

## **Session Nominated for the 2009 RESNET Conference**

### **Home Energy Ratings**

#### ***2009 – 001 Rating Al Gore’s Home***

Former Vice President and Nobel Peace Prize winner Al Gore undertook a comprehensive effort to improve the energy performance of his home in Tennessee. With the assistance of the energy rating firm of Home Energy Concepts Mr. Gore was able his home’s energy performance from a HERS Index score to a score of 65. The HERS Index of 65 meets the 2030 Challenge for existing homes. What was done to make this possible? This session will be led by the home energy raters that worked on the project.

Suggested Presenters: David Lyle, Home Energy Concepts and Jerry Lyle, Home Energy Concepts

#### ***2009 – 002 International Standard Organization (ISO) Effort to Develop an International Standard on Rating Building Energy Performance***

ISO TC163 WG3 is at the start of a 3-year process of developing an international standard on energy performance ratings for all building types. The effort is in part a result and expansion of the European Union’s “Energy Performance of Buildings Directive” (EPBD). The Work Group has met four times. The Work Group Convenor, Mr. Dick van Dijk of the Netherlands, has specifically requested that “national positions” on the issues that the workgroup is considering. This session will provide a forum for individuals to provide input on this process. The U.S. representative for the ISO Work Group is Philip Fairey.

Suggested Presenters: Philip Fairey, Florida Solar Energy Center & Steve Baden, RESNET

#### ***2009 – 003 Meeting the RESNET Provider Quality Assurance Monitoring Challenge***

Come hear RESNET Providers present their rigorous quality assurance programs that meet or exceed the RESNET Quality Assurance Standards. See a variety of quality assurance models and software products used to meet the Standard. Hear RESNET's staff's experience with compliance to the Standard and suggestions for improving your process.

Suggested Presenters: To be Determined

### ***2009 – 004 RESNET National Building Registry***

RESNET is investigating developing a national building registry and has formed a National Buildings Registry Task Force to oversee the investigation. The task force will review and provide a recommendation to the RESNET Board on whether a national building registry makes sense. If the task force recommends developing a national building registry makes sense and the RESNET Board concurs, the task fore will then make a set of recommendations on how the registry will be set up, maintained and identify what information should be held confidential. This session will provide an update of this effort and discuss the implications for RESNET and the rating industry.

Suggested Presenters: Steve Byers, EnergyLogic

### ***2009 – 005 RESNET in China***

The World Bank estimates that by 2015, half of the world's new building construction will take place in China, and more than half of China's urban residential and commercial stock will have been constructed after 2000. The City of Shanghai, following direction from the Ministry of Construction, has taken steps towards reducing the massive energy demands from these new buildings by enacting a basic building energy performance framework and labeling system. Furthering these efforts, our partner organization, The Shanghai Real Estate Science Research Institute, is seeking to become a RESNET accredited provider, the first of its kind in China. This session will describe this project; the opportunities, barriers and progress.

Suggested Presenters: Nick Zigelbaum, NRDC

### ***2009 – 006 REMRate 102-Beyond HERS Class***

REMRate is a very powerful architectural modeling program used by Resnet members and the Energy Star program. The purpose of this program is to illuminate various features, assumptions and capabilities of the REMRate software to enhance a rater's efficiency, accuracy and credibility.

Suggested Presenters: V. Robert Salcido, AEC

### ***2009 – 007 Introduction to the New RESNET Infrared Standard***

This session will define the means by which the Standard was developed, its intention, present the highlights of the Standard, and seek feedback from those in the presentation.

Suggested Presenters:  
John Snell, Snell Infrared, Rogge Miller, GWS

### ***2009 – 008 Blower Door Opportunities and Challenges for HERS Raters***

With the growth of Energy Efficiency & Green Building Programs Blower Door testing is increasingly required, or given credit. This presents the HERS Rater with business opportunities, as well as challenges as they will have to meet different program requirements. The HERS Rater will be challenged to adopt new programs (LEEDnc, LEED for Homes, GreenPoint, etc.), markets (multifamily, high rise, etc.), tools, test procedures (ASTM E779, E1827, etc.), and compliance metrics (ACH, ACH50, EqLA, ELA, SLA, CFM/sqft, etc.).

We will build upon last years presentation on highrise testing by Colin L. Genge, Retrotec. We will learn the lessons from 7 prior years of testing without always getting it right, and the struggles & experimentation the past year from one HERS Rater who been through it already. New Blower Door testing procedures will be presented based on this experience.

Suggested Presenters: George J. Nesbitt Environmental Design/Build, CalHERS

### ***2009 – 009 Panel Session on the Value of the Energy Performance Score to Utilities and Raters***

The EPS has helped home buyers understand the impact their choice of home has, not only on their wallet but also on the environment, creating a direct link between energy efficiency, carbon footprints and their lifestyle. By providing a visual representation on a scale, it makes what was conceptual much more tangible to the consumer and they have responded positively. The EPS is also taking a role in the transactions surrounding the purchase of a new home—realtor marketing, discounted mortgage products, and preferred insurance packages. The value of the EPS goes beyond just homeowners and builders, it is a valuable new tool for utilities and raters to offer to promote energy efficiency in the residential market.

Suggested Presenters: Kendall Youngblood, Energy Trust of Oregon, Sean Penrith, Earth Advantage, Bob Stull, Portland Energy Conservation, Inc., Rob Bennett, Clinton Foundation

### ***2009 – 010 Verifying the Quality of HERS Ratings***

ICF International has been implementing a successful Quality Assurance and Quality Control (QAQC) process for the Oncor Electric Delivery ENERGY STAR® Homes Program (ESHP) since 2004 and implementing a process for Rocky Mountain Power in Utah since 2006. The main goals of the QAQC process are to verify RESNET standards are followed by HERS Raters, confirm the data used by the utilities to calculate utility-sponsored program impacts, and help strengthen the integrity of the ENERGY STAR Home label and the HERS

rating process. This session will share observations, issues, new best practices, and lessons learned from implementing QAQC programs. Specific quantitative results will be presented as well as actions taken to improve the home energy ratings and the final outcomes and recommendations.

Suggested Presenters: Dean Gamble, ICF International, Steve Burnett, ICF International, Jake Titus, ICF International

### ***2009 – 011 Stories from the Trenches of Energy Code Issues***

HERS Raters interact with code officials on a regular basis while in the field. Stories from the Trenches of Energy Code Issues will discuss the process of code adoption in Georgia and how local raters have worked to advance the energy code in the state to work for them in the field. The session will also cover lessons learned on working with code officials on sight for new and innovative technologies and techniques.

Suggested Presenters: Mike Barcik, Southface Energy Institute

### ***2009 – 012 Energy Ratings for HUD Code Manufactured Homes***

HUD-code manufactured housing represents a significant portion of new homes in the U.S. - over 95,000 homes in 2007. Each HUD code manufactured home is required to include both a heat loss certificate, and comfort cooling certificate, allowing for proper sizing of HVAC equipment. These certificates could be updated to provide more useful information to potential homebuyers, and could be linked to the HERS rating process. Challenges to this approach include the need to coordinate both in-plant and on-site inspections.

Suggested Presenters:

Mike Lubliner, WSU Energy Program, Philip Fairey, Florida Solar Energy Center

### ***2009 – 013 A Rater's Role in Meeting the National Builders Challenge***

The U.S. Department of Energy (DOE) has posed a challenge to the homebuilding industry - to build 220,000 high performance homes by 2012. The initiative is called the Builders Challenge, and homes that qualify must meet a 70 or better on the EnergySmart Home Scale (E-Scale). HERS Raters are an integral part of the Challenge and will be instrumental in meeting program goals. In this session you will learn: 1) what it takes to meet the Challenge performance requirements; 2) what additional quality criteria are required; and 3) how you can verify and qualify homes for the Challenge. You will leave this session prepared to discuss Builders Challenge with your builder-clients and facilitate their participation in the program.

Suggested Presenters: Dave Roberts, NREL

### ***2009 – 014 Explaining Home Energy Use that Building Science Misses***

Even though someone buys a Toyota Prius, they may not get the full potential of its efficiency. Their mileage may in fact be dismal compared to the potential in the design. Similarly, high efficiency homes can also fail to live up to their potential. This session examines some of the "big culprits" of homeowner behavior that defeat the energy efficiency in the designs.

Suggested Presenters:

John Laun, Apogee Interactive, Eric Shewbridge, Apogee Interactive

### ***2009 – 015 New York 90+ HERS Scores: 7 Builders, How they Got There, What it Cost***

The NYSERDA High Performance Residential Challenge was initiated to bring together builders, contractors, manufacturers, consultants, and raters to construct homes up to 65% more efficient than a reference home built to the 2004 International Energy Conservation Code. The project focused on reaching this efficiency through improvements in the building envelope and mechanical systems. The session will highlight performance objectives, surprises encountered in modeling the homes, building systems specified to meet objectives, and incremental costs incurred.

Suggested Presenters: Mike Moore, Project Engineer, Newport Ventures, Greg Pedrick, Project Manager, NYSERDA, Home builder to be named later

### ***2009 – 016 Energy Performance Score [EPS] - Indexing the Energy and Carbon Footprint for the Nation's Housing Stock***

The Energy Performance Score (EPS) is a tool that assesses the energy demand and carbon emissions of new and existing homes. The EPS process employs national standards to conduct an in-home energy audit and requisite energy modeling. This model analyzes the home's energy use and carbon emissions and produces a comparable score of the home's energy performance, an analysis of energy use and a prescriptive path of recommendations on how to improve the home score in a cost effective manner. Homeowners, municipal governments, utilities, and the real estate industry can use this easy-to-read certificate to compare the performance and impact on climate change of new and existing homes. It also seeks to drive performance upward in accordance with the vast public and private efforts already underway. In addition, the EPS provides a means of quantifying and measuring energy performance which supply the valuation factor needed to move the appraisal and financing aspects of remodeling forward.

Suggested Presenters: Sean Penrith, Earth Advantage, Inc., Diane Ferington, Energy Trust of Oregon

### **2009 – 017 REALTORS®, Raters, Energy Auditors The New Partnership**

Presentation Abstract:  
demonstrate how REALTORS, Raters and Energy Auditors can work together to educate home buyers and sellers about the cost and energy-saving benefits of retrofitting existing residential buildings through understanding the processes, marketing the differences, and promoting the Energy Efficient movement.

Suggested Presenters: Candice Lightner, Lee O'Neal, CGE Solutions, Inc, Tammy Baca, Stewart Title

### **2009 – 018 Energy Modeling: the Cinderella Design Tool**

Presentation Abstract:  
Often, energy modeling is reduced to a bureaucratic hurdle for design teams, and its value is underappreciated. Modeling is typically done either to demonstrate code compliance or as part of a HERS rating. Either way, it is seldom done as early in the design process as it should be to ensure the greatest reduction in carbon footprint and greatest benefit to the project's owner. And in many cases where energy modeling might be beneficial – including many remodeling projects – it isn't used at all. Modeling is an incredibly valuable tool and can be promoted to generate more business as Raters assist design teams in better understanding the influence of relative energy benefits of different design options, improving the design, and performing cost-benefit analysis.

Suggested Presenter:  
Ann Edminster, Design AVEnues

### **2009 – 019 Field Certification of Window Labels**

Presentation Abstract:  
Ever get out to a job site only to find that the windows didn't have a label? What do you do? Tell the builder to call the dealer to bring a label out, right? WRONG!! Rip out the window? For all ENERGY STAR windows and many ENERGY STAR Homes and/or Utility Programs, NFRC-certified windows are required. Learn the NFRC process for field labeling and the important personnel in their certification chain, so you don't have to rip out the window or redo the rating. Find out how simple and inexpensive it is to maintain the integrity of the window certification (and by extension, your rating!).

Suggested Presenters: Arlene Z. Stewart, AZS Consulting Inc and Ruen M. Beane, AZS Consulting Inc.

### ***2009 – 020 Organizing Raters for Change***

CalHERS represents the independent 3rd party Raters profession in California. We involve, educate develop and support Raters as a professionals to "raise the bar" in terms of ethics, accountability, and competence. We develop the Rating Profession by working with other stakeholders to make energy efficiency programs simple, clear, affordable, credible, achieve real energy savings, and protect the consumer.

Come learn from our efforts and successes the past year and how you can organizing HERS Raters regionally. We will discuss how we can support and be supported by RESNET nationally.

Suggested Presenters: George J. Nesbitt, Environmental Design/Build, CalHERS advisory board, Bill Lilly, California Energy & Living, CalHERS board member, Tommy Young, E3 Energy Efficiency Experts of Northern California & Steve Baden, RESNET

### ***2009 – 021 Additional Energy Conserving Features for RESNET's Energy Rating Standard Session 1 and Session 2***

While Resnet's Energy Standard has proven to be very useful, there are several items related to energy conservancy that are not covered. This session focuses on several of these items, as well as on problems specific to hot humid climates that should be addressed. They include control over energy use with respect to time and location ( phantom loads, controlled lighting vs. area lighting); independent dehumidification equipment; changes in ventilation requirements in hot humid climates (ventilation brings in moisture, a pollutant); enclosed crawl spaces vs.open crawl spaces; problems with Manual J calculation for AC sizing in high humidity climates (dehumidification vs. cooling requirements); inclusion of solar thermal and DeSuperHeater water heaters; and improved definitions for "essentially leak free", durability, and sustainability

Suggested Presenters:

Norman M. Witriol, Building Science Innovators, Myron Katz, Building Science Innovators and Christophor Faust, NoLaSolar

### ***2009 – 022 Window Labels: Missing in Action***

Over the last six months, we've encountered a number of thermal labeling issues with windows in our HERS ratings. These issues run the gamut from no thermal label at all to partial label to improper label. Unfortunately, the most serious problem we've encountered is invalid certification by supplier and manufacturer representatives eager to 'fix' the problem who are unfamiliar with proper field labeling. This is a serious problem because ultimately, the whole home certification could be considered compromised when these little known

procedures are circumvented. In reality, field labeling for thermal certification is relatively simple and inexpensive, provided the correct procedure is followed and a knowledgeable entity from the window manufacturer is involved.

Suggested Presenters: Arlene Z. Stewart and Roland E. Temple

## **ENERGY STAR**

### ***2009 – 023 Challenges and Opportunities of Energy Star in Modular Home Construction: Lessons From the Field***

The renewed interest in achieving Energy Star certification for new construction over the last several years has generated challenges for those who implement the program in modular construction. Challenges with coordination between HERS raters and the manufacturer, as-well-as with the customer at the final building site have tested the certification methodology and performance standards of Energy Star. This session will look at one program's experience with attempting to integrate the HERS rater into the modular construction process over the last two years, both at the manufacturing level and the customer level. Specific attention will focus on coordination and communication between rater (s) and manufacturer for the plan review/consultation, and thermal bypass checklist; connecting customers with raters on site for final performance testing; the pros and cons of proposed sampling protocols for modular construction; and experiences with the education /training of all stakeholders in the modular process on building science and Energy Star certification.

Suggested Presenters: Rick Terry, Director - Factory Built Housing Center - Penn College of Technology, Larry Armanda, HERS Rater & Weatherization Instructor at Penn College of Technology

### ***2009 – 024 Thermal Bypass Checklist-2 Years Later***

I'm suggesting a roundtable discussion on the challenges to getting the ESTAR TBCList properly satisfied for new ESTAR housing. I'm figuring Sam Rashkin, and other initiators of it could talk about what seems the most effective items and some that may be impractical to do. Also demonstrate new/unique strategies to get the Checklist satisfied. Also suggest they talk about the requirements for the National Performance Path.

Suggested Presenters: Sam Rashkin, EPA, Mark Newey, CET, Bruce Harley Conservation Services Group

***2009 – 025 ENERGY STAR Qualified Homes: Opportunities to Work with Affordable Housing***

Affordable housing is such an important component of any energy efficiency program because it is the segment of the housing industry where occupants realize the greatest potential benefits from lower ownership, maintenance costs, and health costs. Recognizing this opportunity, EPA has increased its commitment to support greater ENERGY STAR participation by affordable housing stakeholders. This session will present how HERS providers are actively influencing affordable housing organizations to build energy efficient homes across the country.

Suggested Presenters: Janet McIlvaine, FSEC, Brian Goble, AEC, Ben Adams, MaGrann Assoc.

***2009 – 026 ENERGY STAR Qualified Homes: Getting Ready for Multi-family High-Rise***

Although the high-rise multi-family building category has been a very small component of ENERGY STAR Qualified Homes, many industry analysts point to the aging 'baby boomer' population, increasing cost of developing land further from urban centers, and rapidly escalating cost of energy for both home and commuting as strong indicators of a looming trend to multi-family high-rise buildings and urban living. EPA has been actively working with stakeholders in pilot markets to develop a label for high-rise multi-family buildings. In addition, market research studies and technical evaluations have identified the biggest opportunities for energy savings. This session will present the results of these initial efforts along with potential scenarios for a national label for high-rise multi-family housing.

Suggested Presenters: Ted Leopkey, EPA

***2009 – 027 ENERGY STAR Qualified Homes: How to Set up an ENERGY STAR for Homes Conference/Training***

A large number of highly successful local/regional ENERGY STAR for Homes Conferences have been implemented across the country. This includes events in Raleigh, NC, Denver, CO, Grand Junction, CO, Salt Lake City, UT, Northern VA, Fredericksburg, VA, Southern, CA, Oklahoma City, OK, and Lexington, KY. These conferences provide great opportunities for training, recruiting, and networking and have been tracked to substantial growth in builder participation. However, there are many challenges and skills needed to effectively plan, organize, recruit sponsors, and market these events. This session will present a wealth of information from two conference experts.

Suggested Presenters: Laurel Elam, Appalachian State University Energy Center & Julie Porter

***2009 – 028 ENERGY STAR Qualified Homes: New Marketing Tool Developments***

Learn about all the latest Marketing Tools available from the ENERGY STAR for Homes team. This session will focus on the new on-line ENERGY STAR Marketing Toolkit that allows builders and raters to develop highly-customized point-of-sale materials, the upcoming 2009 ENERGY STAR Outreach Partnership campaign, new consumer fact sheets, and a tour of the new ENERGY STAR for Homes web sites for consumers and partners. The session is a great primer for raters who are new to working with ENERGY STAR, as well as veteran partners looking for the latest updates.

Suggested Presenters: Jon Passe, EPA

***2009 – 029 ENERGY STAR Qualified Homes: Engaging the Design Community with ‘Designed to Earn ENERGY STAR’***

Up to now, EPA has not offered the design community, architects and home designers, an effective partnership opportunity with ENERGY STAR Qualified Homes. Moreover, field observations during visits to 1000's of homes under construction reveal a significant gap between ENERGY STAR for Homes specifications and scopes of work on architectural construction documents. Based on these observations, EPA has introduced a new label for home plans called “Designed to Earn ENERGY STAR”. To earn this label, plans must be certified by a HERS rater to include ENERGY STAR Qualified Homes specifications, plan information, details, and attached documentation. Consumers and builders looking for this label will be assured of compliance with ENERGY STAR where plans are field verified by a certified HERS rater. This session will present the specifications for this new label, business opportunities for promoting this new label, and implementation process.

Suggested Presenters: Zak Shadid, EPA

***2009 – 030 ENERGY STAR Qualified Homes: The Road Ahead***

After only one initial specification with a few regional modifications the first 10 years, ENERGY STAR introduced a more rigorous specification in 2006. One of the biggest lessons learned was that stakeholders need more time to absorb, understand and plan for change. This is important because it appears that political forces are leading to substantially increased building codes nationally and regionally concurrent with unprecedented increases in energy costs. As a result, it has been clear to EPA that external forces are again driving another ramp-up in ENERGY STAR for Homes requirements, and the technical team has

developed a proposed framework for Version 3.0 specifications. In addition, a new initiative called Advanced New Home Construction is being promoted to leading edge builders willing to demonstrate an aggressive package of energy efficiency measures much like a 'farm system' for future specifications. This session will present the first look at these new ENERGY STAR Qualified Homes specifications and the implementation process.

Suggested Presenters: Dean Gamble, ICF Consulting & Sam Rashkin, EPA

***2009 – 031 ENERGY STAR Qualified Homes: The Compelling Builder Business Case in a Soft Real Estate Market***

"Build it and they will come" is officially long over. The housing market across the country is reeling from unprecedented foreclosure rates, extremely tight credit, loss of consumer confidence in the search for bottom, rapidly escalating energy costs, and ripple effects through the entire economy. Builders need a compelling value proposition to avoid merely competing on price and making endless buyer concessions. More than ever, HERS raters working with ENERGY STAR Qualified Homes address builders' business objectives with unique opportunities to help them survive this soft market. As evidence, the number of ENERGY STAR Builder Partners has increased nearly 10-fold to about 300 per month over the last 18 months since the market began to weaken. This session will discuss five business strategies builders can employ with ENERGY STAR to help them weather this storm.

Suggested Presenters: Sam Rashkin, EPA

***2009 – 032 Indoor Air Plus: The Whys and Hows of Getting Involved***

U.S. EPA studies have shown that levels of air pollution inside the home are often two to five times higher than outdoor levels. Poor air quality is associated with a host of health problems, including eye irritation, headaches, allergies, and respiratory problems such as asthma. In addition, indoor air quality is having a sizable financial impact on the home building industry in the form of litigation associated with mold and other indoor air quality related concerns. Builders can employ a variety of construction practices and technologies to improve indoor air quality, including the proper selection and installation of moisture control systems, HVAC equipment, combustion venting systems, and building materials. According to surveys, consumers are willing to pay up to \$5,000 more for these improvements. EPA created the ENERGY STAR Indoor Air Plus (IAP) label to help builders meet the growing consumer preference for homes with improved indoor air quality and energy efficiency. Now that the IAP pilot is complete and the final specifications, label and brochures are available, find out how to participate in this exciting new indoor air quality labeling program.

Suggested Presenters: Chiara D'Amore, ICF International

### ***2009 – 033 Filters and Formaldehyde: The Indoor Air Plus Technical Specifications***

Indoor pollution derives from a variety of internal and external sources and can have negative effects ranging from poor occupant health, durability concerns for the home, increased litigation, lower customer satisfaction, and higher societal costs for health care. The proper strategy to improve indoor air quality is to eliminate it at the source, and then to ventilate or filtrate. EPA's Indoor Air Plus label helps builders implement this strategy by incorporating more than 30 home design and construction features into a systemic and concise framework. EPA's Indoor Air Plus label specifications were developed based on best available science and information about risks associated with indoor air quality problems, and balanced with practical issues of cost, builder production process compatibility, and enforceability. The initial specifications were piloted in several cities and revised based on input from the field. The revised specifications are now being launched at the national level. This presentation will walk through the technical specification checklist for the IAP with a focus on the role HERS raters can play in IAP certification.

Suggested Presenters: Eric Werling, EPA

### **Existing Homes**

#### ***2009 – 034 Selling Energy-Efficiency to Existing Home Owners***

Ratings and home performance services don't save energy unless people buy them! Selling whole house services creates an opportunity for contractors to increase their volume and profitability while reducing customer complaints and callbacks. The key to selling whole house services is an understanding of the home's energy systems, active listening to the homeowner's energy and indoor environmental concerns, and the ability to clearly explain the benefits of the whole house approach.

Suggested Presenters: Mike Rogers, GreenHomes America

#### ***2009 – 035 Existing Home Efficiency Initiatives in Texas***

Texas cities and utilities are considering or experimenting with various approaches to realize the potential for energy and emission reductions from existing homes. This session will highlight these various initiatives and discuss a Texas HERO effort to help grow and meet the resulting demand for energy auditors for the existing home market.

Suggested Presenters: Tom Fitzpatrick, Texas HERO, panel of representatives of Texas HERO, cities (Austin, Dallas or Houston) and local utilities.

### ***2009 – 036 RESNET National Energy Audit Standard***

After three years of consensus building the RESNET Board of Directors has adopted a national energy audit standard. The consensus building included a RESNET Task Force on National Standard for Energy Audit for Existing Homes. The standard was created three categories of certification: In-Home Energy Survey, Diagnostic Energy Survey, and Comprehensive Energy Audit (energy rating). This session will introduce the new standard.

Suggested Presenters: Lee O'Neal CGE Solutions & Kelly Parker, Guaranteed Watt Savers

### ***2009 – 037 Nevada Time of Sale Energy Assessment Legislation***

A barrier to home buyers placing on homes with high energy performance is the lack of information. Most of the energy features of a home can not be readily viewed. When a consumer purchases a refrigerator or automobile, the product has labeled on it stating its energy performance. A consumer's largest purchase, however, has no such label to guide consumers. Led by the European Union a number of states are actively considering requiring an energy assessment at the time of sale of a home. The State of Nevada is pioneering this movement. The state has enacted legislation that starting on January 1, 2011 a house must have received an energy assessment approved by the Nevada State Energy Office before the home can be sold. This session will review the Nevada program and explore the implications for the rest of the nation.

Suggested Presenters: To be determined

### ***2009 – 038 RESNET/BPI Joint Comprehensive Energy Auditor Standard: New Career Path for Raters and Building Analysts***

For three years representatives of RESNET and the Building Performance Institute (BPI) have been developing a new joint certification, the Comprehensive Home Energy Auditor. Individuals certified through the joint RESNET/BPI standard will be able to conduct both home energy ratings and building analysis for home performance contractors. This session will introduce the new standard and explain the career possibilities for home energy raters and building analysts.

Suggested Presenters: Jim Fitzgerald, BPI Technical Committee & Bruce Harley, RESNET Technical Committee

### ***2009 – 039 Green Remodeling, A Step-by-Step Guide***

Follow the progress of two very different homes being remodeled to make them more energy and resource efficient. The first is a modern constructed home where the family needed additional room and a healthier environment. The

second is a 1840's farm house within a city that had very little changes since being built. Take away practical tips to incorporate green practices into your next project.

Suggested Presenters: Robin Pharo, Healthy Homes

### **2009 – 040 Retrofitting Existing Structures with Daylighting, High Performance Glazing and Passive Solar Principles**

The principles of Daylighting-Orientation-Insulation-Ventilation-Mass or DOIVM will show that how these first steps in good design and construction can easily bring large savings in all climates to the housing market. Many existing programs look to utilize mechanical or electrical fixes before applying these basic principles that save the most energy for the least up front cost.

Suggested Presenters:

Turko Semmes is a green building contractor in California for over 30 years with hands on knowledge of construction, passive solar, and many power systems. Chris Prelitz a green remodeling contractor of 25 years, who is now consulting on energy efficiency systems through out the US. He has the lead program on Greenovate on the Discovery Channel as well

### ***2009 – 041 Measuring Performance in Existing Homes: How Much Information do you Really Need?***

As retrofit programs such as Home Performance with ENERGY STAR grow and contractors and re-modelers undertake more and more whole house renovations, energy efficiency program managers are seeking a balance between obtaining data to quantify energy savings and the need for contractors to focus on what they do best: fixing homes. This session will explore program needs, and the needs of the contractors as well as those of the homeowner. Panelist will discuss recent developments in computer modeling and household assessments, and what RESNET is doing to help address this issue.

Suggested Presenters: Ted Leopkey, EPA, Mike L'Ecuyer, ICF International, Steve Baden/Philip Fairy RESNET, John Laun, Appogee, and John Jones, NYSERDA

### ***2009 – 042 Home Performance with ENERGY STAR: What Works and What Doesn't***

Home Performance with ENERGY STAR has become an important program for utilities, states, and nonprofit organizations to implement and meet energy efficiency goals. There are now 27 regional and state sponsored programs across the country with another 10 new program sponsors to launch in 2009. Come hear about six years of experiences, results, achievements, and mistakes.

This session will draw upon lessons learned to encourage discussions about program implementation strategies to achieve a cost-effective program, advance the home performance industry and improve the efficiency of existing homes.

Suggested Presenters: Dale Hoffmeyer, EPA, Ed Pollock/Terry Logee, DOE Marc Milin, ICF International, Diane Ferrington, Oregon Energy Trust and/or Jerry Hanna, National Grid

### ***2009 – 043 Rating Software for Existing Homes***

A key element in guiding consumers in making investments in improving the energy performance of existing homes is to provide the estimated energy savings of proposed upgrades and economic return for making the improvements. Currently RESNET home energy rating software programs calculate the projected energy savings and reduced carbon emissions that result from increased energy performance. RESNET has formed a task force to develop a process to simplify the information required for the software program, reconciliation of utility bills, and a standard methodology for calculating carbon emission savings. This session will explain the RESNET effort.

Suggested Presenters: Rob Salcido, Architectural Energy Corporation, Paul Norton, NREL, and Steve Baden, RESNET

### ***2009 – 044 Clinton Foundation Climate Initiative***

Former President Bill Clinton has established a foundation to support key issues facing the world today. A key area the foundation is addressing is global climate change. It has launched a climate initiative that will address improving the energy performance of existing homes. This session will focus on the Clinton Foundation Climate Initiative existing homes effort.

Suggested Presenters: Rob Bennett, Clinton Foundation Climate Initiative

### ***2009 – 045 RESNET/BPI Joint Certification: Putting Theory into Practice in PA***

RESNET and BPI have been exploring a joint certification process. Performance Systems Development has piloted a dual RESNET/BPI certification requirement for residential energy professionals, through PA Home Energy, a program which promotes Home Performance with ENERGY STAR and ENERGY STAR Qualified New Homes. This session will look at experiences with the dual certification requirement, from three perspectives: curriculum development and training, value of dual certification to trainees, and RESNET and BPI national strategy. PSD has created and delivered a curriculum that combines the strengths of RESNET's new-home orientation and BPI's existing-home approaches, and builds on each to strengthen students' readiness to work in the

field. At the end of two weeks, students have passed the RESNET online exam, and completed written and field certification requirements for BPI's Building Analyst certification. PA Home Energy's experience with the viability of a dual certification requirement will be discussed, in terms of the numbers trained, trainee backgrounds, and pass rates for trainings, as a result of the eight training cycles delivered over the past year. Survey results, regarding the perceived value of dual certification to certified professionals, following six months or more of practice, will also be shared. In addition, representatives of RESNET and BPI will give an update on progress with the joint certification process.

Suggested Presenters: Ethan MacCormick, PSD, Kathy Greely, PSD, 3rd person TBD, representing the team effort to combine RESNET & BPI certification standards

### ***2009 – 046 Transitioning from New Home Ratings to Home Performance Contracting***

Raters who are interested in adding to or transitioning their business into Home Performance Contracting should learn about the entire Home Performance Contracting Process. This session will follow a Home Performance job from start to finish and present key aspects of running a successful business. Learn how to identify and avoid problems that will hurt your Home Performance Contracting business before they materialize.

Suggested Presenters: David Abrey, GreenHomes America & Michelle Knaszak, GreenHomes America

### ***2009 – 047 Deep Energy Reductions in Existing Homes***

Given the increased cost of energy and the urgency to reduce greenhouse gas emissions, it is time to re-examine our assumptions about the levels of energy reductions that are achievable in existing homes. Properly implemented, deep energy reductions offer the potential for reduced energy vulnerability and environmental impact over the life of a dwelling, while enhancing comfort, indoor air quality, and durability. While some experience gained from housing, energy, and utility programs supports implementation of the deep energy reduction paradigm, other residential energy efficiency traditions make it more difficult to obtain deep energy reductions. Explore strategies and initiatives that are responding to this challenge, and the implications to the home energy rating industry.

Suggested Presenters: Linda Wigington, ACI (Affordable Comfort, Inc.)

### **2009 – 048 Real Time Energy Analysis Software for Retrofits**

There are now software tools that can do the energy analysis for a retrofit before the auditor leaves the home, so that s/he is prepared to discuss the results right at the kitchen table when making the sales pitch. This session would be a follow-up about how this issue has evolved from last year and the status of residential retrofit software may be a follow-on panel that RESNET would now want to lead in conjunction with EPA and DOE.

Suggested Presenters: Mike L'Ecuyer, ICF International

### **2009 – 049 ACI/Home Performance with Energy Star Session: Existing Homes – House of Horrors: Home Performance Examples and Remedies**

Step right up and see what goes on in existing homes...if you dare. Get real life examples of some common existing home challenges: bonus rooms, improper insulation, and even customer behavior. Find out how problems were solved, health issues cured, and consumers were educated. See how the experts have gotten their lumps, mistakes happen – see these and learn how to avoid some of your own!

Suggested Presenters: To be determined

### **2009 – 050 ACI/Home Performance with Energy Star Session: Marketing Techniques that Work for Raters & Contractors**

Marketing is essential for a contractor's and rater's success...it makes your phone ring. Explore strategies, costs, and challenges that successful individuals & companies have used. Accelerate your market growth by not repeating other's mistakes but by making the right marketing decisions at the right time. Zero in on marketing channels that will motivate homeowners toward action, improve employee retention, and customer satisfaction. Learn how effective marketing can be done on a shoe string budget.

Suggested Presenters: To be determined

### **2009 – 051 ACI/Home Performance with Energy Star Session: Yesterday's New Homes – Today's Opportunities to Grow Your Rater Business**

Integrate specific strategies and results used to break into the world of home performance contracting. Discover how "value-added" services and products will help start or improve your home performance career. Find out how to develop your business plan, product and service offerings for your own home performance business. Learn from one of the industry's top raters his steps and lessons from moving from the rating world to delivering energy efficiency upgrades to the existing homes sector.

Suggested Presenters: To be determined

### **2009 – 052 ACI/Home Performance with Energy Star Session: Beyond Ratings: You Must Sell Efficiency**

One of the more difficult transitions for raters in entering the existing housing energy efficiency business is selling – to REAL live customers! You can diagnose the place to pieces, but if you can't go “belly to belly” with an effective sales delivery – no efficiency happens! Those days are over – efficiency must be sold! Don't think your job ends with the assessment – work must happen!

Learn to ...

- Use interviewing techniques and diagnostic discovery to motivate the customer and develop their desire to have their home perform
- Build a trusting relationship before the work begins
- Maximize your ability to communicate the technical side of diagnostics to the customer without glazing them over or boring them
- Communicate confidence in your conclusions and recommendations

Suggested Presenters: To be determined

### **Green Building**

#### ***2009 – 053 Introduction to Green Building***

Green Building Seminar intended to give an introductory overview to green building practices, programs, products, and techniques. Participants will review the key areas of green building with emphasis on the top three green areas - Energy Efficiency, Resource Conservation, and Indoor Air Quality. Find out what these concepts really mean and simple ways to integrate them into existing homes or new building projects.

Suggested Presenters: Robin Pharo, Healthy Homes

#### ***2009 – 054 National Association of Home Builders Green Building Certification***

This session will present an overview of the working relationship between RESNET and the NAHB Research Center to implement and grow National Green Certification of residential buildings across the U.S. Details of the 3rd party verification process required for each green building or development. Questions and answers from leaders in both organizations.

Suggested Presenters: Steve Baden, RESNET & Don Carr, NAHB Research Center

### ***2009 – 055 The Future of HERS Raters in Green Building Programs***

With all the changes in green building program verification standards and the new Green Rater designation, this session will discuss the available job opportunities for HERS Raters working in the green building industry.

Suggested Presenters: Mike Barcik, Southface Energy Institute

### ***2009 – 056 RESNET Green Rater Designation***

RESNET has formed a task force to develop the criteria and curriculum for Rater Green Rater certification training. The input from the task force will be used by the RESNET Training and Education Committee and the RESNET Board of Directors in adopting the final criteria. This session will explain this effort and how certified home energy raters can receive the RESNET Green Rater designation.

Suggested Presenters: Kelly Parker, Guaranteed Watt Savers

### ***2009 – 057 Green Building & Remodeling for Dummies***

In this lecture you will hear about the emerging field of green building; see some of the most exciting technologies available; and get a glimpse of the inevitable future of our buildings.

Join us in an energetic and lively discussion on green architecture from one of the pioneers in the field. Eric Corey Freed is an award winning green architect and principal of organicARCHITECT, a research and design firm based in San Francisco. Eric is a warm and engaging speaker and presents this inspirational and informative material in a logical way.

#### **POINTS COVERED:**

- \* what is environmentalism?
- \* what does this have to do with buildings?
- \* the 2 main misconceptions in green architecture
- \* what is the lifecycle and how does that effect the design of buildings?
- \* how to sell these ideas to your clients
- \* 5 case studies demonstrating these ideas
- \* an action plan to implement this in your office

Suggested Presenters: Eric Corey Freed is principal of organicARCHITECT, an architecture and consulting firm in San Francisco, with over 15 years of experience in green building.

### **2009 – 058 USGBC LEED Homes**

This session will explore what role that certified home energy raters can play in the verification of LEED Homes.

Suggested Presenters: Representatives of U.S. Green Building Council

### **2009 – 059 Green Affordable Housing**

Green Affordable Housing & LIHTC Projects; What Works for Other States Can Work for Texas

Suggested Presenters: Mary Luevano, Global Green USA

### **2009 – 060 Green Real Estate Education - Coming of Age**

As a regular part of the practice of their profession, real estate professionals are called upon to recommend upgrades to a property, home or business owner that will impact a future sale or value. This now must include recommending energy efficient upgrades, upgrades to improve indoor air quality as well as the health and longevity of that built structure. The consumer today faces utility bill increases and concerns of global climate issues that were never a concern in the past. As new information becomes available, a their thirst for solutions on their own individual “carbon footprint” are becoming easier to define. . The real estate professional is the absolute first line of communication for every consumer in the United States and is in the enviable position to effect change faster than any other profession.

Suggested Presenters: Kerry Mitchell, Green Real Estate Education

### **2009 – 061 NAHB Green Home Verification Process A to Z**

This session reviews the verification process supporting the NAHB Green Building Program, and where the RESNET raters and providers fit in. Learn how to generate more business supporting NAHB member builders in the rollout of the National Program. Review how NAHB process differs from LEED for Homes. Details provided on how to verify submissions on building sites, energy efficiency, passive solar design, water efficiency, indoor environment, materials, and marketing.

Proposed speakers: Bion Howard, B.E.S.T. Certified NAHB Green Building Program Verifier & CGP. Member, RESNET Technical Committee, Jim Edmunds, EnviroCustom Homes, NAHB Green Building and Builder Business Trainer.

### **2009 – 062 Sustainability Features of Wood**

that use of "quick growth" softwoods should be encouraged and considered a sustainable resource by certifying agencies.

This guy is the most impressive, knowledgeable and enjoyable speaker I have listened to in my life!

Suggested Presenters: Dr. Patrick Moore was keynote speaker at 2008 Green Conference in New Orleans and was extremely impressive

### **2009 – 063 Green Building 101**

This session takes you inside and outside the house to demonstrate techniques to ensure energy and resource efficiency, better water conservation, improved indoor air quality and environmentally sensitive site design, Get your questions answered by an NAHB Green Builder Advocate of the Year and get ready to go green!

Suggested Presenters: Don Ferrier, Ferrier Companies

### **2009 – 064 Real & Relevant Green Home Building**

90% of the effective green building strategies occur within the first 10% of the design process. "Green by design" is cost effective; "green by device" is not. An integrated approach to the pillars of "High Performance Building" from programming to building sciences will be presented. Advanced green building strategies will be critiqued – what worked and what hasn't over the past three decades of the presenter's experience. How various design decisions and building component selections interact with each other to effect occupant health & comfort; building durability & maintenance; conservation of natural resources & project waste management; water conservation, re-use & collection; energy efficiency - including greenhouse gas emissions, will be addressed in an enlightening and builder relevant format.

Suggested Presenters: Peter L Pfeiffer, FAIA, Barley & Pfeiffer Architects

### **2009 – 065 Taking Energy Rating to the Extreme: Building a LEED Platinum Home in 5 Days**

In March of 2008, ABC's television show "Extreme Makeover: Home Edition" built its first LEED certified home. The home was built from foundation to finish in a little over 106 hours while at the same time achieving LEED Platinum certification. This session will look at the creative strategies, in-depth design process, and field implementation of this unprecedented project from the perspective the HERS rater. The audience will walk away with practical tips from

the project's rater and builder on how to streamline the process of building green and ensuring the implementation of checks and balances in the process.

Suggested Presenters: Amy Musser, Ph.D., P.E., Vandemusser Design, Steve Linton, LEED AP, Deltec Homes

***2009 – 066 Maximize Solar Design Performance in LEED for Homes and NAHB Program***

National model programs for green home building include modest credits for implementing passive solar “climate specific” designs and the use of renewable energy forms on site. However, they do not yet push the envelope towards more advanced high-performance levels in new and extensively remodeled residential buildings. This session explores how to maximize credits for advanced climate specific design in the model programs, and reviews recommendations that will advance passive solar design and technologies in the future. An analysis process is reviewed that can help increase overall home performance using renewable energy. Handouts and references provided.

Suggested Presenters:

Bion Howard, B.E.S.T. Certified NAHB Green Building Program Verifier & CGP. Member, RESNET Technical Committee

***2009 – 067 Green Building: The Whole Building Approach***

Seminar teaches residential building professionals, looking to understand the value of including building science in green practices, what they need to consider when thinking of the building as a whole. High performance builders and contractors who are looking for the best products and construction techniques to help them achieve their energy and quality goals will receive value from this seminar. The market for energy-efficient high performance homes is continuing to grow, in a residential new construction down-turn, because homeowners understand the value of a durable, energy efficient home that is safe and comfortable.

Suggested Presenters: Robin Pharo, Healthy Homes

***2009 – 068 Indoor Air Plus: The Next Step in Green Building***

Homebuilders and homebuyers across the country are increasingly interested in green building. Under both national and regional programs, green building takes a more holistic look at how homes are built, occupied, and impact the larger community by scoring homes on a number of attributes. These attributes include energy efficiency, water use, building material use, stormwater management, indoor air quality, and other features. However, builders are challenged by how to prioritize their efforts to achieve “green” levels for each attribute. While energy

efficiency is often considered to be the first step in striving to build green, it is anticipated that homebuyers and builders will look for the ENERGY STAR Indoor Air Package (IAP) label as the next step in achieving a green home. The IAP label is a new specification developed by EPA to indicate that the home has improved indoor air quality. ENERGY STAR qualified homes that also qualify for the IAP label incorporate more than 30 additional home design and construction features to control moisture, chemical exposure, radon, pests, ventilation, and filtration. Together, these features help protect qualified homes and their residents from mold, chemicals, combustion gases, and other airborne pollutants. This session will explain how IAP can be utilized to facilitate compliance with the requirements of prominent green building program while providing a high intrinsic value for homeowners, homebuilders, and society.

Suggested Presenters: Casey Murphy, ICF International

### ***2009 – 069 Green Building for Real Estate Professionals- Green Leadership***

This is a 3 hour continuing education course for the real estate professional approved for credit in Louisiana and 14 other states - we define green building, cover basics on some systems and materials, we cover what "green" means to the real estate profession and how not TO mis-represent the industry – we do promote RESNET and we do have an energy rater address the class.

Suggested Presenters:  
Kerry Mitchell, Green Real Estate Education

### ***2009 – 070 LEED Platinum in Less than a Week!***

In March of 2008, Deltec Homes banded with a group of builders to demolish and erect a new house for the Osea Family IN New Orleans within a single week. The USGBC and Amy Musser of Vandemusser Design certified this house to the highest USGBC standard, LEED Platinum. This was part of the season finale episode for ABC's Extreme Makeover Home Edition. There were hundreds of people to work around, all night shifts AND camera crews to work around to achieve this certification (both getting the work done AND running the diagnosis). While there are few projects that would operate on such a timeline, the lessons available through this experience should be shared. Steve Linton coordinated the work during the project, working with Amy and the USGBC to test at the most appropriate times. Brett coordinated hundreds of volunteers throughout the project keeping the job on schedule.

Suggested Presenters: Amy Musser of Vandemusser Design, Steve Linton, LEED AP of Deltec Homes and Brett A McCall of the BuildSmart Alliance

### ***2009 – 071 Understanding the National Green Building Landscape***

Learn what is happening on the national level within the green building industry. Review the three different national programs —the NAHB Model Green Building Guidelines, the ICC/NAHB (International Code Council/National Association of Home Builders) National Green Building Standard, and USGBC's LEED (US Green Building Council's Leadership in Energy and Environmental Design) for Homes. Also look at the marketing and product certification programs including Water Sense, Cradle-to-Cradle, and others. Finish with ways a business can incorporate information from these programs as part of their marketing initiatives.

Suggested Presenters:  
Robin Pharo, Healthy Homes

### ***2009 – 072 NAHB Certified Green Professional***

It is my opinion that RESNET needs to partner with NAHB on Green rating. Builders support and belong to NAHB and considering that ICC-ES appears to be partnering with NAHB, that the preliminary residential green rating will be NAHB. LEED-H is fine, but expensive.

Suggested Presenters: NAHB

### **Zero Energy Homes**

#### ***2009 – 073 Tapping the Residential Energy Reserve - Zero Energy Homes***

Presentation Abstract:

Art of the possible for zero energy homes, and beyond -- what needs to be done to make them a reality, and what the role of energy and green raters should be into the future. (he presented a very good review of ZEH at Joe Lstibrucek "Summer Camp" that everyone should see...)

Suggested Presenters: Ren Anderson, NREL

#### ***2009 – 074 The 2030 Challenge: Leading the Way to Zero Carbon Buildings***

Architect Edward Mazria has proposed a challenge to the design community to produce buildings that have a zero carbon footprint by 2030, the "2030 Challenge". The 2030 Challenge has been endorsed by the America Institute of Architects, ASHRAE and U.S. Council of Mayors. The challenge has adopted the RESNET HERS Index to set its goals for the residential sector. This session will explore the 2030 Challenge.

Suggested Presenters: Architectural 2030

### **2009 – 075 Net Zero Energy & Carbon Neutral Buildings**

By doing everything right on new and existing buildings you can:

- Produce 100% of the energy you use every year
- Eliminate your homes carbon footprint
- Shave your peak and get huge savings
- Get checks from your power company
- Tax free income

This is a real building not a computer model

Suggested Presenters: Jeff Knutson, A-A Exteriors.com

### **2009 – 076 Zero Energy Homes: From Virtual to Reality**

If a picture is worth 1000 words, are energy models worth as much? The Zero Energy Challenge, currently underway in Massachusetts, is utilizing computer imagery and energy modeling to draw correlations between virtual and real-time appearances and energy consumption/production data. Results from this two year study will look to influence future program designs as well as the home building and home buying communities.

Suggested Presenters: David Ruggiero, ICF International, Matt Dugan, ICF International

## **Business Development Opportunities**

### **2009 – 077 New Business Opportunities for Raters**

Currently the primary source of economic demand for rating services is verification of homes for the Environmental Protection Agency's (EPA) ENERGY STAR Homes Program. It is not healthy for any industry to be dependent upon a single federally sponsored program or a single facet of the housing market. RESNET has identified new services for home energy raters outside of ENERGY STAR and the traditional home energy ratings. This session will define these new opportunities and explore how raters can take advantage of these new opportunities.

Suggested Presenter: To be determined

### **2009 – 078 Essentials for a New Rating Business**

As the rating industry is growing many independent raters are starting up new companies. This session could cover some of the basics of starting a new

business such as providership, taxes, licenses, insurance, marketing and website options.

Suggested Presenters: Tabetha Reyes, started a new rating company this year, Brett Dillon, Builders Energy Rater

### ***2009 – 079 National Builders Challenge***

The U.S. Department of Energy has launched a National Builders Challenge to recognize those builders who are leading the path to zero energy homes. This session will introduce the challenge and explain the role that certified home energy raters will play in the program.

Suggested Presenter: Edward Pollock, U.S. Department of Energy

### **2009 – 080 Real Estate Agents: Your Marketing Partners**

The real estate industry is poised to play a far more active role in meeting the growing demand for energy efficiency and “green” features in existing homes. Real estate agents are catching on to the importance and marketing potential of energy efficiency. From the pioneering nationwide EcoBroker program to state- and local-led efforts, agents are hearing more buzz, seeing more educational options, and becoming more receptive to what was once perceived a niche market. According to recent figures, REALTORS sell between four and five million existing homes annually and the National Association of REALTORS (NAR) has more than 1.3 million members. In addition, many states are considering or have passed a range of energy disclosure mandates at time of sale. How can you leverage these factors to make your neighborhood REALTOR a partner in educating the homeowner about the value of your services, and get more business? The time is now for Raters and REALTORS to join forces and transform energy-wasteful existing housing stock to more comfortable, healthy, energy efficient homes that will contribute to our nation’s energy independence. This session will share an insider's perspective on the real estate industry and tips on building bridges with your area's real estate pros.

Suggested Presenters: Julie Hawkins, (REALTOR) D&R International, Lani MacRae, DOE, New Orleans area REALTOR TBD, New Orleans area energy auditor TBD, Lee O’Neal CGE Solutions

### ***2009 – 081 Connecting the Industry: RESNET’s New Web Based Networking Program***

In order to meet RESNET’s objective to be the premier network for the building performance industry, it is crucial that RESNET remains up to date with the latest technology and use every means available to disseminate information to its members. Recently, there has been a truly revolutionary transformation in how

information is shared through the internet. Rather than solely relying on web pages made by professionals, internet users are beginning to turn to user generated pages and social networking sites which allow them to share and receive information with little knowledge and experience in web-building. The success of websites such as “myspace”, “facebook”, “youtube”, and “Wikipedia” have heralded a new age of user-generated webspace that has been called “web 2.0.” In order to meet its goal of creating a building performance community, RESNET must become part of the web 2.0 Revolution.

The best example of professional usage of a networking web-feature has been Barack Obama’s successful campaign for the Democratic presidential nomination. Barack Obama’s website enabled his volunteers to meet other supporters, and post events that they were planning on the campaign network. Literally thousands of user-groups were created by supporters who logged onto the website, each with their own list-serve.

RESNET is creating a similar network. Through this networking site, users could find or organize building performance events that are occurring in their region. Users can join list-serves that could consist of regional raters, environmentalists, builders, building science professionals, building performance professionals, or environmentalists.

This session will explore the possibilities of the new service and explain how the RESNET can take advantage of the new technology.

Suggested Presenters: John Baden, RESNET

### ***2009 – 082 7 Key Things to Jump Start Your Existing Homes Business***

The analysts tell us that the existing home retrofit market will be hot. Yet the existing homes market can be a tough nut to crack. It’s even harder if you skip some of the fundamentals. From marketing and sales, to installation and business practices, there are some basic things raters and contractors should do to ensure their businesses thrive, this session will focus on seven simple things you can start implementing this week, this month, or this quarter, to improve your top line revenue and your bottom line earnings. While targeted at raters and home performance contractors, this would be relevant for HVAC, insulation, and other trade contractors. It would also be useful to program implementers who want to better understand how to help one of their key stakeholders deliver energy-efficiency.

Suggested Presenters: Mike Rogers, GreenHomes America

**2009 – 083 *Now I am Certified! Now What? (What I Need to Know to Succeed as a Rater?)***

This session will consist of both the technical and business side of a rating organization. It will contain the following: Basic Skills, Equipment, Knowledge, Business Plan etc. needed to succeed in beginning a rating organization. We all know that in our training courses much information is given. Which aspects are the most important? How do we put this information to use in the field and the office?

Suggested Presenters: Erin R. Wiggins, Cenergy, LLC, Barb Yankie - Homes + Inc. & Green Building Consulting, LLC

**2009 – 084 *Uni-Tasking: 25 Tips for Better Listening***

After 25 years as a journalist and 15 as a talk show host, I have come to the conclusion that PEOPLE ARE DYING TO BE HEARD, and that we all need to listen better to each other. Today's society says that in order to keep up with global trends, we have to multi-task. I say we're being sold a bill of goods that we shouldn't buy. We can't do it all. It's just impossible. And while we can watch TV and read a book at the same time, we can't do either well. To do your best, you need to focus your thoughts. You need to listen to your kids. You need to free your mind of all the clutter and really hear your client, co-worker, boss or spouse. You need to take the time to focus on one person or task at a time. I call this ability to focus: Uni-Tasking.

Suggested Presenters: Ben Merens, Represented by Innovation Artistry

**2009 – 085 *Lessons Learned From Successful Rater and HVAC Contractor Partnerships***

With the decrease of residential new construction in many parts of the country, new relationships are being formed between progressive raters and HVAC contractors. Raters who have learned to provide needed envelope and HVAC testing have made themselves essential service providers to HVAC contractors. Learn how to effectively make your services available to the HVAC industry from presenters who have been key players in uniting Raters and the HVAC industry.

Suggested Presenters: Bob Brice, Cenergy, Rob Falke, National Comfort Institute

**2009 – 086 *Benefits and Challenges when developing a Strategic Alliance in the Building Performance Industry***

As performance construction services become more requested by architects, developers, builders and building owners, service providers must adapt to the

ever-changing demands. Companies must diversify their services to meet these demands. The investment and learning curve for many of these services present challenges that are not easily overcome. We believe it is advantageous at this time to seek non-competing service providers to align together behind a single point of contact, simplifying the efforts of the customer while benefiting from the pool of shared resources gained by the alliance members.

The BuildSmart Alliance is such an alliance that is proving to be successful. In this presentation, we will share our methods for choosing our alliance members, the challenges with growing as a larger group and the opportunities that open up when we work together.

Suggested Presenters: Steve Linton, LEED AP, BuildSmart Director and Green Building Coordinator for Deltec Homes, Brett A McCall, BuildSmart Visionary and Sales/Marketing Director for Delkote Machine Finishing

### ***2009 – 087 Program Design in a Changing Market***

If there's one thing we can count on, change happens. Codes change, technologies change, programs and policies change. So how do you determine the impact changes have on energy efficiency programs and how can you redesign programs to ensure relevant savings are captured? This session explores some recent changes and changes to come and presents approaches to quantifying impacts and designing programs in a changing market.

Suggested Presenters: David Meisegeier, ICF International, Sam Rashkin, EPA

### ***2009 – 088 Engaging Energy Efficiency Allies***

Best practices on how to reach out to these allies (Realtors, Lenders, manufacturers/distributors of energy efficient products, etc.) with a panel of allies who will speak about how they incorporate ENERGY STAR into their business and sales.

Suggested Presenters: Traci Synatschk, ICF International

### ***2009 – 089 It's 2020: Are you Capping and Trading Your Carbon Footprint Yet?***

As the issue of climate change rises in public consciousness and advances to political action, people in the building energy performance and rating industry are trying to grasp future opportunities in emerging carbon markets. From tying energy use to carbon emissions via a carbon footprint analysis, to understanding the difference between white tags, green tags, complementary policies and other carbon offset options, this session discusses the latest developments in carbon policies and markets as they may affect residential buildings in the United States.

Suggested Presenters: Bill Prindle, ICF International, Rahul Young, ICF International, Dean Gamble, ICF International

## **Building Science**

### ***2009 – 090 Cavity Insulation Recommendations by Building Envelope Application***

Presentation Abstract:

This presentation will cover cavity insulation recommendations using both single product and hybrid installation systems. Each climate zone in the US will be discussed and recommendations will include fiber glass and spray polyurethane foam products.

Suggested Presenters: Randy Straight, Manager, Residential Technical Services, CertainTeed Insulation

### ***2009 – 091 The Elephant in the Room - HVAC for High Performance Homes***

HVAC is the largest energy consumer in the home. Reducing heating and cooling costs is the main focus of the home performance industry, and yet few practitioners are qualified to provide sound advice when it comes to HVAC system design. More often than not, we rely on the mechanical contractor to know what he's doing when, in fact, he has not been trained to deal with high performance homes and probably has the least incentive to recommend best-practice. I refer to this as the 'elephant in the room.' My presentation will dispel a number of widely held myths regarding HVAC design and will help participants become better qualified in this critical yet under-emphasized area of home performance.

Suggested Presenters: David Butler, Environmental Building Solutions

### ***2009 – 092 How to Verify Charge & Airflow with Installing Refrigeration Gages***

Raters can use non-intrusive testing to determine if the newly installed central air conditioning has the proper charge and airflow. This test can be conducted by recording four temperature readings and total system airflow. Using these readings, the "Temperature Split Chart" and manufactures specs, charge and airflow can be checked and verified with out installing refrigeration gages.

Suggested Presenters: Louis Marrongelli, CSG

### **2009 – 093 Thermal Comfort**

Thermal Comfort Diagnostics is the practice of diagnosing a home for the causes of comfort complaints by the occupants. Comfort complaints typically manifest as excessive temperature variations between rooms, but can also be caused by drafts and humidity issues. This seminar focuses on comfort issues in Hot/Dry climates. The causes of the comfort issues can include poorly sized equipment (under or over-sized), poor duct system design, poor shell building construction, poor thermostat operation, poor air balance, and many others. Tools and techniques used for thermal comfort diagnostics include on-site room-by-room load calculations, air flow measurement (flow hood), long term temperature monitoring (temperature data loggers), static pressure testing (manometer), duct leakage testing (duct tester), air temperature measurements (temperature probes and laser thermometer), and more.

Thermal Comfort Diagnostics is a great business opportunity that HERS raters can add to their quiver of services. It uses many of the same tools and skills and can greatly enhance their understanding of how a home operates.

Suggested Presenters: Russ King, PE, Sierra Building Science, Inc.

### **2009 – 094 Proper Manual J Calculation**

Central A/C sizing is critical in ESTAR and beyond, and typically it is also difficult for raters to get the Man J calc copy from HVAC installers. Raters/Providers should be trained to input and determine sizing using the ManJ or "other ACCA approved method" It can be an additional service product for raters/providers, especially since they are reviewing and calcking the bldg docs and working with the builders anyway.

Suggested Presenters: Someone from ACCA

### **2009 – 095 Thermal performance of NCFI's Spray Polyurethane Foam insulation in Walls**

NCFI's Sealite open-cell and InsulStar closed-cell Spray-in-place Polyurethane Foam (SPF) insulations were tested in whole-wall panels using ASTM C 1363-05. Whole-wall sections insulated with fiberglass batts were also tested. This session will discuss the results of these whole-wall tests, and how this information can be used in home energy ratings.

Suggested Presenters: Craig DeWitt, PhD, PE, RLC Engineering, LLC, Jason Hoerter, NCFI, Inc., Roger Morrison, PE, Deer Ridge Consulting, Inc.,

### ***2009 – 096 Infrared Inspection of Building Envelopes***

With increasing energy costs, thermal imaging cameras have quickly become prevalent for commercial and residential building inspection. Building structures commonly exhibit quality and performance problems caused during construction and maintenance that can impact energy performance and, in some cases, rendering them dangerous. Regardless of the building type involved, infrared imaging has been shown to provide remarkable, nondestructive information about construction details and building performance.

This session will discuss the numerous applications for thermal imaging technology currently being used to inspect building envelopes. These include validation of structural details, verification of energy performance (conduction and air leakage), location of moisture intrusion, and the identification of structural and system degradation of roofs and facades. Examples will be given for each application and the basic conditions required will be discussed.

Suggested Presenters: Thermal Imaging Resource Center

### ***2009 – 097 Building Blocks of a Healthy Home***

Learn simple, easily-implemented best practices for building healthier. Today, many standard materials and practices are known to have environmental and health impacts. Learn which standard building materials could have issues as well as mainstream and specialty replacement products and procedures. Content covers the practical application of how to control moisture; reduce or eliminate chemicals; protect against dangerous gasses; and ensure clean air.

Suggested Presenters: Robin Pharo, Healthy Homes

### ***2009 – 098 Interpretation and Application of the (Proposed) RESNET Standard For Thermographic Inspections***

Outline and explain the (proposed) RESNET Standard For Thermographic Inspections and how it is relevant in the field. Explain portions that could be challenging for field raters to understand and apply.

Suggested Presenters: Norbert Muller

### ***2009 – 099 Occupant Behavior and Energy Efficiency in Military Housing***

The military is making strides to improve the efficiency of its housing, in large part because it pays for or subsidizes the utility costs. Efficiency improvements in the housing stock, therefore, translate into direct financial savings for the military. In part, these improvements are being achieved through efficiency improvements to the buildings themselves. However, another important strategy is to provide

occupants with the information to understand their impact on the energy usage, including an accurate utility allowance, rather than paying for all utility costs regardless of expenditures. This session explores the impacts occupants can have on their utility bills and describes a novel approach that was developed to equitably create energy allowances for military housing bases in the United States.

Suggested Presenters: Dean Gamble, ICF International, David Meisegeier, ICF International

### ***2009 – 100 It's Easy Being Green with Infrared Thermography***

This session will explore how infrared thermography can be used to accomplish energy conservation goals in home construction and in existing buildings. An infrared camera can be used to verify building construction quality, as well as perform energy audits and surveys, indoor air quality investigations, and plumbing and radiant floor inspections. Through real world examples, attendees will discover how infrared inspections can help to save thousands of dollars, improve the comfort of building inhabitants, and detect hidden problems – all while conserving energy. Included will be a discussion of the latest technological advances in infrared thermography.

Suggested Presenters: Tom O'Toole, FLIR Systems, Inc.

### ***2009 – 101 Residential HVAC Operating Efficiency***

Training on correct design and installation of HVAC duct work and filter systems and the ramifications/energy cost of poorly designed air distribution systems. (This is over and above leaky ducts...)

Suggested Presenters: National Comfort Institute

### ***2009 – 102 Building Blocks of a Healthy Home***

Learn simple, easily-implemented best practices for building healthier. Today, many standard materials and practices are known to have environmental and health impacts. Learn which standard building materials could have issues as well as mainstream and specialty replacement products and procedures. Content covers the practical application of how to control moisture; reduce or eliminate chemicals; protect against dangerous gasses; and ensure clean air.

Suggested Presenters: Robin Pharo, Healthy Homes

### **2009 – 103 Results of a Study on Duct Leakage in Louisiana**

The Louisiana Department of Natural Resources supported a study on duct leakage in Louisiana. In this session the results of that study are presented. Among the topics discussed are an enhanced protocol that simultaneously tests duct leakage; and house leakiness. Among the results of the integrated test are the two RESNET required leakage parameters -House and Duct Leakiness; estimating the size of the "hole to outside"; return duct leakage; and the cost to homeowners resulting from these losses. The talks will describe the test procedures, the parameters of the study, the problems encountered, the results obtained, and comments thereon. In addition, using a statistical analysis of the results, parameters will be given that can be used to determine which homes are worthwhile testing for duct leakage, and on which homes such testing would not be cost effective.

Suggested Presenters: Norman M. Witriol, Building Science Innovators, Myron Katz, Building Science Innovators, Christophor Faust, NoLaSolar

### **2009 – 104 Making Buildings that Last**

This session will identify conditions that a building created today, will have to endure if we stay on the same course. Learn how to build a better product, reduce construction costs & waste, improve performance & comfort, eliminate "Call-Backs", sell your services, and help the environment all at the same time.

Suggested Presenters: Robin Pharo, Healthy Homes

### **2009 – 105 Offer HVAC System Performance Diagnostics**

The air is blowing, the air is warm or cool, but how well is this HVAC system working? Learn to solve your customer's efficiency problems by using the Top 10 performance diagnostic tests used by today's best HVAC techs. Learn to measure and interpret system temperatures, airflows and pressures. The basic test instruments are inexpensive and easy to use. Each of these tests are quick and simple to perform. Essential forms and generic engineering tables are included in the session materials.

Suggested Presenters: Bob Brice, Cenergy, Rob Falke, President, National Comfort Institute

### **2009 – 106 Making Buildings that Last**

This session will identify conditions that a building created today, will have to endure if we stay on the same course. Learn how to build a better product, reduce construction costs & waste, improve performance & comfort, eliminate "Call-Backs", sell your services, and help the environment all at the same time.

Suggested Presenters:  
Robin Pharo, Healthy Homes

**2009 – 107 *Understanding Differences Between IR Imagers, Low Cost-High Cost***

There has been so much discussion and use of IR imagers for various energy applications, that people are not considering the differences between low cost and higher priced imagers. An imager is purchased for a low cost, and then they do not understand the reasons it does not work under certain conditions. A list of imagers from the most popular manufacturers will be discussed and image comparisons of the same inspection area displayed for attendees to "see" the imager differences. Sometimes the least expensive imager is not the most capable imager and sometimes the most expensive imager is not needed.

Suggested Presenters: Bret Monroe, John Snell

**2009 – 108 *“Truth Behind the Walls” – Determining Insulation Quality Installation***

This training will feature how to detect the quality of insulation through infrared technology. It will include a demo session for people to get a hands on. The topics to be included would be: Discovery of Infrared (short video on discovery of infrared), utilizing infrared in Building Envelope (post construction) and identifying defects (insulation, duct leaks, weather stripping etc.), ASTM Standards on insulation inspections etc. The presentation will be based upon 50 homes worth of images that were taken. These were Post Construction (final phase or walk through) inspections done for homeowners who wished to have their homes checked for thermal breaks or insulation quality. Of the group, not a single home complied with the Title 24 insulation installation requirements. The session will be led by Peter Hopkins of SoCal Infrared.

Suggested Presenters: Peter Hopkins, SoCal Infrared

**2009 – 109 *ACI/Home Performance with Energy Star Session: When to Walk & When to Run – Dealing with Crawlspace Correctly***

Frozen pipes, cold floors, indoor air quality problems moisture, rodents & insects, and allergies are some of the consequences of problem crawlspaces. Find ways to solve problems commonly found with new and existing crawlspaces. Find out why crawlspace ventilation and insulating the floor really don't work. And, is the conditioned crawlspace remediation strategy effective everywhere?

Suggested Presenters: To be determined

### **2009 – 110 ACI/Home Performance with Energy Star Session: Central Air Conditioning System RX**

Over sixty percent of residential air conditioning units have either the incorrect charge, incorrect airflow, sized incorrectly and push air through crappy ducts. Find out how system design, sizing, air balancing, duct location, and duct system tightness can impact comfort, equipment life, system efficiency, and building durability and safety. Getting CAC systems right is keystone to efficient and comfortable housing in the south.

Suggested Presenters: To be determined

### **2009 – 111 ACI/Home Performance with Energy Star Session: Whole House Humidity & Moisture: Problems & Solutions**

The windows sweat, the pipes sweat, and the air conditioning ducts sweat. The gasket on the refrigerator is getting moldy. The north side of the roof sheathing is covered with mold. Frogs live in the crawl space; a river runs through the basement when it rains. The vinyl tile is lifting off the floor slab and the paint is coming off the siding. How can I fix them? How do I price them out? Can I make them worse? There's money in that moisture if you know how to diagnosis and deliver comprehensive solutions.

Suggested Presenters: To be determined

### **2009 – 112 ACI/Home Performance with Energy Star Session: Combustion Safety Testing**

Have you ever wondered what all the fuss is over combustion appliances? This session will address the basics of combustion and the latest diagnostic procedures that are used to determine if vented and unvented combustion appliances are operating safely. Learn how carbon monoxide is formed, which appliances are used to diagnose problems, and ensure safe operation.

Suggested Presenters: To be determined

### **2009 – 113 "*Designing the Standard of Sustainability*"**

I propose that I do a CONFERENCE TALK (with two colleagues Christophor Faust and Norman Witriol) addressing problems with building and/or energy conservation standards revolving around the terms: Green Building and or Sustainability. Both terms are loosely defined at best and therefore challenge good results and/or can lead to poorly informed consumers.

For example: LEED for Homes makes no requirements on Durability. Passive Survivability is probably left off the table. Our team shows that it is not only

possible but preferable to thoroughly define what it means for a home to be SUSTAINABLE. We give a definition suitable for New Orleans and think a similar standard is needed for each local... This is a HIGHLY LOCAL DEFINITION.

In November 2006, the New Orleans City Council took the unprecedented step to incorporate a voluntary Standard of Sustainability into its residential building code.

### Voluntary Standard of Sustainability for New Orleans' Homes

Homes that are

- o Comfortable,
- o Safe,
- o Healthy,
- o Well-Constructed,
- o Achieve Net-Zero Energy Use,
- o Provide Passive Survivability, and
- o Designed to be Durable for Thirty Generations.

Norman, Christophor and I gave a talk to Louisiana's Joint Engineering Society in January, 2007, on this subject. The paper supporting the talk can be found at: [www.TheRegenGroup.com](http://www.TheRegenGroup.com)

Over 50 professional engineers attended expecting to see a silly assertion about why and how we can get a building design to withstand natural challenges for 30 generations. However, no one walked out laughing. We convinced the audience that we were logical, methodical and practical.

Suggested Presenters: Myron Katz, Building Science Innovators

### **2009 – 114 "Passive Solar/Environmental Design in New Orleans"**

Passive Solar is usually described for home design choices in cold climates. However, passive design is also appropriate in the southern climate. However, the challenges are quite different. Passive Solar design (in cold climates) concentrates on how to collect and store heat. The complementary approach needed in the south should not be called Passive "Solar" since the goal is not nearly as oriented toward collecting heat... this is the case since the climate in the south is cooling-dominated but, even more than that, the climate in New Orleans is DEHUMIDIFICATION dominated! So the complementary phrase to Passive Solar Design should be Passive Environmental Design.

What are the elements of Passive Environmental Design in New Orleans?

Elements:

TRADITIONAL ( thousands of homes still exist in New Orleans exhibiting these features.)

- Shading
- Passive Ventilation
- Passive Dehumidification
- Radiant Cooling
- Maximize the Hygric (moisture holding capacity) Mass of the home
- High Ceilings
- Pressure equalized rain screen
- Balloon framing
- Hardwood floors
- Open crawl spaces
- Self Venting roofing
- Dark roof shingles
- External window treatments
- Gutter Guards
- Trees
- Large Thermal Mass separated from exterior, ambient conditions
- Cypress Weather boards, studs
- Double-hung windows with full screens
- Shutters
- Transom Windows over every door, even interior doorways.
- Stone shingles

MODERN (The opportunities were not available to home builders of 60 or more years ago.)

- Windows with SHGC < 0.40
- Earth Coupling
- Radiant paint

How should these elements be changed if the home has an active HVAC system for most of the year?

Elements:

- Enclosed Crawl spaces
- Unvented or Cathedralized Attic
- Cellulose insulation

What passive elements of modern home construction in New Orleans are problematic to outright dangerous?

- Vinyl wallpaper on the inside of exterior walls.
- Carpets
- Foam insulation between joists, studs or rafters.

Suggested Presenters: Myron Katz, Building Science Innovators

### **2009 – 115 "Designing for Vinyl Wallpaper in a Historic Building"**

Following Katrina, a 10,000+ sq ft historic building on a prominent business street corner lost its occupant. RHODES FUNERAL HOME.. at St Charles and Louisiana Avenues.

The plan is that the new tenant is Border's Books.  
That company likes to put VINYL WALL PAPER type decals on their walls.

I was hired by the Design-Build engineering consultant to come up with a wall design that would both keep the original wood facade and appearance AND be able to withstand the challenges of a modern commercial building.

My work utilized a very sophisticated, Integrated Energy and Moisture Wall analysis tool, call WUFI (developed in Germany and supported by Oak Ridge National Laboratory).

The result solves a very challenging problem for our climate... Otherwise somewhat unsolved.

Suggested Presenters: Myron Katz, Building Science Innovators

### **2009 – 116 "Avoiding Warped Floors over Open Crawl Spaces"**

Although the IRC fully specifies how to handle open crawl spaces, the specification for enclosed is poorly described. Moreover, it seems that few of those voting at the ICC contemplate either:

1. homes cooled below the ambient dew point. OR
2. soil below the home warmer in the winter than the home is normally conditioned.

Moreover, in concert with these challenges are those that require openings in foundation walls 1/144 the area of the ceiling of crawl spaces... supposedly needed to keep those homes' foundations from failing in a flood.

The soil below homes in New Orleans tends to stay a few degrees from 72 F year round... if not heated by direct sunlight. So homes that are well coupled thermally to such soil will have lower energy use -- both in summer and winter. This favorable temperature regime, is not prevalent elsewhere in the US. In fact, even as far south as Baton Rouge, the soil is significantly cooler in the winter.. so much so that a home coupled to the ground there will have soil temperatures lower than that desired for comfort in the winter.

The climate in New Orleans is very challenging. The dew point during August over 75F. Homes in New Orleans are often cooled below 74F.

This author is the only practitioner who regularly advertises as an expert to solve the insidious and all too common warped floors over open crawl space problem in New Orleans. I'm the only expert regularly recommended by the largest hardwood flooring distributor in southern Louisiana .. reselling to hardwood floor installation companies from Lafayette, LA to Pascagoula, MS.

What do I recommend?

ENCLOSE THE CRAWL SPACE!!... Not too complicated. But I have to invent (and/or plagiarize) the specifications. I have made such suggestions and found a few that work well here.

What are the problems with this?

Do conditioned homes in New Orleans need vented crawl spaces?

Why were homes built over crawl spaces in the first place? Why abandon something that worked?

What's different? The key is the fact that homes are now actively conditioned... quite different than in the past.

DO YOU HAVE TEST DATA?

Yes. Data was collected by a technician employed by Johnson Controls for his own home.

DO YOU HAVE SATISFIED CUSTOMERS who had warped floors and do not any longer?

Yes, Tens to hundreds.

What insulation do you recommend to be placed between the joists along the ceiling of the crawl space?

NONE.

Suggested Presenters: Myron Katz, Building Science Innovators

***2009 – 117 "Superior House and Duct Leakage Testing without a Duct Blaster"***

During 5 years and supported by DOE funding, a house and duct leakage research project developed the following outcomes:

An enhanced protocol that simultaneously tests duct leakage, house leakiness, and perhaps the most serious pressure imbalance responsible for infiltration.

Among the results of the integrated test are:

the two RESNET required leakage parameters: House and Duct Leakiness locating the most problematic duct leaks.

estimating the size of the "hole to outside" at the attic floor.  
A peer-reviewed article was published in ASTM's Journal of Testing and Materials.

The testing protocol was almost adopted by RESNET as an officially accepted alternative to the use of the Duct Blaster (or similar fan pressurization equipment.)  
A characterization of house and duct leakage for Louisiana residences.  
A characterization of the cost to homeowners resulting from these losses.

This talk describes the test procedure, the parameters of the study, results and comments. It also discusses the problems encountered, and draws conclusions about what should be done in a home to make such testing superfluous.

Suggested Presenters: Myron Katz, Building Science Innovators

### **2009 – 118 "Energy Savings via Control"**

I believe that we can save much more energy and do it with much less capital cost if the tool is control instead of energy efficiency..

The RESNET energy rating standard gives little to no credit for control strategies. Why is this perhaps the best choice for a talk? Because it is the subject that RESNET has the most control over. It addresses their rating standard and how it should be changed.

Everyone knows that given the choice:

1. Use an incandescent lamp
2. Use a fluorescent lamp
- 3 Use a light switch.

The third saves the most energy... however, RESNET gives no credit for extra light switches. That's what I'm talking about.

What are the common historic elements of control?

light switches, double hung windows, operable shades and shutters, multiple speed HVAC's, multiple HVAC's, zoned HVAC systems, ceiling fans, etc.

However there are many uncommon elements that are becoming increasingly common:

1. Ductless mini-split HVAC systems.
2. Hydronic cooling
3. LED lamps are often not technically more efficient than CFL lamps but they are more efficacious because, when installed in a ceiling can, much more of the light they generate actually leaves the fixture.
4. Home automation systems, like GreenSwitch (see [www.GreenSwitch.com](http://www.GreenSwitch.com))

claim to save more than 25% of a home's energy consumption.

AND WHAT ABOUT PHANTOM LOADS? If you find a way to control them, you are talking about 5 to 30% of a home's annual consumption.

I propose to give a talk about this. I will find and/or organize data to support the assertion that given a particular set of systems, one can reliably predict ENERGY CONSERVATION -- even when ENERGY EFFICIENCY does not predict the savings.

I think there are some New Orleans connections to this issue, if so they would be associated with humidity. In fact, EnergyGauge, the energy rating software promulgated by FSEC, already gives some credit for ceiling fans. This idea is only poorly mined heretofore.

Suggested Presenters: Myron Katz, Building Science Innovators

### ***2009 – 119 New RESNET IR Standard***

I would not think this would be a session topic, but would suggest perhaps a discussion forum for those wanting to know more about the standard. Whether the timing means the standard has been accepted or not by RESNET, people are going to want to know more details.

Suggested Presenters: All people involved in writing the standard- Bret Montro, John Krigger, Barb Yankie, Rogge Miller, Kelley Parker

## **Commercial Buildings**

### ***2009 – 120 RESNET Commercial HERS index***

As public concern grows over energy and environmental issues there is an emerging need for a HERS Index commercial buildings. RESNET is in the process of developing a rating methodology for commercial buildings. This session will explain the RESNET effort.

Suggested Presenters: David Goldstein, NRDC & Steve Baden, RESNET

### ***2009 – 121 Raters and Commercial Building***

How Senior Raters can help and assist architectural firms and building owners to qualify commercial building for Energy Star Commercial and LEED New Construction. Our firm is currently the LEED Consulting AP for 3 LEED NC projects in Texas, one in New Mexico and working on one in Mexico. I believe that commercial sector is the next best step for experienced senior raters.

Suggested Presenters: L. Javier Ruiz, Southwest Energy Conservation

**2009 – 122 *What's New in Multifamily Buildings: Making Sense of Emerging Standards***

Standard-making bodies and program providers have been paying closer attention to multifamily buildings in recent years. As a result, standards are emerging in the form of pilot programs that will most likely inform future decisions for national standards. But how are local program administrators and energy services providers to make sense of all of this and prepare for future national program launches? Learn about initiatives underway and results to date of EPA's Energy Star for High Rise Multifamily Pilot, USGBC's LEED-h Mid-Rise Pilot, and NYSERDA's Low-Rise Multifamily Pilot and the synergies between these programs that will affect future national programs.

Suggested Presenters: Courtney Moriarta, Steven Winter Associates, Ted Leopkey, US EPA, Doug King, USGBC, Luke Falk, NYSERDA

**2009 – 123 *COMNET - RESNET for Commercial Buildings***

Although EPA's ENERGY STAR program provides operational energy ratings for commercial buildings, there is no national asset value labeling system for commercial buildings yet. We seek to begin the process of developing this system, based in large part on the RESNET framework and fill the need for quality energy performance labels for commercial buildings around the country. This session would describe the general structure of such a system; the tools needed and the obstacles and opportunities present.

Suggested Presenters: Nick Zigelbaum, NRDC, John Wilson, Energy Foundation

**2009 – 124 *Measuring Air Leakage in Residential and High-Rise Buildings***

High rise test results will be presented where regular size super power blower doors were used. Here, gauges controlled as many as four blower doors from one location in order to measure floor to floor, individual floor leakage to outdoors and the leakage of each wall of one apartment. We will show how you can use the same equipment to test entire high rise buildings one day, a house the next, and the capacity of a bathroom fan the next day. We will discuss new market opportunities in the fire suppression market where tests can be sold for \$2,000 each and how air sealing crews can perform new tasks with existing commercial fields. We will discuss LEED apartment testing, the sizing of stairwell and control room systems, measuring slab leakage of high rises for smoke movement and the use of blower doors to augment

equipment. We will show how to find and fix high rise energy and air quality problems.

Suggested Presenters: Colin Genge, President of Retrotec Energy Innovations Ltd.

### ***2009 – 125 Whole Building Approaches to Multifamily***

Any building with attached dwelling units is going to present different challenges than detached dwelling units. Programs and labeling systems have historically allowed low-rise multifamily buildings to be evaluated for energy and overall performance on a unit-by-unit basis. But, when is this approach okay and when does it break down? What opportunities are missed and what are the risks of making incorrect assumptions and conclusions using this approach? When are whole-building approaches more appropriate? Can whole-building approaches be cost effective? Explore the answers to these questions using real-life examples and discuss possible implications for future program standards.

Suggested Presenters: Courtney Moriarta, Steven Winter Associates

### ***2009 – 126 Building Tightness-Blower Door Testing of Multi-Family buildings***

The session would cover best practices and objectives when blower door testing various types of Multi family buildings. MF buildings covered would be attached town/row houses w/ individual street egress, single story flats w/ common egress, MF units above w/ retail/office below, etc. What measurements are required to meet building tightness, ventilation and compartmentalization requirements and objectives.

Suggested Presenters: Rick Karg, RJ Karg Assoc., Steven Winter Assoc. Energy Conservatory, Infiltec

## **Policy Issues**

### ***2009 – 127 Prospective on New Presidential Energy Policy***

In January 2009 the U.S. will have a new president. What will the new administration energy and environmental policies include? This session will feature individuals who have an insight on what the future can look like in Washington.

Suggested Presenters: To be determined

### ***2009 – 128 Prospects for U.S. Carbon Cap and Trade Policy***

Barack Obama and John McCain both have called for a mandatory carbon cap and trade system in the U.S. This session will explore the prospects of the new president and Congress enacting a mandatory carbon cap and trade law.

Suggested Presenters: To be determined

### ***2009 – 129 Energy Efficiency: The Invisible Energy Option***

Despite being the near term most cost effective strategy in addressing climate change and the nation's addiction to foreign oil, energy efficiency is often ignored in the great energy debates in the US. Why is this? What can be done to raise its visibility? This session will explain why energy efficiency has been largely invisible and how to change this.

Suggested Presenter: David Goldstein, Natural Resources Defense Council

### ***2009 – 130 G8 Climate Action Initiative***

The leaders of the largest industrial nations (G8) have identified global climate change and high costs of energy has major threats to the global economy and international security. The G8 sees energy efficiency has a key to addressing these issues. A key element of this effort is improving the energy performance of buildings. The G8 has adopted a series of policy initiatives that addresses the building sector. This session will explain the G8 building energy performance initiatives.

Suggested Presenter: Jens Lausten, International Energy Agency

### ***2009 – 131 Following Katrina, Recommendations of the New Orleans Energy Policy Task Force***

Following Katrina, the New Orleans City Council President formed a task force to create a coherent energy policy for the city. Over 100 volunteers met to create a compendium of ideas on Energy Conservation and Efficiency; Renewable Energy; Integrated Resource Planning; Accountability to Rate-Payers; above Code Construction mandates, awards, standards, mechanisms, best construction practices, mandatory energy ratings, and the creation of a Building Science Institute. This process culminated in a final report on Oct of 2007. In this session the story, process, successes, pitfalls, and outcome of this endeavor will be presented.

Suggested Presenters: Norman M. Witriol, Building Science Innovators, Myron Katz, Building Science Innovators, and Christophor Faust, NoLaSolar,

### ***2009 – 132 PA Home Energy: Launching a Combined New and Existing Homes Program***

PA Home Energy was launched in August 2007 by the West Penn Power Sustainable Energy Fund to promote both Home Performance with ENERGY STAR and ENERGY STAR Qualified New Homes. The first program of its kind in Pennsylvania, PA Home Energy was designed around three objectives: (1) to create an infrastructure of auditors and raters in a state with less than a dozen RESNET or BPI-certified contractors, (2) to promote the value of ENERGY STAR's new and existing homes programs to building professionals and consumers largely unfamiliar with their benefits, and (3) to pilot a dual RESNET/BPI certification requirement for auditors and raters providing services through the program. This presentation will focus on the successes, challenges, and solutions encountered in the program's first eighteen months, and report findings to date regarding "homes on the ground" and energy savings. (This presentation would ideally be combined with program-implementation presentations from other regions.)

Suggested Presenters: Kathy Greely, Performance Systems Development

### ***2009 – 133 Energy Efficiency – Is It Really All That Important?***

What's the difference between energy efficiency and energy conservation? Why is energy efficiency important? How is energy efficiency encouraged and promoted? What is the impact of politics on energy efficiency? This session will discuss these topics and more as energy efficiency, its role and its future are explored.

Suggested Presenters: David Meisegeier, ICF International, Bill Prindle, ICF International, Sam Rashkin, EPA

### ***2009 – 134 Novel Utility Regulation Idea improve Conservation & Renewable***

Our team found that a very novel set of utility regulation can greatly improve the economics of Energy Conservation and PV installations.

Net-metering is undermined whenever a home has no roof facing southward, has an historic home, trees in the way, a roof too old or too new. It is also challenged by the fact that many, many people are tenants but cannot expect to get permission to sit a PV system at his residence. Finally, in some major cities, notably New Orleans, the central business district is serviced by a distribution system that will not allow for electricity to run in the opposite direction. We have found a novel public policy solution for this problem.

There is a very, very good (perhaps the best in the country) subsidy supporting installation of PV for La residents. This is NOT production based, but instead PRICE based. This can lead to the possibility that PV can be installed and be cost-effective AFTER subsidies. Namely the fully amortized cost per kWh could be less than the price sold by the local electricity utility.

The current minimum connection fee undermines both conservation and PV. This can be fixed quite easily.

In La the price of electricity decreases with increasing consumption. By inverting this, both PV and conservation is encouraged.

The thrust of these measures it make the conservation and PV competitive in the marketplace.

Suggested Presenters: Myron Katz, Building Science Innovators

### ***2009 – 135 "New Orleans Energy Policy Task Force"***

At a New Orleans City Council meeting in March of 2007, when the Net-Metering ordinance was up for final passage, many people complained about the process and the narrow scope of the result.

Council President, Oliver Thomas, invited Pres Kabacoff to form a task force to create a coherent energy policy for the city.

Over 400 invitations when out on Easter Sunday and ultimately over 100 volunteers met to create an compendium of ideas on

1. Energy Conservation and Efficiency
2. Renewables.
3. Integrated Resource Planning
4. Accountability to Rate-Payers
5. A catch all committee to take up the rest.. This included:  
Above Code Construction mandates, awards, standards, mechanisms,  
Best Construction practices: creation of an institute  
Mandatory Energy Ratings. etc.

This culminated in a report in Oct of 2007, more public hearings, facilitated meetings various details were formally accepted but the top initiative was to create an EnergySmart Program. When implemented it should be comparable to VEIC, Vermont Energy Investment Corporation, funded by a public benefit fund and responsible for a variety of programs including education, certification of contractors, publicly underwritten private investments in energy conservation and perhaps much more.

This is where we'll tell the story.

We'll explain the process, successes, pitfalls, who tripped us up and how we got there nevertheless.

Suggested Presenters: Myron Katz, Building Science Innovators

## **Financing**

### ***2009 – 136 Fannie Mae New Energy Efficient Mortgage Initiative***

Congress has called on the secondary mortgage market to revitalize the energy efficient mortgage. Fannie Mae has taken the lead in exploring how the energy efficient mortgage can become more effective. This session will feature the efforts that Fannie Mae is taking and give a peek into what new features are being considered.

Suggested Presenter: Jean Ballard, Fannie Mae

### ***2009 – 137 Energy Efficient Mortgages: Is the Time Right, Right Now?***

Over the past 10 to 15 years energy efficient mortgages (EEMs) never really took off. In part this was due to the corresponding housing boom. But now that the boom is over and banks are much more careful about lending money. Further, the recent Housing and Economic Recovery Act of 2008 requires HUD to conduct a study, with DOE and EPA, on barriers to use of energy efficient mortgages and submit findings with recommendations on ways to overcome them. Are the stars finally aligning and is the time right, right now, for EEMs to step into the mainstream?

Suggested Presenters: Tom Hamilton, ICF International, FannieMae, To be determined, Dave Porter, Countrywide Home Loans

### ***2009 – 138 ENERGY STAR Qualified Homes: New Innovations in Energy Efficient Home Financing***

The energy efficient mortgage (EEM) has generally been considered an under-utilized financing option to date. However, this can be traced to very lax lending policies that minimized the advantage of EEM's. The rules are substantially changing now with tight credit, and this financing tool has new possibilities for energy efficient homes. In addition, a new subsidized interest rate mortgage developed in cooperation between the Energy Programs Consortium (EPC) and EPA for buying an ENERGY STAR Qualified Home or make improvements via the Home Performance process will be discussed. Lastly, an update will be

provided on new initiatives by some green banks to promote energy efficiency and green in the residential sector.

Suggested Presenters: Brian Ng, US EPA & Mark Wolfe, EPC

**2009 – 139 *Energy Efficiency and Environmental Certification Trading 101***

There is an emerging opportunity for the home energy rating industry in the monetizing the energy savings from improving a home's energy performance. Such potential economic opportunities includes carbon offsets, environmental emission trading, energy efficiency certificate trading and utility forward capacity trading. Learn what these opportunities are and how the home performance industry take advantage of this emerging market.

Suggested Presenters: To be determined

**2009 – 140 *EEMs and EIMs***

I'd like to see some presentations from successful implementers of EEM mortgages. it's a product i'd like to add, But don't know the precise docs that the banks(s) are looking for in order that the process transact smoothly. Who searches for the contractor and bid etc...