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# THIRD PARTY QUALITY ASSURANCE

Opportunities, Challenges,  
and Outstanding Questions



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# Agenda

- Introduction
- Current / future scope of third party QA
- Outstanding questions / QA theory
- Summary and recommendations



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# FUTURE OF RESNET QA *Today!*



# Future of RESNET QA *today!*

- Provider business models
  - Rater-Provider
  - Third Party Provider
  - Hybrid Provider
- Each set own policies and procedures
- Must have QAD of record, perform QA on affiliated raters per RESNET Standards



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# Future of RESNET QA today!

- Nov. 3, 2014: RESNET BOD Policy on HERS Consistency Enhancement
- Classes of Providers
  - Direct Rating Providers (DRPs) perform ratings
  - Third Party Providers (TPPs) perform QA
- New professional classification
  - QA Contractor (QAC)



**Policies Adopted by the RESNET Board of Directors on Enhancing the National Consistency of HERS Index Scores**

November 3, 2014

**I Software Oversight Fixes**

The RESNET Board adopted the recommendation of the RESNET Quality Improvement Task Force on adopting the Software Fixes Working Group proposal with an amendment of moving "Stories above grade" on Table 5.1(1) to a "Warning" from the recommended "Error"

**II Additional Quality Assurance Oversight if Errors are Found in the Quality Assurance Review**

The RESNET Board voted to task the RESNET Quality Improvement Quality Assurance Working Group with reviewing RESNET staff's proposal and industry comments and to draft a revised proposal.

**III Quality Assurance Oversight**

Status of Quality Assurance Review

1. RESNET will centrally administer quality assurance review of building files using data in the National Building Registry.
2. Direct Rating Providers
 

Definition of Direct Rating Provider:  
*Providers who either receive fees for the rating or whose staff conduct any portion of the rating are "Direct Rating Providers".*

Maintain current infrastructure of Direct Rating Providers with the following changes:

  - o Direct Rating Providers must utilize independent QA Contractors to perform quality assurance on their Ratings.
  - o QA Contractors are certified as agents of RESNET and as agents of RESNET the y.



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# Future of RESNET QA today!

- Third Party Providers
  - Serve independent raters/rating companies
- Independent QA Contractors
  - Serve Direct Rating providers
- Not mutually exclusive?



Setting the Standards for  
Home Energy Efficiency

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# THIRD PARTY QA

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## *Current*





## Third Party RESNET QA: *current*

- Third party QA Providers
- Hybrid Providers
- Independent QADs



## Third Party Providers: *current*

- National and regional based
- Core business is file and field QA
- Perform few if any ratings



## Third Party Providers: *current*

- License rating software; sublicense to independent raters/rating companies
- Set internal policies for rating submissions, print permissions
- May perform greater than 10% / 1% QA



## Third Party Providers: *current*

- Must have QAD of record
  - Most are employees, owners
  - May have additional QADs, QADDs
- Internal policies and procedures for QA thresholds, disciplinary policy
  - Minimum based on RESNET Standards



## Third Party Providers: *current*

- Additional responsibilities
  - Probationary rater mentorship
  - Rater certification management
  - RESNET Registry management
  - Completion tracking (PDHs, CAZ, ESv3, calibration, etc.)
  - Informal professional development (phone, email, field QA, etc.)



## Hybrid Providers: *current*

- Combination of TPP & DRP
- Core business is performing ratings
- QA/management of independent raters ancillary business



## Hybrid Providers: *current*

- License rating software for own use; sublicense to independent raters
- May use independent raters as subcontractors to perform ratings / field inspections for rating clients



## Hybrid Providers: *current*

- Must have QAD of record
  - May be staff or subcontractor
  - May not QA ratings performed by self
- Provider rep, not QAD, responsible for annual RESNET provider submission?





## Independent QADs: *current*

- Free agent subcontractors to Providers
- Contracted to fulfill Provider file/field QA
- May work for multiple Providers
- May be independent rater of Hybrid/TPP



## Independent QADs: *current*

- Do not directly license rating software
  - May or may not be granted Provider's software access
- May or may not have role in rater management, discipline



## Independent QADs: *current*

- Must report QA results to Provider; complete annual QA Checklist
- Must report significant non-compliance of Providers to RESNET



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# THIRD PARTY QA

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## *Future*



## Third Party Providers: *future*

- Core business of independent rater QA/management likely maintained
- Dual-role: TPP & QAC?
- Additional training/credentialing for QADs



## Hybrid Providers: *future*

- Most are likely to become Direct Rating Providers
- Question
  - Can businesses be both DRP and TPP?



## QA Contractors: *future*

- Operate similar to independent QADs
- Question
  - What distinguishes an independent QAD from a QAC?



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# OUTSTANDING QUESTIONS

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## *QA Theory*





## Outstanding Questions

- Can organizations be both TPP & DRP?
  - If so, what are limits / stipulations?
- Can employees of TPPs perform ratings if working with outside QAC / TPP?



# Outstanding Questions

- TPPs vs QACs
  - How will industry differentiate?
  - Software access/Registry access, etc.
  - Reporting QA findings, managing discipline
  - Cost, training, role in marketplace
  - Can businesses be both?



# Outstanding Questions

- QACs
  - What power will they have?
  - Management of DRP registry?
  - If QA issues are observed, who enforces discipline? How?



# Outstanding Questions

- Direct Rating Provider
  - Without QA, how different from independent rater/rating company?
  - Are all Raters now Providers?
  - What do they Provide? What differentiates their role/accreditation?



## Outstanding Questions

- Direct Rating Provider
  - Do they make own policies/procedures for QA, discipline, etc.?
  - How uniform are these policies?
  - Who enforces them, the DRP or their QAC?



## Outstanding Questions

- Direct Rating Provider
  - If bar for entry low, more DRPs likely
  - Will “new system” result in less file QA than present?
  - Will less file QA result in more discipline?



- Low bar for DRPs = more DRPs
- More DRPs = TPP/QACs touch less files
- If TPP/QACs touch less files, cost impact likely ...
  - Less ratings managed, greater cost per QA
  - Less ratings, “risk pool” for failures higher



## QA Theory

What is the primary goal of QA?

- A. Gradual improvement?
- B. Protecting HERS Index?
- C. Busting bad apples?
- D. All of above?





## QA Theory

- What are appropriate thresholds for failing QA?
  - Want to protect HERS Index
  - Is 2-pt variance best/only method to determine QA pass/fail?



## QA Theory

- Protecting HERS Index vs improving ratings
- What's worse?
  - 10 rating variations, 8 pt gross change, 2 pt net change
  - 1 rating variation, 3 pt net change



# QA Theory

- Rater discipline
  - Is probation first step in disciplinary policy?
  - Should there be intermediate step for corrective action?
  - Should disciplinary policies be standardized?



## QA Theory

- Rater discipline
  - If action is suspension worthy, how to handle best?
  - What is RESNET's role in supporting QAC/TPPs?



## QA Theory

- Provider inconsistency
  - Appliances: Always those present or defaults?
  - Floors on/above grade?
  - “Air cycler” wattage?
  - Unique / advanced HVAC systems?



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# QA Theory

- Provider inconsistency
  - Conditioned Floor Area

U.S. DEPARTMENT OF ENERGY  
PNNL-22580

Prepared for the U.S. Department of Energy  
under Contract DE-AC05-78OR21400

**Identification of RESNET HERS  
Index Values Corresponding to  
Minimal Compliance with the IECC  
Performance Path**

Z Todd Taylor  
Vrushali Mendon

- In every climate, CFA is the most important characteristic. Corresponding HERS Index ranges are about 12 points in the southern regions and upwards of 15 points in the north. These ranges are com-

Pacific Northwest  
NATIONAL LABORATORY  
Presidentially Operated by Battelle Since 1965



## QA Theory

- Provider inconsistency
  - What data must be submitted for 10% QA?
    - Just rating?
    - Rating and plans?
    - Rating, plans, checklists?
    - Rating, plans, checklists and photos?
    - What photos?



## QA Theory

- Field QA aberrations?
  - Always use field QAD observed testing / inspection values?
  - Atmospheric changes, house settling, cable guy who crushed duct / swam through insulation?





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# SUMMARY

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## *Recommendations*



## Summary

- Extra set of eyes probably for best
- Clear definition of roles, responsibilities crucial
- Success of QA requires reduced subjectivity of TPP/QAC



## Recommendations

- QA professional communication, interpretation management forum
  - Inform market
  - Influence standards management
- RESNET staff for QA management, TPP/QAC support



## Recommendations

- Potential opportunities for streamlining
  - Tracking, reward raters for reduced errors
- Must be checked with clear guidelines, goals of QA objectives



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# Questions?

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