2019 RESNET Building Performance Conference Prospective Pre-Conference Sessions



For more information on the RESNET Conference visit https://conference.resnet.us/

Home Energy Ratings - Practices and Procedures

PC-1 HVAC Design NOT for Dummies . . . But for Those of Us Who Really Care*

Have you ever seen a proposal from an HVAC Contractor or their "Designer" and wondered, "Is this gonna come back to bite me?" Have you ever wanted to cross-check their work, or at least ask the right questions so you know what you're about to pay for or what you'll have to test and verify? Join us for an engaging, interactive workshop to learn the fundamentals of HVAC design from a long-standing member of the ASHRAE 62.2 Committee. We'll explore how proper design and installation are crucial, not just for a lower HERS score, but also for improved comfort, indoor air quality, and building durability. During the workshop, you'll also hear how thoughtful HVAC design can help a builder earn the ENERGY STAR and Indoor airPLUS new home labels, and you might even get a chance to practice just a moment of math! Don't miss this great opportunity to learn from years of industry experience in ventilation and heating/cooling design.

Presenter: Paul H. Raymer, ICF

PC-2 New World Order – Get the Scoop on HERS Rater and RFI Training and Certifications

Find out what's changed with the certification pathways for HERS Raters and RFI's and what it means to your business. Know what a CFA or CRI is? Did you know that training providers no longer need to have practice ratings? Whether you're new to the industry or looking to add new raters to your business, join us to learn how to navigate these new waters and discover what opportunities this "new world order" provides. These changes have made training and certification customizable, flexible, and cost effective. Using the establishment of a network of raters to train the next generation, EnergyLogic is primed to help you find the best pathways for your success.

Presenters: Ben Graham, EnergyLogic & Jordi Kimbrough, EnergyLogic;

^{*}Submitted as an ADVANCED session

PC-3 The next generation of HouseRater and REM/Rate: 2019 Preview

In this pre-conference session, you will learn how to streamline ratings and save time by using HouseRater to collect field data, document test results, and send reports directly to your builder clients. You will also discover the latest in REM/Rate including new features, building science, and code compliance capabilities. The HouseRater and REM/Rate development teams will demonstrate new and advanced software features that will increase your proficiency and confidence in your ratings.

In this half-day session, you will:

- Learn how to streamline ratings using HouseRater.
- Understand how to customize reports for builder clients.
- Find out about the new features in the latest version of REM/Rate.
- Reduce the burden of data entry and repetitive tasks, particularly with multiple files.
- Learn about upcoming solutions in HouseRater & REM/Rate

Presenters: Mat Gates, HouseRater; Michael Resech, HouseRater; Hank Brekke HouseRater & Brian Christensen, NORESCO REM/Rate

PC-4 Ekotrope RATER - Orientation, Training, and Product Feedback Session

All types of attendees are welcome, whether unfamiliar with Ekotrope or already ramped up and using the tool. The first part of this session will feature a demo and product walkthrough, highlighting both basic functionality and advanced features. The session will then move to question and answer format to answer users' questions about the product, and finally end with an interactive discussion about users' needs and potential product improvements.

Presenters: Cy Kilbourn, Ekotrope; Nick Sisler, Ekotrope & Ziv Rozenblum, Ekotrope

PC-5 HERS 101 - RESNET HERS Affiliate Certificate Training

RESNET has created a new training and certificate program - "RESNET HERS Affiliate" The training will introduce HERS and HERS Index Scores and provide a solid foundation on understanding the components and process that results in a HERS Index Score.

This session will pilot the new training, Novices are encourage to take this introductory training to better prepare them for the more advanced conference breakout sessions.

People completing the training will be issued a RESNET HERS Index Affiliate certificate.

Presenter: Scott Doyle, RESNET

^{*}Submitted as an ADVANCED session

Launching the HERS Rating Industry to a New Trajectory

PC-6 The AXIS Data Collection, Storage, and Sharing Platform

Pivotal's AXIS platform is a cloud-hosted workflow and data management solution specifically designed for the collection, storage, and sharing of energy rating data. AXIS is used by leading energy efficiency program sponsors and utilities such as NEEA, Energy Trust of Oregon, and Arizona Public Service as a program administration, participation, quality assurance, and incentive processing platform for residential new construction programs. AXIS can also be used by HERS Raters, HERS Providers, and home builders to centralize energy rating and program-specific data. This session will provide an overview of the AXIS platform, integrations between AXIS and other technology solutions serving the energy efficiency market, data sharing functionality specifically serving the real estate and appraisal markets, and a glimpse into the furture of the AXIS platform.

Presenter: Robert Burns, Pivotal Energy Solutions

New Technologies and Building Practices that are Changing our Industry

PC-7 Align by Design: Advancing the Modern Grid Capabilities of Tomorrow, Starting Today*

What if there were a simple way to: Aggregate any numbers of utility customers so that their combined usage and available distributed energy resources could all be cleverly orchestrated and harmonized and, in less than a decade, result in negative energy bills for many of the same customers? Empower customers to invest in their own zero and low-emission generation, energy efficiency and energy storage, in a way that makes it a great investment for all participants, doesn't burden non-participants, and provides New Orleans with a lower cost, more resilient and greener grid? Never happen, you say?

A local developer proposes to revitalize the iconic, million square-foot Charity Hospital building (est. in 1736, at its current location since 1939, and abandoned since Hurricane Katrina) to create a multi-use civic center and affordable-housing complex, and, by combining these generation, efficiency and storage technologies, produce New Orleans's first sustainable microgrid. This will be enabled by a recently-proposed, utility rate design which allows participants to finance investments for buying and selling electricity, power, and resiliency, thereby permitting them to manage their electricity usage and income accordingly. These investments will contribute to a green economy, job-creation, and provide a sustainable model and teaching tool for those working in the green energy fields. This presentation explains the concept, provides examples to show how and why it works, and describes ready-to-launch pilot projects for applying the new rates.

Presenter(s): Tom Stanton, National Regulatory Research Institute; Mike Hopkins, Ice Energy Holdings; Pres Kabacoff, HRI Properties; Myron Katz, PhD, Building Science Innovators

PC-8 PHIUS Rater Training

This 2-day training includes one day of classroom work with a second day spent in the field demonstrating advanced testing and inspection protocols for the PHIUS+ Passive Building Standard certification program. Enclosure integrity design strategies Passive building mechanical/ventilation systems

On-site verification of passive building construction features

Airtightness/blower door testing protocols

The course concludes with an exam. Successfully completing the course and exam qualifies the trainee as a PHIUS+ Rater.

Presenter: Chris McTaggart, PHIUS/BER

PC-9 Sketchup for Energy Professionals - Quick, Accurate, Powerful Takeoffs

SketchUp is a powerful graphic modeling tool developed by Google and now owned by Trimble. EnergyLogic has successfully adopted SketchUp to streamline the take-off process for all of our builder clients. With its 3-D depiction of the thermal envelope, it has also proven to be a strong tool when reviewing probationary ratings, performing quality assurance, and field verifying a house was built to the original model. This training is designed to provide an overview of SketchUp and provide you with practice designing a 3-D model. Then we will use the scripts developed by EnergyLogic to generate a report designed for easy input into REM/Rate. Using SketchUp by itself will improve your speed and accuracy in performing take-offs, but with EnergyLogic's custom reporting script designed for easy input into REM/Rate, you'll find this method is not only fun, but cuts takeoff time in half! This course is designed for HERS Raters or other energy professionals with equivalent experience with energy modeling. It has been specifically designed to help complete accurate take-offs with quick from-plans rating data collection.

Presenter: Ben Grahm & Glenn Pease, EnergyLogic

Rating Water Efficiency

PC-10 Saving Energy and Saving (Hot) Water in New Homes

Which floor plans meet the WaterSense for Homes or Net-Zero Ready requirements for hot water distribution systems? Are there any hot water distribution systems that can deliver hot water to every plumbing fixture and appliance within 15 seconds after opening the tap? Learn how to improve customer satisfaction by improving the water, energy and time efficiency of the hot water systems in your new home designs. This seminar includes a field trip to nearby home site(s) where we can view the rough-in plumbing. Sites need to be arranged. Maximum 20 attendees per session. Transportation not provided. This session can be repeated twice in one day. If no sites are available, we will teach the principals in a classroom.

^{*}Submitted as an ADVANCED session

Presenter: Gary Klein, Gary Klein and Associates, Inc.

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