

Spring 2021

Welcome to the spring 2021 issue of *Rater News*, brought to you by the Washington State University Energy Program Home Energy Rater Program

News from Jonathan Jones

Did you miss the 2021 Virtual RESNET Building Conference?



Over the course of three days, the 20th Annual RESNET Conference offered well over a hundred informative sessions available live and in webinar format for attendees. This annual conference is a great place to earn CEU credits. Attendees have access to recorded presentations through the RESNET portal throughout 2021 for referral and/or to earn CEU credits for sessions they could not attend. You may want to

consider attending this useful event next February—hopefully in person. Here are some of the hot topics discussed:

- Fannie Mae and Freddie Mac mortgage programs for energy efficient homes
- The future of energy codes:
 - Virtual inspection for energy code compliance
 - o IECC 2021
 - Raters and RFIs inspecting for code compliance
- Presentations on the ANSI/ACCA/ ICC/RESNET 310 Standard
- Clarification of IECC's ERI versions 2015, 2018 and RESNET HERS® Index and what you need to know
- EPA Program Updates: HVAC grading, Indoor AirPlus Version 2, Multifamily New Construction program, RaterPro™
- Hiring and maintaining a young workforce
- Testing Best Practices

Conference Session In-Depth—The Value of an Energy Cost Estimate for Every Home

To reward homeowners for a higher performance home we need to change the system that assigns value to homes. This includes the following, each of which has been improved over the past 15 years:

- Description: HERS, HES, and other certifications
- Listing: Green training and national green databases



- Appraisal: Green appraisal training and standards from Appraisal Institute, Earth Advantage
- Mortgage Lending Criteria: SAVE (Sensible Accounting to Value Energy) Act and ESG demand from investors

Expected energy use may be known, but you also need a baseline level of efficiency to compare it to (built to code). The Rocky Mountain Institute with the U.S. Department of Energy looked into this. Fannie Mae and Freddie Mac are charged with making sure homeowners receive the value of efficiency improvements, including increasing the delivery of their Homestyle Energy and GreenCHOICE mortgage products. The Pacific Northwest National Lab is developing the ResStock energy modeling tool and the Energy Cost Estimator.

Takeaways for Raters: When communicating with builders, realtors, appraisers, and homebuyers, encourage them to take advantage of energy certifications, the National Green Database, Green appraisal standards, and federal green mortgage products. This will help increase the value of green homes and the number of homebuyers who appreciate efficient homes and can afford to buy them.

AXIS

We hope that by now our raters are using AXIS. AXIS is a cloud-based workflow management platform designed by Pivotal Energy Solutions to streamline workflow for us all: raters and providers, utility and program sponsors, and homebuilders. AXIS will allow you to rate homes using



REM/*Rate*[™] or Ekotrope, upload your files, and will automatically inform you of inconsistencies or other problematic issues. Once resolved, your files will be certified and uploaded into the RESNET Registry. AXIS provides data sharing with utilities and other energy efficiency programs. This software enables quicker review turn around time, and a more accurate and timely billing system. It provides you with checklists, tracks your CEUs, equipment calibration, and professional memberships. AXIS also can provide you with an informative two-page color brochure that details the many benefits of owning an energy-efficient home. This house specific brochure, which can include a photo of the house and the builder's logo, could help your builder sell homes to prospective customers. Although you may not be used to AXIS now, you will soon find that it will make your life easier. For more information, contact our QAD and Trainer, Jonathan Jones, at (509) 438-7839 or email: JonesJ@energy.wsu.edu

Upcoming ENERGY STAR® and HERS Training Classes

ENERGY STAR[®] Version 3: April 19-21, 2021, Online via Zoom

For home energy raters who have not taken the ENERGY STAR[®] training for Version 3, here is your chance. This is required training for any rater who wants to provide builders with ENERGY STAR[®] certifications. This class is offered online via Zoom and will cover more advanced energy efficiency improvement techniques and materials. This class will be offered April 19 – 21, 8:00 a.m. to 4:00 p.m. PDT. The third day will be a half day for taking the proctored exam and for any additional instruction needed. The cost is \$200. For more information and to register email: <u>NWrater@energy.wsu.edu</u>

ENERGY STAR® Multifamily New Construction Training: April 26-28, 2021, Online via Zoom

With the proliferation of new apartment buildings these days, coming up to speed on multifamily ratings may be a business development opportunity to consider. To be able to certify buildings over three stories as ENERGY STAR[®] you need to take the ENERGY STAR[®] Multifamily New Construction training. Our instructor, Jonathan Jones, is offering this as a remote training April 26 – 28, 8:00 a.m. to 4:00 p.m. PDT so that you can take it from home. The third day will be a half day that can be spent for additional training for those with less experience and for taking the proctored exam. The cost is \$200. For more information and to register email: <u>NWrater@energy.wsu.edu</u>

Watch for Online Home Energy Rater (HERS) Training Coming Soon

The WSU Energy Program, a RESNET certified provider, is currently scheduling a virtual HERS class for prospective home energy raters to be held later this spring. HERS is a nationally recognized rating certification program and is a prerequisite for the U.S. Environmental Protection Agency ENERGY STAR[®], Indoor airPLUS, and other certification programs. This class is split between two three day sessions and provides all necessary resources, covers all-important building science and rating topics, three RESNET proctored exams, and three probationary ratings followed by three detailed file quality assurance reviews and one virtual filed QA to mentor necessary techniques. The cost is \$1,200. For more information and to register email: <u>NWrater@energy.wsu.edu</u>

Questions for Jonathan Jones

Recently Certified Raters May Ask: "How Much Should I Charge? What is the Going Rate?"

The most recent RESNET member survey published in 2018 found the national average fee for a HERS rating to be \$450, but so *many* factors influence what a rater charges, RESNET will no longer publish a national home energy rating average charge.

What factors may increase the fee? Keep these in mind:

- Location. A home in Seattle, will cost more than a home in Spokane
- Longer travel times
- Size. A 4000 sq. ft. home will cost more to rate than a 2000 sq. ft. home
- Single-family homes rather than multifamily, where raters can greatly reduce travel, as well as labor costs by using a sampling process
- Volume. Custom buildings with a few homes per year vs. a production builder with 1,000 all in three developments and possibly allowing sampling to cut labor costs
- Reputation based on years of reliable performance in rating quality and turnaround time
- Providing useful suggestions to help the builder with his techniques, materials, or marketing approaches

How do you earn higher fees? You many want to consider:

- Attending trainings so that you can offer more certification programs
- Focus marketing on more local production builders, especially with multifamily homes

- Play up the federal tax credit opportunity; if you help a builder pull in an extra \$2,000 per home, they will remember you
- Encourage your builders to take advantage of the new two-page color brochures available through AXIS to turn a prospect into a happy customer
- Instead of just producing a HERS score, provide cost-effective suggestions for how a builder may modify their design or methods to earn more certifications

Homes May Not Qualify for Federal Efficiency Tax Credits

According to Jonathan Jones, common reasons why a home may not qualify for the federal home efficiency energy tax credit, which was just extended (see below under Newbriefs) include:

• The lack of an installed air conditioner at the time of final inspection. REM/Rate assumes that there is A/C with the minimum federal efficiency. This issue is a Marine 4 climate issue



where there are cooling days but not so severe that a cooling system is required to sell the dwellings.

- Ventilation modeling, if not done correctly, may disqualify the home. Over ventilation with max watt usage on an ERV (energy recovery ventilation) modeled at full capacity for 24 hours per day is the most common culprit. These units are almost never actually operating this way.
- As software versions change, there are nuances in the model that need to be corrected. For instance, wall cavities used as ducts will disqualify you. So, make sure you check the box indicating that they are not used if that is the case.
- Make sure you model the actual appliance kWh usage. This is especially true of washing machines. REM/Rate versions older than 16.0.1 assume greater energy use than any appliances actually available in the Northwest.

Both Ekotrope and REM/Rate offer approved U.S. Department of Energy software that can check your ratings for 45L tax compliance and deliver reports for qualified homes.

Home Energy Rating Software and Equipment

Ekotope 4.0

RESNET recently informed the WSU Energy program that they have accredited Ekotrope 4.0. This software version includes calculations for ANSI/RESNET/ICC 301-2019, ANSI/RESNET/ACCA 310-2020 as well as RESNET Publication 001-2020 for federal tax credit verification.

Reminder: Manometers, blower doors, and Duct Blasters[®] MUST be recalibrated at least every two years with supporting documentation submitted to the WSU Energy Program via AXIS. Blower doors and Duct Blasters[®] can be recalibrated in the field. Jonathan Jones can instruct you in, or provide this service for your equipment for \$100 during a field inspection. Manometers must be recalibrated by a qualified lab. Both <u>Retrotec</u> and <u>The Energy Conservatory (TEC)</u> provide these services.

 Pro Tip: TEC currently offers raters the chance to send in their old DG-700 manometers and get a \$300.00 discount on a new DG-1000. The DG-1000 uses both Blue Tooth and Wi-Fi.

Axis tracks your equipment recalibrations and will inform you when it is necessary to recalibrate. Failure to recalibrate can lead to suspension from the Program.

Newsbriefs

Following are recently published news items relevant to home energy raters:

3 Million HERS Homes and Counting! RESNET announced that over three million homes in the United

States have now been rated with a <u>HERS Index Score</u>, measuring a home's energy efficiency. According to RESNET Executive Director Steve Baden, "What started in 1995 with just a few hundred homes rated per year has now grown exponentially, backed by consumer demand. By 2012, there were more than one million homes HERS rated, followed by another million homes by 2017, and now the milestone of over three million home HERS rated, a little over 3 years later" Read more...

Great News: The Energy Efficient Home Tax Credit has Been Extended Through 2021

The Federal Energy Efficient Home Tax Credit, also know as 45L and formerly slated to end in 2017 has been retroactively extended through 2020 and will continue to be available through 2021. What does this mean to you? Builders can claim \$2000 on each new single-family or multifamily home. A 200-unit

apartment will qualify for \$400,000. That should get some builder's attention and hopefully increase our rater's business this year.

What is required?

- Properties must be new or heavily renovated construction in the United States
- Each house or multifamily unit must show an estimated energy consumption use at least 50 percent below the annual energy consumption of a comparable home that was constructed in accordance to 2006 IECC standard



45L Home

Tax Credit

Builder



- At least one-fifth of the 50 percent energy efficiency improvement must come from improved building envelope components
- To gualify for the credit, the builder must obtain certification from an accredited RESNET rater or equivalent rater.

For more information see: Tax Credits for Home Builders

New RESNET Retest Policy

In February, RESNET announced the new retest policy for the 55-question Rater Standard Exam. Formerly, RESNET required students to wait long periods of time in between test takes to allow more preparation time for the candidate and ensure a more qualitied rater for the employer. After careful consideration and study with testing consultants, candidates and employers, who found long wait

times detrimental, RESNET revised the RESNET Retest Policy. Wait times between testing have now been reduced. The Revised RESNET Retest Policy:

- First failure: User will be blocked for 7 days before being able to try again
- Second failure: User will be blocked for 14 days before being able to try again
- Third failure: User will be blocked for 45 days before being able to try again

ENERGY STAR[®] RaterPro[™]

WSU Energy Program Raters, ENERGY STAR[®] RaterPro[™] now has a free mobile app for your phone. This app makes data collection and retention a snap. RaterPro[™] is available for both Apple and Android devices. RaterPro[™] inspection checklists are built into the software applications so you do not have to complete them separately. Duct

blaster, blower door test results, and supporting photographs of the house and HVAC equipment can be uploaded into RaterPro[™]. RaterPro[™] works with or without the Internet and will automatically sync to the cloud when it reconnects. Builders will be impressed with your ability to gather information and transfer it digitally without old fashion clipboards. RaterPro™ requires a MY ENERGY STAR account. To join and get started contact: RaterPro[™] Pro Tip: You will likely find that using it on a tablet (e.g. iPad) is a lot easier.

Standards

RESNET Updates the RESNET Home Energy Rating Standards of Practice

The RESNET Home Energy Rating Standards of Practice guides certified RESNET HERS Raters and Rating Field Inspectors (RFIs) in the inspection and testing of a home's energy performance. The Standards of Practice were adopted to help clients of rating services understand what is and what is not required in a home energy rating. The revised standards of practice (Oct. 5, 2020) were considerably streamlined by referring to the RESNET ANSI standards instead of spelling out specific minimum rater features and the contents of rating report. Download the revised document here: **RESNET Home Energy Rating Standards of Practice**





The International Code Council (ICC) Partners with ACCA and RESNET to Develop New Standard for Grading HVAC System Installations

The International Code Council has partnered with the Air Conditioning Contractors of America (ACCA) and the Residential Energy Services Network (RESNET) to develop the ANSI/RESNET/ACCA/ICC 310-2020 Standard for Grading the Installation of HVAC Systems. The new standard is the product of a collaborative effort of the three organizations that establish the procedures, tolerances and record-keeping practices for evaluating and grading elements of a heating, ventilation, and air conditioning (HVAC) system's design and

installation—International Code Council, Building Safety Journal, Feb. 17, 2021: Read more...

ICC and RESNET Water Rating Index Standard Approved by ANSI

The American National Standards Institute (ANSI) has announced that it has approved the RESNET/ICC

Standard 850-2020. This new ANSI standard sets the technical specifications for the inspection, testing and labeling of a home's water efficiency. Development of this standard was the culmination of

a partnership between the Residential Energy Services Network (RESNET) and the International Code Council dedicated to improving the performance and affordability of residential construction— *Contractor,* June 29, 2020: <u>Read more...</u>

Upcoming Events & Training Opportunities

Join the EPA's Indoor airPLUS Program

The Indoor airPLUS Partnership is a voluntary program that is free to join. Together, Indoor airPLUS

and Partners promote indoor air quality in new homes as an easy and desirable option for homebuyers to help protect their health. Builders are finding that more prospective homebuyers are concerned about indoor air quality, especially families with respiratory health issues or small children, so this certification can help builders sell more homes. Raters can participate in this program by

becoming third-party verifiers that ensure that builders meet the EPA's high standards for home design and construction. Technical assistance, resources, tools and marketing materials are available at no cost. Partnership is available for homebuilders, home energy raters, and providers. For more information ...

IECC/HERS Compliance Specialist Designation

The International Code Council (ICC) and RESNET are pleased to announce a new combination designation, the IECC/HERS Compliance Specialist. You must be a current RESNET HERS Rater or Rating

Field Inspector (RFI) <u>and</u> hold the Residential Energy Inspector/Plans Examiner Certification (79). This designation combines the energy code knowledge of code officials with the energy efficiency knowledge of HERS Raters to identify experts in









energy plan review and inspection. The credential leverages the strengths of both organizations to increase the number of qualified individuals available for evaluating energy code compliance and home energy performance: For more information and to apply ...

Construction Instruction® Live Webinar Classes

- Getting it Right The Enclosure Update: Part 2, IAQ & Ventilation April 22
- Getting it Right The Enclosure Update: Part 3, Air Sealing Tactics May 6
- Getting it Right The Enclosure Update: Part 4, The Future of Above Grade Walls May 20

Click here and scroll down for more information and to register.

2021 RESNET Webinar Series for April, May, June

- Effects of ANSI 310 on HERS[®] Index Scores with Scott Doyle (RESNET), Philip Fairey (Florida Solar Energy Center), and Scott Horowitz (National Renewable Energy Laboratory) May 5
- Using HERS and HERSH2O Data for Environmental Impact Reporting with Ryan Meres (RESNET) – June 16

Click here for more information and to register.

Your WSU Energy Program Provider Team

Rob Penney, Jonathan Jones, Gary Kaufman and Anne Whitney can all be reached via email at: <u>NWrater@energy.wsu.edu</u>

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Rater News

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