders have told us they rarely get them into the homes and sit in a box in the main office. Builders have asked us to put them



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

in for them but we won't preprint labels because we can't guarantee the home will pass. Also, they don't pay us for that. A website would be the best options.

- 2) Do you have additional general feedback on this topic?

Get rid of the labels



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Organization Name: Leading Builders of America

Respondent Last Name: Hickman

Respondent First Name: Amanda

Comments:

General

- 1) Do you have any general feedback on EPA's proposed enhancements to the ENERGY STAR Certification System's Quality Assurance and Quality Control (QAQC) requirements?

On behalf of Leading Builders of America (LBA), I would like to express our sincere appreciation for the EPA's commitment to enhancing the effectiveness of the ENERGY STAR Certification System. We are supportive of enhancements designed to improve the effectiveness of current QAQC activities, give HCOs new tools to oversee participants, and ultimately create more confidence in the quality of ENERGY STAR certifications. We strongly agree that this needs to be done in a practical manner that avoids unnecessary disruption.

As we work collectively to implement these reforms, it is important that all participating parties remain flexible and adaptable. This includes being open to changing our approach if well-meaning measures are found to encumber certification and defeat the purpose of these improvements.

We encourage EPA to continue making improvements to streamline the administration of the ENERGY STAR program. Doing so will help sustain interest in the program at a time when the forthcoming version 3.2 updates pose a significant challenge for many builders to remain committed to the program.

Improvements include working with us to remediate ongoing issues with the HOST API. This will allow for better access to ENERGY STAR certified home data which is necessary for timely verification of properties within green financing programs. It also includes continuing our ongoing efforts to streamline the verification of thermal bypass and air sealing requirements as well as creating viable and verifiable remedies for missed pre-drywall inspections. All of these improvements should be made in coordination with other federal programs to ensure alignment and encourage progression to other EPA and Department of Energy initiatives.

We look forward to continuing our discussions on these topics as well as the concerns identified in this document.

- 2) Can you foresee any unintended consequences from implementing any of these elements?
We urge careful consideration of potential disruptions caused by delays in certification. This includes the impact on securitization for green bonds and the 45L tax credit. However, these are not the only reasons why builders commit to ENERGY STAR. As it currently stands, the program is a value add to consumers and builder care deeply about bringing ENERGY STAR certification to the closing table.

In order to help builders deliver on their promise in a timely manner, we need clarification on how homes flagged for further review can still be certified or, at a minimum, "certified pending further review." The EPA's Quality Assurance period should better facilitate the builder's ability to cure administrative issues such as missing paperwork or reports that were performed but were not included in the file. The assumption should be that the home remains certified until the builder fails to cure the issue within a specified amount of time after being notified. Furthermore, it is essential to ensure consistent interpretations from EPA to the HCOs to ensure uniform guidance is being disseminated.

We share the concerns expressed by a large HCO regarding non-delegable file QA reviews and the total turnaround time required. We agree this could have a dire effect on the Fannie Mae green bond mortgage program. Time is an essential element for the secondary mortgage market to bundle the loans (seven days or less).

Implementation will need to be phased to allow HCOs to prepare for the costs and staffing needed to implement each enhancement. This is particularly true with large volume HCOs which will handle hundreds of thousands of ENERGY STAR homes annually.

- 3) Are there significant implementation challenges for any proposed elements that EPA needs to consider?
Yes, please consider the following challenges we've identified. Some are explained further in subsequent comments:



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

- There is a notable misalignment between federal and HCO QA standards. We recommend that the HCOs and EPA work together to reconcile and streamline these standards.
- Several of the proposed revisions to the program may result in delays and raise concerns regarding safety, security, and liability. Hence, we've offered recommendations to address these issues while also improving the QAQC protocols.
- Establishing a feedback loop with builders and enhancing transparency to identify bottlenecks is necessary for taking appropriate and expedient action on pending homes.
- Implementing measures to ensure the timely and accurate input of information would greatly enhance the efficiency of the overall system.
- The absence of ownership or chain of custody protocols for information across multiple systems poses a significant vulnerability for builders. Protocols should be established to provide a better level of security around this issue.
- Builders also need access to information and visibility into known issues with HCOs. As this represents a potentially significant liability to them.
- Ensuring the protection of information is crucial. Outsourcing tasks involving highly sensitive data without a formal agreement between the provider and the builder poses significant risks.

- 4) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?

[Add comments]

Centralized collection of ENERGY STAR checklist data in HCO database

- 1) For the sake of consistency, when digital data collection software is used by Raters to complete the ENERGY STAR checklists, should EPA require that it be based on an EPA-created data schema/stylesheet and/or should EPA require HCOs to operate a review and approval process for such software to ensure ENERGY STAR checklists are accurately translated to digital formats?

[Add comments]

- 2) Do you have additional general feedback on this topic?

[Add comments]

Centralized Collection of Rater Photos in HCO Database

- 1) Beyond photos of installed checklist measure, are there other photos that would provide significant QAQC value, such as elevation photos or Rater 'selfies' during the on-site inspections?

We echo support shared by HCOs for Rater "selfies" to include the front elevation and address as well as their request that the list of required photos be decided upon and made available to HCOs in time for implementation by the beginning of 2025.

- 2) How should HCOs address situations where mandatory photos are unavailable, for example due to accidental data loss?

RESNET and presumably other HCOs have well established policies on this topic that we encourage the EPA to reference. Those protocols focus disciplinary action on patterns of careless behavior, but missing photos are not a per se failure.

- 3) Do you have additional general feedback on this topic?

We believe that the proposal for the collection and retention of photos for a three-year period is unnecessary and overly cumbersome. Six to twelve months is a more reasonable time frame as this would align with the QA period or the one-year duration of workmanship and materials warranties which is common in our industry. Correspondingly, the increase in QA/QC scrutiny justifies a reduction of the homeowner-induced certification review period from two years to one.

The larger the amount of data and the longer the custody period, the more susceptible it is to being an administrative problem for the HCO and a legal liability for the builder. We are told by one large HCO that the number of photos they would hold until this proposal could easily exceed 15 million. The duration of photo custody should align with the QA period of 6 months or up to 12 months which is a common duration of workmanship and materials warranties.



ENERGY STAR Certification System

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Whenever it is decided that the custody period for photos ends, protocols must make it clear that photos can be destroyed at that point. Destroyed versus deleted is an important legal distinction regarding digital data.

Formalized List of Automated Validations in Approved Rating Software and Databases

- 1) Do you have additional general feedback on this topic?

[Add comments]

Printing ENERGY STAR Certificates and Labels Exclusively in Approved Rating Software

- 1) Do partners find value in the ENERGY STAR label sticker and what is your reaction to the concept of eliminating the sticker, making it optional, and/or replacing it with a preprinted QR-code format that would link to a web address lookup?

We are supportive of exploring the elimination or replacement with a QR Code linked to the HCO's database.

- 2) Do you have additional general feedback on this topic?

[Add comments]

Performing Quality Control of Installed Features During File Review Step

- 1) Is it practical for QC reviewers to complete File Review activities prior to the time of certification?

As mentioned before, the rater already faces very quick turnaround times to deliver certification. We understand from our correspondence with HCOs that this will not be possible without a high degree of automation.

- 2) If not, are there concrete reasons the File Review could not at least be completed within 10 business days of certification?

[Add comments]

- 3) Do you have additional general feedback on this topic?

[Add comments]

Adding "Skills and Knowledge" Check as Purpose of Field Evaluations

- 1) Are the proposed minimum rates of Field Evaluation appropriate to ensure Raters maintain adequate skills and knowledge of the latest policies, protocols, and program requirements?

[Add comments]

- 2) Do you have additional general feedback on this topic?

[Add comments]

Layering On HCO Direct (Non-Delegated) Quality Control Review

- 1) Is the rate of 0.5% HCO direct File Review an appropriate and practical frequency given that the scope is a detailed human review?

[Add comments]

- 2) Do you have additional general feedback on this topic?

[Add comments]

Requiring Builders to Facilitate HCO Site Visits

- 1) What issues (e.g., legal, liability, scheduling) do builder partners foresee with HCO personnel directly arranging site visits and how can those considerations be addressed?

Baselines need to be established for insurance and safety proficiency. Each builder has different protocols on this issue that are reflected in their contracts signed with subcontractors and suppliers. Contractual privity exists between the rater and the builder, but not between the builder and the HCO.

We believe these issues can be effectively addressed by the following considerations:



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

- Utilize virtual inspections: this addresses safety concerns and allows HCOs to “visit” the site more randomly and expeditiously. Protocols for virtual inspections including SDC 1400 have proven effective on code inspections and have been utilized on other above code programs.
- A multiday delay for an onsite inspection can imperil certification and securitization of green bonds. Additionally, it will be impractical for HCO staff to fly anywhere in the country at a moment’s notice and then acquire the tools, including ladders, to access a particular job site.
- Facilitating on site visits at the pre-drywall stage would be less disruptive to closings.
- On site visits should be a skills and proficiency check for the rater and not an audit of a particular home. The spirit of this proposal is to ensure raters are performing to the standards we all expect them to and not to cause undue delays to an unlucky homeowner who is expecting ENERGY STAR certification for their home.

2) Do you have additional general feedback on this topic?

Thank you for the opportunity to share our comments. We believe that these suggestions will contribute to a more efficient and effective ENERGY STAR Certification System. LBA is committed to supporting initiatives that promote good building practices and looks forward to continued collaboration with the EPA.]



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Organization Name: MaGrann Associates

Respondent Last Name: Pelosi

Respondent First Name: Kim

Comments:

General

- 1) Do you have any general feedback on EPA's proposed enhancements to the ENERGY STAR Certification System's Quality Assurance and Quality Control (QAQC) requirements?

Overall, the additional burden resulting from these updates should be distributed equally between RESNET software, certifying companies and QADs so as not to overburden one particular party.

- 2) Can you foresee any unintended consequences from implementing any of these elements?

There may be an ENERGY STAR participation drop-off due to cost increases associated with these enhancements. There is also a concern around the question of how do raters recoup additional costs required that are associated with current contracts where the price has been fixed? We recommend EPA establish a grace period for rolling out these updates - possibly a 2025 implementation.

- 3) Are there significant implementation challenges for any proposed elements that EPA needs to consider?

[Add comments]

- 4) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?

[Add comments]

Centralized collection of ENERGY STAR checklist data in HCO database

- 1) For the sake of consistency, when digital data collection software is used by Raters to complete the ENERGY STAR checklists, should EPA require that it be based on an EPA-created data schema/stylesheet and/or should EPA require HCOs to operate a review and approval process for such software to ensure ENERGY STAR checklists are accurately translated to digital formats?

[Add comments]

- 2) Do you have additional general feedback on this topic?

We support requiring the use of a standardized software. EPA should also ensure multifamily projects have batch upload capabilities so that a checklist may be assigned either to each unit or to multiple units.

Centralized Collection of Rater Photos in HCO Database

- 1) Beyond photos of installed checklist measure, are there other photos that would provide significant QAQC value, such as elevation photos or Rater 'selfies' during the on-site inspections?

[Add comments]

- 2) How should HCOs address situations where mandatory photos are unavailable, for example due to accidental data loss?

[Add comments]

- 3) Do you have additional general feedback on this topic?

EPA should ensure photos are able to contain meta data and should be able to refer to that data rather than relying on raters having to comply with an organizational protocol. For multifamily, obtaining and organizing native photos by unit and date will require extensive time and resources. Also, builder-taken photos should be allowed at certain intermediate stages e.g. roof insulation (such as continuous rigid insulation on top of roofdeck common in multifamily), which may not be accessible to the rater at time of inspection.

Formalized List of Automated Validations in Approved Rating Software and Databases

- 1) Do you have additional general feedback on this topic?



ENERGY STAR Certification System

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Validations should be presented as warnings and not something that automatically fails the unit. Validations become outdated frequently as new technologies are released, so raters should have the ability to defend validations and they should therefore remain as warnings.

Printing ENERGY STAR Certificates and Labels Exclusively in Approved Rating Software

- 1) Do partners find value in the ENERGY STAR label sticker and what is your reaction to the concept of eliminating the sticker, making it optional, and/or replacing it with a preprinted QR-code format that would link to a web address lookup?

Our experience has been that multifamily partners do not find the label sticker particularly valuable.

- 2) Do you have additional general feedback on this topic?

[Add comments]

Performing Quality Control of Installed Features During File Review Step

- 1) Is it practical for QC reviewers to complete File Review activities prior to the time of certification?

Yes, MaGrann has been doing this for several years. We believe it is practical and a good standard practice. This should be required to avoid problematic files in the registry.

- 2) If not, are there concrete reasons the File Review could not at least be completed within 10 business days of certification?

[Add comments]

- 3) Do you have additional general feedback on this topic?

We recommend also evaluating the responses of third-party providers as they may be working under different restrictions.

Adding “Skills and Knowledge” Check as Purpose of Field Evaluations

- 1) Are the proposed minimum rates of Field Evaluation appropriate to ensure Raters maintain adequate skills and knowledge of the latest policies, protocols, and program requirements?

[Add comments]

- 2) Do you have additional general feedback on this topic?

We believe this is a good standard practice.

Layering On HCO Direct (Non-Delegated) Quality Control Review

- 1) Is the rate of 0.5% HCO direct File Review an appropriate and practical frequency given that the scope is a detailed human review?

[Add comments]

- 2) Do you have additional general feedback on this topic?

For projects selected for this review, we recommend the review take place before certifications are issued to avoid projects having to decertify. EPA should also ensure these reviews take place as quickly as possible following rater QAQC so certification issuance is not substantially delayed and so there is ample time to address any issues. A standard turnaround time needs to be established so expectations can be communicated accurately to clients, and if the inspection does not occur within the established time frame, those projects should automatically be defaulted back to moving forward without HCO review.

Requiring Builders to Facilitate HCO Site Visits

- 1) What issues (e.g., legal, liability, scheduling) do builder partners foresee with HCO personnel directly arranging site visits and how can those considerations be addressed?

[Add comments]

- 2) Do you have additional general feedback on this topic?

[Add comments]



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Organization Name: Northeast HERS Alliance (NEHERS)

Respondent Last Name: Zeis

Respondent First Name: Cindy

Comments:

General

- 1) Do you have any general feedback on EPA's proposed enhancements to the ENERGY STAR Certification System's Quality Assurance and Quality Control (QAQC) requirements?

Given the increased complexity of QA requirements, any policy changes should try to align as closely as possible to existing HCO QA policies to aid in streamlining processes which would more effectively align with the purposes of the Paperwork Reduction Act of 1995. It will be important that much of this is managed through the modeling software.

The goal would be to have consistency and alignment with RESENT EPA and DOE Programs to eliminate duplicate documentation and reporting requirements.

- 2) Can you foresee any unintended consequences from implementing any of these elements?

Increased cost for certification is a primary concern. The more human controls we put into place, prices will need to be increased for HCOs, Providers, and Raters/Verifiers. Creating additional barriers to certification could result in a decline of certified units. This has real consequences for projects/project teams considering whether to certify. Especially in the multifamily market where non-prevailing wage projects will elect not to certify their projects since the Rating cost far outweighs any benefit from 45L tax credits.

- 3) Are there significant implementation challenges for any proposed elements that EPA needs to consider?

How do we manage common files (docs, photos) for a large multifamily project?

Is it going to be assumed that if a unit is pulled, all the duplicated data should be available in that record or how do we manage this? This will need to be managed at the building level with the ability to associate units with the common files for the building. Any software enhancements to facilitate data, document and photo uploads needs to be clear and concise with respect to unit level, common area and building wide requirements. Please make this easy for the end user!

- 4) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?

[Add comments]

Centralized collection of ENERGY STAR checklist data in HCO database

- 1) For the sake of consistency, when digital data collection software is used by Raters to complete the ENERGY STAR checklists, should EPA require that it be based on an EPA-created data schema/stylesheet and/or should EPA require HCOs to operate a review and approval process for such software to ensure ENERGY STAR checklists are accurately translated to digital formats?

Guidance on which photos are required would be beneficial. See Item 3 above for challenges regarding large multifamily projects, particularly those using sampling as unverified units/components may not have an associated photo from the unit being QA'd.

Consider requiring the accredited software platforms to include the EPA and DOE Program checklists. When creating a Rating, choosing the State, permit date and levels of certifications would then automatically produce the checklists for the applicable Program version/revision. An additional feature to override this to voluntarily to a newer version of each of the programs would also be useful. This would allow for the checklist data to be completed in process as the Rating progresses as well as embedding the data with the Rating file. It would then be available to QA Providers, HCO's and the EPA/DOE for review.

- 2) Do you have additional general feedback on this topic?

[Add comments]

Centralized Collection of Rater Photos in HCO Database

- 1) Beyond photos of installed checklist measure, are there other photos that would provide significant QAQC value, such as elevation photos or Rater 'selfies' during the on-site inspections?



ENERGY STAR Certification System

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Elevations, common areas, and mechanical rooms with shared/common equipment. The existing photo documentation criteria is adequate.

- 2) How should HCOs address situations where mandatory photos are unavailable, for example due to accidental data loss?

Allow for resubmission of post inspection/post construction photos. An attestation that the home meets the Program requirements would need to be provided.

- 3) Do you have additional general feedback on this topic?
How do we maintain geotag data, etc. for raters who use cameras, and other devices without this option?
Do not require geo tagging for cameras. This limits the use of “point and shoot” cameras for photo documentation and file management of photos.

Formalized List of Automated Validations in Approved Rating Software and Databases

- 1) Do you have additional general feedback on this topic?
Moving to a builder number rather than company name may alleviate some issues with matching firm names. There have also been character limit issues within software that have made these validations challenging i.e. “Habitat for Humanity of ...”. Also, it’s imperative that software be aligned in such a way as to allow for seamless integration. Could we use the existing OID number in HOST.

Printing ENERGY STAR Certificates and Labels Exclusively in Approved Rating Software

- 1) Do partners find value in the ENERGY STAR label sticker and what is your reaction to the concept of eliminating the sticker, making it optional, and/or replacing it with a preprinted QR-code format that would link to a web address lookup?

If the QR code is linked to the HCO database, this may make looking up ENERGY STAR, IAP, and ZERH projects easier to verify. There are challenges with getting the stickers affixed to each property after the final inspection has been completed since the dwelling/sleeping units are often occupied shortly after. Having a placard/certificate for the building level would be beneficial.

For MF or Townhome projects- a Building label or plaque would be more desirable than panel labels.

- 2) Do you have additional general feedback on this topic?

[Add comments]

Performing Quality Control of Installed Features During File Review Step

- 1) Is it practical for QC reviewers to complete File Review activities prior to the time of certification?

No, at least not the full review that may require additional QA/QC for other programs and standards. The QA process is becoming more complex with new programs and QA checklists as with the new IAP and ZERH programs.

- 2) If not, are there concrete reasons the File Review could not at least be completed within 10 business days of certification?

We would like to see this moved out to 60 days to help align with some HCOs where the file QA requirement is to be completed quarterly. Unless this is a modified file review to just check off that specific checklists and photos have been received. This would allow QADs/QA Inspectors to be able to perform the full QA at the HCOs interval while providing a streamlined process that could be verified by trained administrative personnel. We understand the need to avoid liability of potentially taking tax credits and other funding where not earned. It is our hope we can come to a reasonable conclusion that works across all levels and organizations.

- 3) Do you have additional general feedback on this topic?

[Add comments]

Adding “Skills and Knowledge” Check as Purpose of Field Evaluations

- 1) Are the proposed minimum rates of Field Evaluation appropriate to ensure Raters maintain adequate skills and knowledge of the latest policies, protocols, and program requirements?

Yes. Allowing the HCO/Provider the flexibility of requiring additional QA for those who need the extra mentoring seems to work without imposing an additional monetary penalty for those who are performing well.

- 2) Do you have additional general feedback on this topic?



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

There may be challenges in getting the required pre-drywall / final every other year for Raters who are only certifying a few units each year. Would recommend moving to pre-drywall being an acceptable Field QA but not for 2 consecutive years, aligning with RESNET protocols. This would allow a small Rater to use final inspections for 2 consecutive years if necessary. We understand the importance of pre-drywall inspections and believe moving to this structure would allow flexibility while ensuring these types of QA inspections are being performed.

Layering On HCO Direct (Non-Delegated) Quality Control Review

- 1) Is the rate of 0.5% HCO direct File Review an appropriate and practical frequency given that the scope is a detailed human review?

This may place an unfair burden on some HCOs depending on existing organizational structure.

- 2) Do you have additional general feedback on this topic?

[Add comments]

Requiring Builders to Facilitate HCO Site Visits

- 1) What issues (e.g., legal, liability, scheduling) do builder partners foresee with HCO personnel directly arranging site visits and how can those considerations be addressed?

Timing more than anything would likely be challenging since HCO personnel (not delegates) may not be in close geographic proximity to the sites. Another challenge may be in the HCO getting builders placed as additional insured on their general liability policies. If this is to be used as a complaint resolution process only, the challenges stated here would be minimized.

- 2) Do you have additional general feedback on this topic?

[Add comments]



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Organization Name: PEG, LLC

Respondent Last Name: Cooper

Respondent First Name: Matthew

Comments:

General

- 1) Do you have any general feedback on EPA's proposed enhancements to the ENERGY STAR Certification System's Quality Assurance and Quality Control (QAQC) requirements?

We support increased requirements and stringency related to the file and modeling review to ensure improved consistency in ENERGY STAR home modeling and file QA. We share the ENERGY STAR program's goals of establishing stringency in ways that support continued participation from both Builders and Raters.

- 2) Can you foresee any unintended consequences from implementing any of these elements?

Builders will undoubtedly leave the ENERGY STAR program if all or portions of this proposal are implemented. A few of these elements will further reduce or eliminate available modeling software options, which would push out Raters and incentive programs that rely on the various software platforms. This proposal establishes software requirements that turn the industry closer to a monopolistic software environment.

- 3) Are there significant implementation challenges for any proposed elements that EPA needs to consider?

Adhering to the 10-day File Review proposal will be very challenging for non-vertically integrated rating companies and even those that are. Implementing a 0.5% requirement for additional HCO human file review will create unnecessary new hurdles within the certification processing environment. Requiring Builders to provide HCO access to occupied homes is a non-starter.

- 4) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?

We support an increase in robust QA oversight and disciplinary action being performed by RESNET - including real-time QA activities - to prevent fraud in certifying homes as ENERGY STAR when they are not. An increased QA structure put into place by RESNET would raise the QA activities industry-wide to a level closer to the rating companies that already invest in automated and human QA activities above the minimum requirements maintained by RESNET.

Centralized collection of ENERGY STAR checklist data in HCO database

- 1) For the sake of consistency, when digital data collection software is used by Raters to complete the ENERGY STAR checklists, should EPA require that it be based on an EPA-created data schema/stylesheet and/or should EPA require HCOs to operate a review and approval process for such software to ensure ENERGY STAR checklists are accurately translated to digital formats?

We support the proposed HCO operating review and approval process so long as reduced fees, requirements, or other incentives are provided to the companies that perform well in standard and proposed HCO QA activities. Adding additional costs or requirements onto companies that have already invested in additional voluntary QA activities to better support the ENERGY STAR program should not be further incumbered by this new policy.

- 2) Do you have additional general feedback on this topic?

N/A

Centralized Collection of Rater Photos in HCO Database

- 1) Beyond photos of installed checklist measure, are there other photos that would provide significant QAQC value, such as elevation photos or Rater 'selfies' during the on-site inspections?

Photos of appliances like washers and dryers that make a tangible difference in the energy model should be included. Oftentimes they are not installed during inspection but are particularly important for the final HERS Rating and ERC compliance.

- 2) How should HCOs address situations where mandatory photos are unavailable, for example due to accidental data loss?

Flag these instances for further review by the HCO. If the problem becomes persistent, there should be investigation and corrective activities. Inspectors may have backup photos that can be obtained, if needed.



ENERGY STAR Certification System

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- 3) Do you have additional general feedback on this topic?

The quality of the photos is most important. They should be clear, geo-tagged, and timestamped.

Formalized List of Automated Validations in Approved Rating Software and Databases

- 1) Do you have additional general feedback on this topic?

We support increases to automated validation as default or standardized requirements. Automated validations of items such as an attempt to certify a home to an expired version of the ENERGY STAR program are helpful and easy to perform for both single and multifamily home files.

Printing ENERGY STAR Certificates and Labels Exclusively in Approved Rating Software

- 1) Do partners find value in the ENERGY STAR label sticker and what is your reaction to the concept of eliminating the sticker, making it optional, and/or replacing it with a preprinted QR-code format that would link to a web address lookup?

We recommend eliminating the stickers altogether. In today's environment, they serve little purpose and have little value.

- 2) Do you have additional general feedback on this topic?

N/A

Performing Quality Control of Installed Features During File Review Step

- 1) Is it practical for QC reviewers to complete File Review activities prior to the time of certification?

No, we do not see this as practical for any sized rating company and believe that those with third party providers will be deeply burdened by this requirement.

- 2) If not, are there concrete reasons the File Review could not at least be completed within 10 business days of certification?

Current File QA requirements are based on year-end totals with no hard-codified rules mandating quarterly or real-time QA. Adding a requirement for 10-day File Review is erroneous. Doing so for ratings with ENERGY STAR certification while leaving ratings requirements as-is for homes without ENERGY STAR would significantly increase the barrier for entry into the ENERGY STAR program. This increased barrier could result in less certification services being offered throughout the industry and existing services becoming more costly.

- 3) Do you have additional general feedback on this topic?

Rating companies will face increased challenges bringing Builders into the ENERGY STAR program – as well as keeping them in the program - with additional challenges and costs being imposed.

Adding “Skills and Knowledge” Check as Purpose of Field Evaluations

- 1) Are the proposed minimum rates of Field Evaluation appropriate to ensure Raters maintain adequate skills and knowledge of the latest policies, protocols, and program requirements?

The minimum rates should be scaled according to the structure of the rating company, their volume of work, and their QA performance. Rating companies that operate an RFI model should have a higher degree of skills and knowledge checks required of their field staff. Rating companies without RFIs – and potentially those with – that operate at high volumes and those that maintain positive QA performance should receive lessened rates over time. We recommend re-certification or re-testing of field staff working on ENERGY STAR program homes every three years.

- 2) Do you have additional general feedback on this topic?

[N/A]

Layering On HCO Direct (Non-Delegated) Quality Control Review

- 1) Is the rate of 0.5% HCO direct File Review an appropriate and practical frequency given that the scope is a detailed human review?

No, it is not. The 0.5% itself is not problematic by volume but we see little reason that additional HCO-led human QA will provide a worthwhile benefit.

- 2) Do you have additional general feedback on this topic?



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

We support technology-based QA by the HCO with scaled implementation according to empirical track-record weighting, so long as the costs for such activities are scaled according to the Rater and/or Provider.

Requiring Builders to Facilitate HCO Site Visits

- 1) What issues (e.g., legal, liability, scheduling) do builder partners foresee with HCO personnel directly arranging site visits and how can those considerations be addressed?

We do not support this proposal and feel that Builders will not either. There are many legal, liability, insurance, and scheduling concerns that make this proposal impractical and costly.

- 2) Do you have additional general feedback on this topic?

This proposal would be very difficult for rating companies using a third-party provider to meet.



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Organization Name: Pivotal Energy Solutions, LLC

Respondent Last Name: Burns

Respondent First Name: Robert

Comments:

General

- 1) Do you have any general feedback on EPA's proposed enhancements to the ENERGY STAR Certification System's Quality Assurance and Quality Control (QAQC) requirements?

The EPA's proposal suggests that rating software should do more than just run simulations and generate ratings. We propose that functions not directly related to simulation - like checklist data collection, photo collection, and certificate generation - can be handled by separate, complimentary software. This would allow for innovation and extra features that aren't essential for generation of energy ratings. For instance, the EPA's RaterPro application was a powerful software application focused on data collection and workflow management. It worked alongside rating software to ensure all necessary documentation was collected for ENERGY STAR certification. Any complimentary software would need to comply with the EPA's new data collection rules but could be developed and used separately from the main rating software. This approach would lighten the load on rating software providers, as they wouldn't have to develop features beyond their expertise. It would also enable HCO's to partner with other software providers to meet the new data collection requirements faster, potentially speeding up the implementation of new QAQC standards.

- 2) Can you foresee any unintended consequences from implementing any of these elements?

Requiring more features and functionality within rating software (or complimentary data collection software) – and more broadly, to perform more enhanced quality assurance - will likely necessitate price increases.

- 3) Are there significant implementation challenges for any proposed elements that EPA needs to consider?

[Add comments]

- 4) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?

[Add comments]

Centralized collection of ENERGY STAR checklist data in HCO database

- 1) For the sake of consistency, when digital data collection software is used by Raters to complete the ENERGY STAR checklists, should EPA require that it be based on an EPA-created data schema/stylesheets and/or should EPA require HCOs to operate a review and approval process for such software to ensure ENERGY STAR checklists are accurately translated to digital formats?

[Add comments]

- 2) Do you have additional general feedback on this topic?

[Add comments]

Centralized Collection of Rater Photos in HCO Database

- 1) Beyond photos of installed checklist measure, are there other photos that would provide significant QAQC value, such as elevation photos or Rater 'selfies' during the on-site inspections?

[Add comments]

- 2) How should HCOs address situations where mandatory photos are unavailable, for example due to accidental data loss?

[Add comments]

- 3) Do you have additional general feedback on this topic?

[Add comments]



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Formalized List of Automated Validations in Approved Rating Software and Databases

- 1) Do you have additional general feedback on this topic?

We strongly support this proposal to ensure consistency across all qualified rating software.

Printing ENERGY STAR Certificates and Labels Exclusively in Approved Rating Software

- 1) Do partners find value in the ENERGY STAR label sticker and what is your reaction to the concept of eliminating the sticker, making it optional, and/or replacing it with a preprinted QR-code format that would link to a web address lookup?

We support the adoption of an ENERGY STAR branded QA-code sticker that links to a web address lookup. Per our previous response, we do not believe that label/certificate generation should be limited exclusively to approved rating software and that this requirement should be expanded to allow non-rating software to generate the label/certificate so long as the complementary software includes a method to validate the certification status of the home prior to label/certificate generation.

- 2) Do you have additional general feedback on this topic?

[Add comments]

Performing Quality Control of Installed Features During File Review Step

- 1) Is it practical for QC reviewers to complete File Review activities prior to the time of certification?

[Add comments]

- 2) If not, are there concrete reasons the File Review could not at least be completed within 10 business days of certification?

[Add comments]

- 3) Do you have additional general feedback on this topic?

[Add comments]

Adding “Skills and Knowledge” Check as Purpose of Field Evaluations

- 1) Are the proposed minimum rates of Field Evaluation appropriate to ensure Raters maintain adequate skills and knowledge of the latest policies, protocols, and program requirements?

[Add comments]

- 2) Do you have additional general feedback on this topic?

[Add comments]

Layering On HCO Direct (Non-Delegated) Quality Control Review

- 1) Is the rate of 0.5% HCO direct File Review an appropriate and practical frequency given that the scope is a detailed human review?

[Add comments]

- 2) Do you have additional general feedback on this topic?

[Add comments]

Requiring Builders to Facilitate HCO Site Visits

- 1) What issues (e.g., legal, liability, scheduling) do builder partners foresee with HCO personnel directly arranging site visits and how can those considerations be addressed?

[Add comments]

- 2) Do you have additional general feedback on this topic?

[Add comments]



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Organization Name: Residential Energy Management Services

Respondent Last Name: Christensen

Respondent First Name: Brian

Comments:

General

- 1) Do you have any general feedback on EPA's proposed enhancements to the ENERGY STAR Certification System's Quality Assurance and Quality Control (QAQC) requirements?
[Add comments]
- 2) Can you foresee any unintended consequences from implementing any of these elements?
[Add comments]
- 3) Are there significant implementation challenges for any proposed elements that EPA needs to consider?
[Add comments]
- 4) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?
[Add comments]

Centralized collection of ENERGY STAR checklist data in HCO database

- 1) For the sake of consistency, when digital data collection software is used by Raters to complete the ENERGY STAR checklists, should EPA require that it be based on an EPA-created data schema/stylesheet and/or should EPA require HCOs to operate a review and approval process for such software to ensure ENERGY STAR checklists are accurately translated to digital formats?
[Add comments]
- 2) Do you have additional general feedback on this topic?
[Add comments]

Centralized Collection of Rater Photos in HCO Database

- 1) Beyond photos of installed checklist measure, are there other photos that would provide significant QAQC value, such as elevation photos or Rater 'selfies' during the on-site inspections?
[Add comments]
- 2) How should HCOs address situations where mandatory photos are unavailable, for example due to accidental data loss?
[Add comments]
- 3) Do you have additional general feedback on this topic?
[Add comments]

Formalized List of Automated Validations in Approved Rating Software and Databases

- 1) Do you have additional general feedback on this topic?
[Add comments]

Printing ENERGY STAR Certificates and Labels Exclusively in Approved Rating Software

- 1) Do partners find value in the ENERGY STAR label sticker and what is your reaction to the concept of eliminating the sticker, making it optional, and/or replacing it with a preprinted QR-code format that would link to a web address lookup?

[I personally like the idea of a preprinted QR code that links to the HCO website, where the curious individual can search for the given address and learn whether ENERGY STAR certification was achieved. This streamlines the



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workflow for Raters, allowing the QR code to be applied to the electrical panel during final inspection, instead of relying on the Builder to apply the sticker. It is less friendly and more work for the potential homebuyer, however.]

- 2) Do you have additional general feedback on this topic?

[Add comments]

Performing Quality Control of Installed Features During File Review Step

- 1) Is it practical for QC reviewers to complete File Review activities prior to the time of certification?

[Add comments]

- 2) If not, are there concrete reasons the File Review could not at least be completed within 10 business days of certification?

[Add comments]

- 3) Do you have additional general feedback on this topic?

[Some thought should be given to whether this serves as a check on the Field evaluation or on the Certification itself. If the former, then the frequency should be tied to the individual doing the fieldwork (RFI or a Rater), vs the Rater responsible for finalizing the Rating (Rater of Record).]

Adding “Skills and Knowledge” Check as Purpose of Field Evaluations

- 1) Are the proposed minimum rates of Field Evaluation appropriate to ensure Raters maintain adequate skills and knowledge of the latest policies, protocols, and program requirements?

[Add comments]

- 2) Do you have additional general feedback on this topic?

[Rather than framing this in terms of Raters, it should be framed in terms of the individual(s) conducting the fieldwork. Sometimes a Certification involves RFIs, sometimes Raters, and sometimes a plurality of both (particularly when re-inspections are required for checklist items that failed initially). The frequency of evaluation should be tied to the volume of certifications impacted by the fieldwork of those individuals.]

Layering On HCO Direct (Non-Delegated) Quality Control Review

- 1) Is the rate of 0.5% HCO direct File Review an appropriate and practical frequency given that the scope is a detailed human review?

[Add comments]

- 2) Do you have additional general feedback on this topic?

[Add comments]

Requiring Builders to Facilitate HCO Site Visits

- 1) What issues (e.g., legal, liability, scheduling) do builder partners foresee with HCO personnel directly arranging site visits and how can those considerations be addressed?

[Add comments]

- 2) Do you have additional general feedback on this topic?

[Add comments]



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Organization Name: RESNET

Respondent Last Name: Doyle

Respondent First Name: Scott

Comments:

General

- 1) Do you have any general feedback on EPA's proposed enhancements to the ENERGY STAR Certification System's Quality Assurance and Quality Control (QAQC) requirements?

In general, RESNET supports the proposed improvements to the QAQC program. Our primary concern is with the percentage of non-delegable HCO file QA reviews and the turnaround time required. The current proposal is for file QA review of 0.5% of ENERGY STAR labeled homes (presumably using the HCO's total count of ENERGY STAR labeled homes rather than breaking this down by rater or builder). We can estimate the labor required for this partly based on the time it takes to complete one review. However, this is not the only time required. In our experience, the follow up and back and forth communication for rejected (failed) reviews can be significantly more time consuming than performing the reviews themselves. Based on our new understanding of the scope of these detailed human reviews, we recommend the HCO direct file QA review of 0.25% of ENERGY STAR labeled homes.

- 2) Can you foresee any unintended consequences from implementing any of these elements?

This could have dire effect on the Fannie Mae green bond mortgage program which is based upon ENERGY STAR labelling. Since the Fannie Mae program is based on mortgage backed securities, time is an essential element for the secondary mortgage market to bundle the loans (seven days or less). The unintended consequence of the non-delegated HCO file QA reviews could be the demise of the Fannie Mae program by added delays.

- 3) Are there significant implementation challenges for any proposed elements that EPA needs to consider?

Implementation will need to be phased per specific QA enhancement to allow HCOs to prepare for the costs and staffing needed to implement each enhancement. This is particularly true with large volume HCOs which will handle hundreds of thousands of ENERGY STAR homes annually.

- 4) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?

Change the HCO direct file QA review to 0.25% of ENERGY STAR labeled homes annually.

Centralized collection of ENERGY STAR checklist data in HCO database

- 1) For the sake of consistency, when digital data collection software is used by Raters to complete the ENERGY STAR checklists, should EPA require that it be based on an EPA-created data schema/stylesheet and/or should EPA require HCOs to operate a review and approval process for such software to ensure ENERGY STAR checklists are accurately translated to digital formats?

For sake of consistency across all HCO programs, we agree that when digital data collection software is used by Raters to complete the ENERGY STAR checklists, the EPA should require that it be based on an EPA-created data schema/stylesheet AND the EPA should require HCOs to operate a review and approval process for such software to ensure ENERGY STAR checklists are accurately translated to digital formats.

- 2) Do you have additional general feedback on this topic?

[Add comments]

Centralized Collection of Rater Photos in HCO Database

- 1) Beyond photos of installed checklist measure, are there other photos that would provide significant QAQC value, such as elevation photos or Rater 'selfies' during the on-site inspections?



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RESNET would support Rater “selfies” to include the front elevation and address. Note that the list of photos in ANSI 301 is not very extensive. For example, it requires photos of a representative sample of mechanicals instead of photos of ALL mechanicals. For QA, it is more valuable to have both the nameplate label and the “zoomed out” general photo showing all mechanicals and their locations. We recommend also requiring the additional photos as identified in MINHERS Chapter 9. We request that the list of required photos be decided upon and made available to the HCOs before EPA’s annual November 2024 updates, so that the photo requirements can be implemented by the beginning of 2025.

- 2) How should HCOs address situations where mandatory photos are unavailable, for example due to accidental data loss?

RESNET currently addresses photo requirements as part of our QA program. Missing photos is a penalty, but a single photo is not enough to accumulate enough points for failure. However, our guidance to QADs is that a pattern of missing the same item warrants a more severe penalty, which can be added in a QAD discretion scoring line item for miscellaneous items. We propose the EPA take a similar approach where a single missing photo may not result in rejecting the label for a home, but a substantial percentage of missing photos on one home should result in it being rejected. In addition, a pattern of missing photos from the same rater or rating company, especially of the same item or items, should result in disciplinary or corrective action.

- 3) Do you have additional general feedback on this topic?

[Add comments]

Formalized List of Automated Validations in Approved Rating Software and Databases

- 1) Do you have additional general feedback on this topic?

[Add comments]

Printing ENERGY STAR Certificates and Labels Exclusively in Approved Rating Software

- 1) Do partners find value in the ENERGY STAR label sticker and what is your reaction to the concept of eliminating the sticker, making it optional, and/or replacing it with a preprinted QR-code format that would link to a web address lookup?

Support elimination or replacement with a QR Code linked to the HCO’s database.

- 2) Do you have additional general feedback on this topic?

[Add comments]

Performing Quality Control of Installed Features During File Review Step

- 1) Is it practical for QC reviewers to complete File Review activities prior to the time of certification?

Consider that mortgage-backed securities and other financial instruments are driving forces behind the demand for ENERGY STAR labeled homes. These programs require very quick turnaround times for the rater to deliver certification. If processing time is added for HCO file QA, some of these programs may decide to decouple their programs from ENERGY STAR altogether. If EPA would recognize automated system checks to meet the intent here (such as verification that all checklists were submitted, complete, etc.) then this could be done without delay. But if EPA is defining the scope of the file QA to include human “eyes” reviewing supporting documents and filling out the ENERGY STAR QA Checklist, then some delay is inevitable. In other words, if having the review performed prior to the time of certification is of utmost importance, then EPA needs to consider modifying the scope of these reviews so they can be automated.

- 2) If not, are there concrete reasons the File Review could not at least be completed within 10 business days of certification?

We agree that it is reasonable to begin that process, and often complete that process, within 10 days. And we anticipate the need for extra time for follow-up when there are issues. Therefore, we propose that the File Review occur within 15 business days of certification.



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

- 3) Do you have additional general feedback on this topic?

[Add comments]

Adding “Skills and Knowledge” Check as Purpose of Field Evaluations

- 1) Are the proposed minimum rates of Field Evaluation appropriate to ensure Raters maintain adequate skills and knowledge of the latest policies, protocols, and program requirements?

[Add comments]

- 2) Do you have additional general feedback on this topic?

[Add comments]

Layering On HCO Direct (Non-Delegated) Quality Control Review

- 1) Is the rate of 0.5% HCO direct File Review an appropriate and practical frequency given that the scope is a detailed human review?

RESNET is concerned with the percentage of non-delegable HCO file QA reviews and the turnaround time required. The current proposal is for file QA review of 0.5% of ENERGY STAR labeled homes (presumably using the HCO’s total count of ENERGY STAR labeled homes rather than breaking this down by rater or builder). We can estimate the labor required for this partly based on the time it takes to complete one review. However, this is not the only time required. In our experience, the follow up and back and forth communication for rejected (failed) reviews can be significantly more time consuming than performing the reviews themselves. Based on our new understanding of the scope of these detailed human reviews, we recommend the HCO direct file QA review of 0.25% of ENERGY STAR labeled homes.

- 2) Do you have additional general feedback on this topic?

[Add comments]

Requiring Builders to Facilitate HCO Site Visits

- 1) What issues (e.g., legal, liability, scheduling) do builder partners foresee with HCO personnel directly arranging site visits and how can those considerations be addressed?

[Add comments]

- 2) Do you have additional general feedback on this topic?

[Add comments]



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Organization Name: Vantem Global

Respondent Last Name: Harrison

Respondent First Name: Joseph

Comments:

General

- 1) Do you have any general feedback on EPA's proposed enhancements to the ENERGY STAR Certification System's Quality Assurance and Quality Control (QAQC) requirements?

The proposed theme of taking better advantage of technology can be further expanded to provide more options for modular construction. Currently, single and multi-family modular construction are treated the same at site-built homes, and thus require QAQC inspections at both the factory and the eventual site location. Considering these homes are transported across states lines all over the country makes it difficult to have regular coordination with an HCO.

- 2) Can you foresee any unintended consequences from implementing any of these elements?

[Add comments]

- 3) Are there significant implementation challenges for any proposed elements that EPA needs to consider?

[Add comments]

- 4) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?

The redline mentions consideration for innovative alternative quality control schemes, such as those relying on remote video QA. I believe similar proposals would be considered today but having additional structure and guidance from the EPA around this possibility would fit with these enhancements. Using tools that have already been in use during the pandemic would allow expanded access to raters and provide additional options for inspections in multiple different locations

Centralized collection of ENERGY STAR checklist data in HCO database

- 1) For the sake of consistency, when digital data collection software is used by Raters to complete the ENERGY STAR checklists, should EPA require that it be based on an EPA-created data schema/stylesheet and/or should EPA require HCOs to operate a review and approval process for such software to ensure ENERGY STAR checklists are accurately translated to digital formats?

[Add comments]

- 2) Do you have additional general feedback on this topic?

[Add comments]

Centralized Collection of Rater Photos in HCO Database

- 1) Beyond photos of installed checklist measure, are there other photos that would provide significant QAQC value, such as elevation photos or Rater 'selfies' during the on-site inspections?

[Add comments]

- 2) How should HCOs address situations where mandatory photos are unavailable, for example due to accidental data loss?

[Add comments]

- 3) Do you have additional general feedback on this topic?

[Add comments]

Formalized List of Automated Validations in Approved Rating Software and Databases

- 1) Do you have additional general feedback on this topic?

[Add comments]



ENERGY STAR Certification System

Quality Assurance and Quality Control Enhancements

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Printing ENERGY STAR Certificates and Labels Exclusively in Approved Rating Software

- 1) Do partners find value in the ENERGY STAR label sticker and what is your reaction to the concept of eliminating the sticker, making it optional, and/or replacing it with a preprinted QR-code format that would link to a web address lookup?

[Add comments]

- 2) Do you have additional general feedback on this topic?

[Add comments]

Performing Quality Control of Installed Features During File Review Step

- 1) Is it practical for QC reviewers to complete File Review activities prior to the time of certification?

[Add comments]

- 2) If not, are there concrete reasons the File Review could not at least be completed within 10 business days of certification?

[Add comments]

- 3) Do you have additional general feedback on this topic?

[Add comments]

Adding “Skills and Knowledge” Check as Purpose of Field Evaluations

- 1) Are the proposed minimum rates of Field Evaluation appropriate to ensure Raters maintain adequate skills and knowledge of the latest policies, protocols, and program requirements?

[Add comments]

- 2) Do you have additional general feedback on this topic?

[Add comments]

Layering On HCO Direct (Non-Delegated) Quality Control Review

- 1) Is the rate of 0.5% HCO direct File Review an appropriate and practical frequency given that the scope is a detailed human review?

[Add comments]

- 2) Do you have additional general feedback on this topic?

[Add comments]

Requiring Builders to Facilitate HCO Site Visits

- 1) What issues (e.g., legal, liability, scheduling) do builder partners foresee with HCO personnel directly arranging site visits and how can those considerations be addressed?

[Add comments]

- 2) Do you have additional general feedback on this topic?

[Add comments]



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Organization Name: Building Efficiency Resources

Respondent Last Name: Mullins

Respondent First Name: Zac

Comments:

Requiring quality control review to be completed on the most critical program elements prior to a home's certification.

- 1) Can you foresee implementation challenges or unintended consequences from implementing this element beyond those already discussed in the companion document?

Separate tracking for the selected 10% of ENERGY STAR projects will be needed. This could create extra overhead and data tracking for providers and HCOs. How will project that need HCO review be selected and tracked? There is currently no system for this with the HCOs. You would also have a delay in processing certification of projects that are waiting on 10% and 1% reviews. With 1% of the projects needing an HCO review this will add to delays to raters and builders for processing of ENERGY STAR certifications. Additional file storage will add to cost of reviews for ENERGY STAR projects at the provider and HCO levels.

- 2) Are there any alternative measures that could provide the same benefit as mandating Stage 1 review be completed prior to certification?

No, the process of the change meets the desired goal.

- 3) What is a recommended guideline for the typical time required to perform a Stage 1 review? If the answer differs at the designee and HCO levels, please elaborate.

A typical ENERGY STAR review takes about 30 minutes at the provider level

- 4) Do you have additional general feedback on this topic?

None at this time

Revising the minimum rate of HCO direct file review and establishing a ramp-up schedule.

- 1) Is the revised minimum rate schedule for direct HCO file review set at an appropriate and practical frequency? (It is not necessary to repeat feedback submitted during the first comment period, but stakeholders are welcome to address the revised elements of the proposal and/or provide additional analysis to support earlier comments)

Yes, 1% reviews are a minimum that should be reviewed. While we feel that the ramp up schedule should go to 1% in 2025, we feel that a better and faster schedule should be going to 0.25% in 2025, 0.5% in 2026, and 1% in 2027.

- 2) Do you have additional general feedback on this topic?

There should be a minimum amount of ENERGY STAR HCO field reviews each year based on the number of ratings submitted to the HCO. A ramp up to 0.5% HCO field review would provide accurate feedback and review to ensure compliance with ENERGY STAR program. The ramp up schedule could be 0.1% in 2025, 0.25% in 2026 ramping up to 0.5% in 2027. This would provide more oversight for both the rater and provider ensuring compliance with ENERGY STAR standards.

The information does not specify the percentage of 1% file reviews that are rater submitted projects or projects that were reviewed by providers. Having HCO use projects that providers reviewed for the HCO 1% review would provide greater feedback to providers as well.

Creating differentiated credentials to perform quality control reviews for the SFNH and MFNC programs.

- 1) Can you foresee any unintended consequences from implementing this element?

No unintended consequences, BER supports this. If raters need to be certified, reviewers should be certified as well. There should also be continuous education for the reviewers, in line with the re-certification that Rater/RFIs/Modelers must obtain. This training should be a minimum of 10 Professional Development Hours on ENERGY STAR training for all Raters/RFIs/Modelers.

Reviewers should have to watch and attend quarterly EPA webinars discussing ENERGY STAR current topics and issues.



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

- 2) Are there significant implementation challenges for this element that EPA needs to consider?
Tracking who has single-family and multi-family certification. This should be on the public energy star website for all raters/builders to see and know who to go to.
- 3) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?
Quarterly roundtable discussion could provide a good way to provide up to date training and data to reviewers.
- 4) Do you have additional general feedback on this topic?
This is a good step in the right direction for ENERGY STAR



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements Comments Received

Organization Name: Building Science Institute, Ltd. Co.

Respondent Last Name: Dillon

Respondent First Name: Connor

Comments:

Requiring quality control review to be completed on the most critical program elements prior to a home's certification.

- 1) Can you foresee implementation challenges or unintended consequences from implementing this element beyond those already discussed in the companion document?

No.
- 2) Are there any alternative measures that could provide the same benefit as mandating Stage 1 review be completed prior to certification?

Only increasing the percentage. Though I'd recommend if the Stage 1 review finds flaws it triggers a mandatory Stage 2 review. This triggered mandatory Stage 2 review would NOT count toward the required percentage of Stage 2 reviews, rather stack on top.
- 3) What is a recommended guideline for the typical time required to perform a Stage 1 review? If the answer differs at the designee and HCO levels, please elaborate.

Based on prior experience with other HCOs, we expect 45-60 minutes for a Stage 2 file review to be performed. A Stage 1 review should be much less - 5-10 minutes would be our expectation if all required photos and documents were already provided.
- 4) Do you have additional general feedback on this topic?

We're already doing the reviews prior to certification, and that should be the industry standard to avoid the massive amount of fraud that could occur with allowing 90% of all projects to get registered and certified without any kind of review. Our internal numbers indicate the average time from submission to certification is 7.25 days (including weekends). It should not take weeks to review a single project if you are properly staffed to do the work we already know is required. As it relates to documents to be collected, we recommend HVAC Design Reports to only be accepted if generated by an approved Manual J/S software tool.

Revising the minimum rate of HCO direct file review and establishing a ramp-up schedule.

- 1) Is the revised minimum rate schedule for direct HCO file review set at an appropriate and practical frequency? (It is not necessary to repeat feedback submitted during the first comment period, but stakeholders are welcome to address the revised elements of the proposal and/or provide additional analysis to support earlier comments)

A five year transition period is too long. Both national HCOs currently have enough employed full-time staff to perform the 1% review within a year. And if they push back against the appropriate timeline, it should beg the question of, "Why?"
- 2) Do you have additional general feedback on this topic?

If it takes 1 hour to complete a Stage 2 review and the industry averages 360,000 projects in a given year, that means one HCO would need to perform ~3,600 Stage 2 reviews. A standard full-time 40 hour work week is 2,080 hours. $3,600 / 2,080 = 1.75$. I currently understand there are at least two full-time staff members who are responsible for QA (QA being in their titles) in the leading HCO. Splitting these Stage 2 reviews between the two would leave ample time for other QA-related tasks, especially since they've hired additional staff members to handle non-QA related tasks.

There is NO excuse to not mandate the HCO 1% Stage 2 review by the end of 2025.

Creating differentiated credentials to perform quality control reviews for the SFNH and MFNC programs.

- 1) Can you foresee any unintended consequences from implementing this element?

There are currently challenges in multiple regions with Verifiers being certified for either SFNH or MFNC, rather than Verifiers being certified for SFNH *then* MFNC. Creating two separate credentials could cause similar confusion for QA/QC reviewers.

- 2) Are there significant implementation challenges for this element that EPA needs to consider?

The time to produce the curriculum could be a challenge. Subject matter experts involved in content production would need to be selected from practitioners. Continuing education requirements specific for this credential would need to be mandated.

- 3) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?

Since this has not been a mandatory requirement before, our recommendation would be to have a mandatory "ENERGY STAR Quality Control Reviewer" certification training, rather than splitting the focus between SFNH and MFNC from the get-go. This initial training should cover the shared QA/QC principles for the SFNH and MFNC programs, and specific differences that occur in each program. To allow flexibility in the marketplace, this "generalist" perspective for a new certification requirement would be beneficial and allow the industry to grow into these needs. We can then mandate specialization requirements as part of the QC Reviewer continuing education requirements.

- 4) Do you have additional general feedback on this topic?

We support a mandatory training program for quality control reviewers / delegates reviewing ENERGY STAR projects. However, Training Providers should NOT be allowed to develop their own standalone training programs. The EPA ENERGY STAR Team should provide the training curriculum and require each HCO to produce content using that curriculum. If the EPA chooses to produce the training content as you have for current Verifier certifications, you need to find a better training content producer. What training providers have received (and test revisions) do not meet best practices for content development and item writing.



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements

Comments Received

Organization Name: CalCERTS

Respondent Last Name: Choo

Respondent First Name: David

Comments:

Requiring quality control review to be completed on the most critical program elements prior to a home's certification.

- 1) Can you foresee implementation challenges or unintended consequences from implementing this element beyond those already discussed in the companion document?

No Comment

- 2) Are there any alternative measures that could provide the same benefit as mandating Stage 1 review be completed prior to certification?

No Comment

- 3) What is a recommended guideline for the typical time required to perform a Stage 1 review? If the answer differs at the designee and HCO levels, please elaborate.

No Comment

- 4) Do you have additional general feedback on this topic?

We ask the EPA for confirmation that Rater Checklists and Design Reports would be required to be submitted in conjunction with Rater photos.

One should assume Design Reports were completed before construction, and Rater checklists are completed in conjunction with the mandatory photos. Having all documentation available would allow HCOs the option to conduct both stages of QA review prior to certification.

As the EPA suggests, the proposed 2 stage QA process can increase the complexity of QAQC. Requiring all Design Reports and Rater Checklists be submitted at the same time as Rater photos would reduce the need to track separate stages of documentation. It would also provide all necessary data to investigate a potential project issue that may not be discovered with the streamlined ENERGY STAR QC Checklist. This would reduce the potential for claw-back and improve the success of the program. Program participants would have more confidence that the QAQC process would help them maintain ENERGY STAR certificates and inclusion into any programs that require them.

We recommend the EPA consider submission of Design Reports and Rater Checklists concurrently or previous of photo submission an official requirement.

Revising the minimum rate of HCO direct file review and establishing a ramp-up schedule.

- 1) Is the revised minimum rate schedule for direct HCO file review set at an appropriate and practical frequency? (It is not necessary to repeat feedback submitted during the first comment period, but stakeholders are welcome to address the revised elements of the proposal and/or provide additional analysis to support earlier comments)

No Comment

- 2) Do you have additional general feedback on this topic?

No Comment

Creating differentiated credentials to perform quality control reviews for the SFNH and MFNC programs.

- 1) Can you foresee any unintended consequences from implementing this element?

No Comment

- 2) Are there significant implementation challenges for this element that EPA needs to consider?



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements

Comments Received

We recommend a simplification of the MFNC program. The current consensus is that the MFNC program is very complex. Many of the documentation and inspection requirements are significantly more cumbersome and technically challenging than the SFNH program majority of stakeholders are accustomed to.

We understand that the EPA has tried to address this complexity with the use of Functional Testing Agents. However, there may be limited availability of FT Agents, and the learning curve for FT Agents is high. Locating a suitable FT Agent, coordinating these additional inspections, the additional costs involved, may reduce the participation in the MFNC program. It may also introduce the unintended consequence of inadequate oversight that results in significant claw-back and potential litigation.

- 3) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?

No Comment

- 4) Do you have additional general feedback on this topic?

No Comment



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements

Comments Received

Organization Name: CHEERS

Respondent Last Name: Wheeler

Respondent First Name: Jimmy

Comments:

Requiring quality control review to be completed on the most critical program elements prior to a home's certification.

- 1) Can you foresee implementation challenges or unintended consequences from implementing this element beyond those already discussed in the companion document?

Yes, we foresee challenges here. Some of those challenges or unintended consequences are: Backlog of Certifications; Allocation of Resources; Communication Overload; Impact on Relationships, or even Reputational Risk. Holding certifications could result in a backlog that may increase over time if resources are limited or if the review process is time-consuming, resulting in delays for homeowners and builders. In general certifications will be reviewed on a submission-by-submission, rater-by-rater basis until their applicable QA for the year is complete. This may pose challenges in terms of workload management and prioritization. Ensuring equitable treatment for all submissions while managing varying volumes of certifications from different rating partners or firms requires careful resource planning and allocation. Not to mention communication channels may become overwhelmed with inquiries, requests for priority, and status updates. This could lead to frustration among stakeholders and strain on the HCO's communication infrastructure. In some cases, there may be delays or perceived lack of responsiveness in the certification process that may strain relationships with rating partners and builders. The lower volume raters, in particular, may feel neglected or disadvantaged if they have to "wait their turn" for reviews, potentially leading to dissatisfaction and strained partnerships. In the event that there are prolonged certification timelines and/or communication challenges could have reputational implications for the HCO leading to negative perceptions regarding efficiency, responsiveness, and fairness in the certification process which could discourage stakeholders participation into the program. Alternatively, we feel the HCO providing a robust, coordinated, certification recall system will have the same impact on QA over time, with less resource burden on the HCO. It will only take a few recalls (if any) for the builder and verifier to better fall in line with ES program requirements.

- 2) Are there any alternative measures that could provide the same benefit as mandating Stage 1 review be completed prior to certification?

As mentioned above, requiring the HCO to establish robust certification recall system in the event of failed certifications. Providing some flexibility in allowing 'Stage 1' homes to be certified prior to a human reviewer still ensures prompt attention and could accommodate varying volumes of raters. Meanwhile, requiring a robust "clawback" system would be a final backstop in the event the partner is unable to resolve the serious issues identified. This system could encompass measures like notifying raters, builders, and the EPA or other stakeholders of recalled certification(s), ongoing monitoring, and more frequent file and field evaluations.

- 3) What is a recommended guideline for the typical time required to perform a Stage 1 review? If the answer differs at the designee and HCO levels, please elaborate.

Recommend five to seven (5-7) business days after certification if designated at the HCO level. If the review is assigned to a designee, an additional maximum of five (5) business days is allowed for the HCO direct review. Allowing certification prior to a human reviewer ensures equitable treatment for all submissions while managing varying volumes of certifications from different rating partners or firms. This timeframe provides a reasonable window for thorough evaluation at both levels, ensuring compliance with the program while minimizing delays for homeowners and builders.

- 4) Do you have additional general feedback on this topic?

No.

Revising the minimum rate of HCO direct file review and establishing a ramp-up schedule.

- 1) Is the revised minimum rate schedule for direct HCO file review set at an appropriate and practical frequency? (It is not necessary to repeat feedback submitted during the first comment period, but stakeholders are welcome to address the revised elements of the proposal and/or provide additional analysis to support earlier comments)



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements

Comments Received

We encourage the EPA to maintain its initial direct HCO rate of 0.5%, and then eventually ramp it up to 1.0%. HCOs maintain the ultimate responsibility of project certification, and therefore should have as many touchpoints on those certifications as reasonable. We think 0.5% ramping to 1.0% is practical to implement.

- 2) Do you have additional general feedback on this topic?

No.

Creating differentiated credentials to perform quality control reviews for the SFNH and MFNC programs.

- 1) Can you foresee any unintended consequences from implementing this element?

No.

- 2) Are there significant implementation challenges for this element that EPA needs to consider?

No.

- 3) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?

No.

- 4) Do you have additional general feedback on this topic?

No.



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements

Comments Received

Organization Name: MaGrann Associates

Respondent Last Name: Pelosi

Respondent First Name: Kim

Comments:

Requiring quality control review to be completed on the most critical program elements prior to a home's certification.

- 1) Can you foresee implementation challenges or unintended consequences from implementing this element beyond those already discussed in the companion document?

MaGrann has been performing quality control file review for several years now. We believe it is practical and a good standard practice, so we do not foresee any significant implementation challenges or unintended consequences. See our response to question 4 for additional feedback on the proposed changes discussed in the companion document.

- 2) Are there any alternative measures that could provide the same benefit as mandating Stage 1 review be completed prior to certification?

See answer to question 1.

- 3) What is a recommended guideline for the typical time required to perform a Stage 1 review? If the answer differs at the designee and HCO levels, please elaborate.

Three business days is an acceptable review timeline for HCO.

- 4) Do you have additional general feedback on this topic?

While we support the requirement of both HCO and rater file review prior to certification, we have concerns around the fact that a portion of the HCO review will occur following certification. Despite the potentially low risk of HCO finding unresolvable deficiencies during Stage 2 review, it is difficult to gauge all the different potential outcomes that could still result in decertification. Even if Stage 2 HCO review only results in a small percentage of decertifications, this will still impact overall credibility of the ENERGY STAR program. The risk is even higher for multifamily projects, as just one unit getting decertified will impact an entire project.

Revising the minimum rate of HCO direct file review and establishing a ramp-up schedule.

- 1) Is the revised minimum rate schedule for direct HCO file review set at an appropriate and practical frequency? (It is not necessary to repeat feedback submitted during the first comment period, but stakeholders are welcome to address the revised elements of the proposal and/or provide additional analysis to support earlier comments)

We are concerned that the minimum file review rate schedule did not take multifamily into consideration, and encourage EPA to consider adopting separate minimum review rates for multifamily projects. EPA should consider how these rates will disproportionately impact raters of larger MF properties. We believe starting with a rate of .25% and moving to a rate of .5% by 2027 is still acceptable for multifamily, but increasing the rate to 1% seems like an unnecessary jump that will result in raters of larger MF projects getting subject to an HCO review for closer to 100% of projects (assuming each project is averaging 100 units in size). This may negatively impact the ERI path as a more expeditious path to certification than the ASHRAE path, which is already hampered by significant time delays in its process. Affordable housing projects may also suffer additional consequences related to their funding timelines. Therefore, we recommend EPA cap the MF HCO review rate at .5% after the initial ramp-up described above.

- 2) Do you have additional general feedback on this topic?

Overall, EPA should consider the possibility that unintended market dissatisfaction may occur from any significant delays in MF projects as a consequence of the QA process, with follow-on implications for developers of affordable housing who must meet tight timelines at the close of a project.

Creating differentiated credentials to perform quality control reviews for the SFNH and MFNC programs.

- 1) Can you foresee any unintended consequences from implementing this element?

We are in agreement with this proposed change and do not foresee any significant unintended consequences.



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements

Comments Received

- 2) Are there significant implementation challenges for this element that EPA needs to consider?

See answer to question 1.

- 3) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?

[Add comments]

- 4) Do you have additional general feedback on this topic?

[Add comments]



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements

Comments Received

Organization Name: RESNET

Respondent Last Name: Doyle

Respondent First Name: Scott

Comments:

Requiring quality control review to be completed on the most critical program elements prior to a home's certification.

- 1) Can you foresee implementation challenges or unintended consequences from implementing this element beyond those already discussed in the companion document?

[Add comments]

- 2) Are there any alternative measures that could provide the same benefit as mandating Stage 1 review be completed prior to certification?

[Add comments]

- 3) What is a recommended guideline for the typical time required to perform a Stage 1 review? If the answer differs at the designee and HCO levels, please elaborate.

[Add comments]

- 4) Do you have additional general feedback on this topic?

[We would like to commend EPA for soliciting stakeholder feedback and for actively working to address the concerns with how a delayed process for certification could negatively effect the marketplace. It was important to seek solutions with key players such as Fannie Mae, Freddie Mac, and and the building community. We assume there will be continued engagement during the implementation phase.]

Revising the minimum rate of HCO direct file review and establishing a ramp-up schedule.

- 1) Is the revised minimum rate schedule for direct HCO file review set at an appropriate and practical frequency? (It is not necessary to repeat feedback submitted during the first comment period, but stakeholders are welcome to address the revised elements of the proposal and/or provide additional analysis to support earlier comments)

[Add comments]

- 2) Do you have additional general feedback on this topic?

[RESNET's concerns have been expressed, so we won't restate them here. The ramp up timeline seems like a fair compromise, and will give HCOs time to evaluate ways to mitigate the overhead costs and reduce the risk of certification delays.]

Creating differentiated credentials to perform quality control reviews for the SFNH and MFNC programs.

- 1) Can you foresee any unintended consequences from implementing this element?

[Add comments]

- 2) Are there significant implementation challenges for this element that EPA needs to consider?

[Add comments]

- 3) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?

[Add comments]

- 4) Do you have additional general feedback on this topic?

[RESNET supports differentiated credentials for QA/QC of SFNH and MFNC programs.]



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements

Comments Received

Organization Name: TopBuild Home Services, Inc.

Respondent Last Name: Duke

Respondent First Name: Laura

Comments:

Requiring quality control review to be completed on the most critical program elements prior to a home's certification.

- 1) Can you foresee implementation challenges or unintended consequences from implementing this element beyond those already discussed in the companion document?

[This "Stage 1 QC" is essentially what we have internally implemented for 100% of the homes we certify. We continue to add and refine system-checks as well. We are better able to provide real-time feedback to operations and provide mentoring opportunities, especially for those joining the industry. We ensure we are an active participant in the solution to increasing the integrity of Energy Star Certifications, as well as the Home Energy Rating industry in general. Additionally, implementing a QC procedure within the Providerships should also reduce the amount of time invested in the QA Process for the Providership, as well as the HCO. We look forward to officially counting our efforts in the name of QC.]

- 2) Are there any alternative measures that could provide the same benefit as mandating Stage 1 review be completed prior to certification?

[Given our footprint in the industry and the fact that we have already have implemented strong Energy Star QC system, I would say this "Stage 1 QC on a subset" would be the only alternative. Also, Dimensions portion (ANSI/RESNET/ICC 301-2019, Normative Appendix B) of the HERS Modelers Certification should be required by each HVAC Designer individually.]

- 3) What is a recommended guideline for the typical time required to perform a Stage 1 review? If the answer differs at the designee and HCO levels, please elaborate.

[Depending on the engagement of the builder and their subcontractors in the certification process. For municipalities and the builders that want Energy Star as a path to Code Compliance, the turn around is very quick due to their engagements with their subcontractors. For others markets we provide feedback and it can be a lengthy timeframe to finalize and allow the home through QC process.]

- 4) Do you have additional general feedback on this topic?

[It has become clear that these QC checks are not implemented across our industry. Increased QC Procedures are a necessity and are the first steps in enhancing the quality of the Energy Star Certification System. EPA should increase the support of the 3rd Party Rating Industry by drastically heightening awareness of the expectations of builders and the subcontractors that participate in the Energy Star Program. A more thorough and comprehensive Orientation video emphasizing what they should expected for better subcontractor management and accountability.]

Revising the minimum rate of HCO direct file review and establishing a ramp-up schedule.

- 1) Is the revised minimum rate schedule for direct HCO file review set at an appropriate and practical frequency? (It is not necessary to repeat feedback submitted during the first comment period, but stakeholders are welcome to address the revised elements of the proposal and/or provide additional analysis to support earlier comments)

[A reduced rate schedule for HCO direct file review to allow for increased frequency of QA/QC Review of each Providerships procedures would be a better investment in increasing awareness of rating practices. This would allow HCO and Providers to have more communication to discuss nuances and rather than solely relying on completing File Review to fulfill an annual QA quote.]

- 2) Do you have additional general feedback on this topic?

[Given the agenda for decarbonization by electrification, as well as HVAC Grading, there would be a better return on investment if DOE and EPA invested resources to increase QAQC oversight and accountability on ACCA and HVAC Manufactures/Contractors. This is a need across the nation whether they participate in Energy Star or strictly build to Code standards.]



ENERGY STAR Certification System Quality Assurance and Quality Control Enhancements

Comments Received

Creating differentiated credentials to perform quality control reviews for the SFNH and MFNC programs.

- 1) Can you foresee any unintended consequences from implementing this element?
[Add comments]
- 2) Are there significant implementation challenges for this element that EPA needs to consider?
[Dimensions portion (ANSI/RESNET/ICC 301-2019, Normative Appendix B) of the HERS Modelers Certification should be required by each HVAC Designer individually.]
- 3) Do you have suggestions for additional or alternative measures that could provide the same or more benefits that EPA should consider?
[Dimensions portion (ANSI/RESNET/ICC 301-2019, Normative Appendix B) of the HERS Modelers Certification should be required by each HVAC Designer individually.]
- 4) Do you have additional general feedback on this topic?
[An option may be to bring back and repurpose the former "QA Delegate" role as "QC Delegate" or "QC Analyst" and certify by program – SFNH and/or MFNC.]