

Audit at Time of Sale SB 437, Sections 31 and 50 Stakeholders' Group Recommendations

Introduction

On February 4, 2010, the Nevada State Energy Commissioner conducted a stakeholders' meeting in Carson City with video conference link to Las Vegas, to begin to develop rules and procedures to implement SB 437, sections 31 and 50. The law, passed in 2007, requires an energy evaluation be offered on homes for sale beginning January 1, 2011.

From February to March 15, interested citizens from all parts of Nevada teleconferenced in 5 committees to analyze the issues and develop recommendations to implement the law. Participants included energy auditors, contractors, realtors, appraisers, and persons from nonprofit and government agencies. The 5 committees focused on:

- (a) the nature of the energy evaluation
- (b) qualifications of the energy evaluator
- (c) Integration of the requirement into State real estate sales procedures
- (d) enforcement of the requirements
- (e) public education concerning the requirement and its benefits

The terms "audit" and "auditor" are standard in the energy evaluation industry, and are used here to refer to the evaluation and the evaluator.

Contents

- I. Guiding Principles**
 - II. Discussion points and conclusions**
 - III. Recommended draft language**
- Appendices**

I. Guiding Principles

The discussion groups considered the following points in their discussions.

- Intent of the legislation
- Existing industry standards for evaluating the energy consumption of a home.
- Ensure value to the consumer
- Accomplishment of energy savings
- Consumer protection
- Affect on sellers and buyers of real estate
- Cost to the seller
- Administrative cost to the State
- Time, equipment and training involved to qualify the auditor
- Proposed federal legislation that would provide financial incentives to homeowners for energy efficiency improvements
- Meaningful reporting data that be contained in a report to customers and to the State
- Interaction with other programs, including Federal initiatives, intended to accomplish energy reductions

II. Discussion points and conclusions

Intent of the legislation

The public input groups focused on the wording of the legislation to guide their analysis. The legislation speaks of:

- evaluating the energy consumption of residential property
- improving energy conservation and energy efficiency in residential property.

The Audit group agreed that the *evaluation* of the energy consumption of residential property requires a comprehensive audit to pinpoint the energy use of the components of the home (walls, windows, air infiltration, etc.). This type of comprehensive audit, which includes an on-site survey and a computer-aided energy load calculation, is well established in the industry. The law requires an *evaluation* of the energy use of a home (not just, for instance, a recital of one year's energy bills), and the comprehensive audit is the one reliable way to quantify the cost and proposed savings of building retrofits. It is thus the one reliable analysis that will achieve the legislation's goal of improving energy conservation and energy efficiency in residential property.

The groups discussed whether a less comprehensive type of survey should be adopted. Some contributors felt the cost of the audit would hinder home sales, or that a low score would stigmatize a home for sale. However, the groups came to consensus that any type of review other than the comprehensive audit would not meet the intent of (1) evaluating a home's energy use and (2) leading the way to improving residential energy use. It was not the goal of the citizens' groups to rewrite or negate the law.

Audit and auditor requirements, and program administration

The home energy auditing industry is well established nationally, with well-developed standards, procedures, and industry self-regulating bodies. It is in the State's interest to review established procedures in the industry, and accept them if appropriate, rather than expending resources to develop procedures from scratch in an area that requires specialized expertise.

The participants came to consensus that procedures of the Residential Energy Services Network (RESNET) cover the needs of the State program, and should be adopted. RESNET and the Building Performance Institute (BPI) are the most influential and well established national home energy organizations.

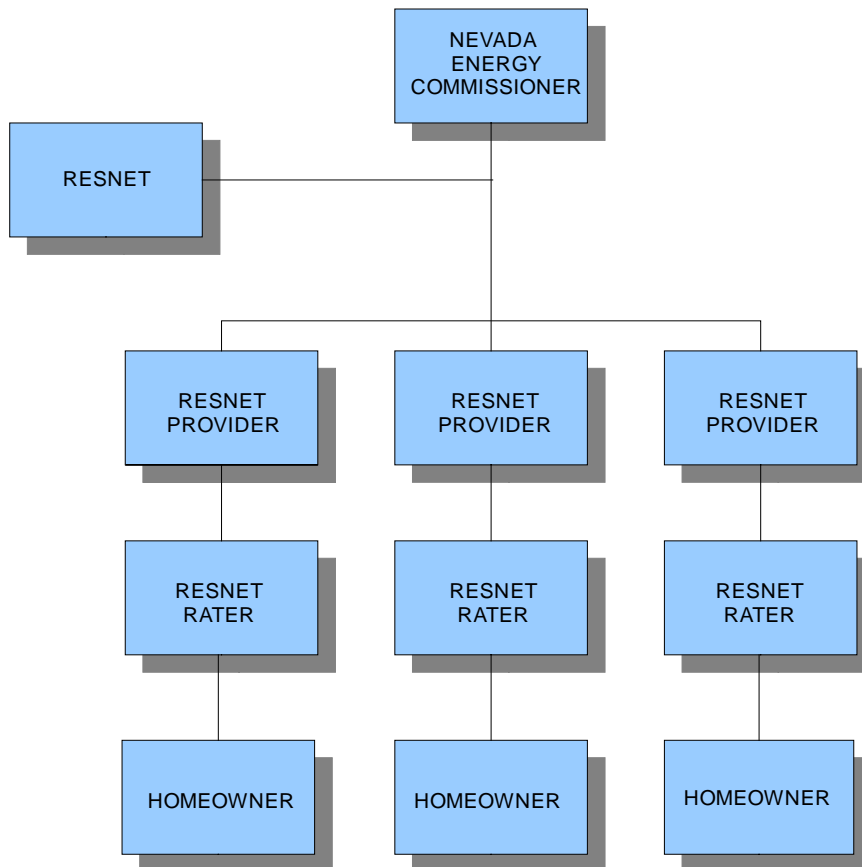
RESNET's purpose is to set the standards for quality of home energy ratings/surveys. Through stringent industry standards and certification, the organization and its members seeks to increase public awareness of home energy ratings and to enhance the technical and ethical performance of home energy raters. Nationally, RESNET is recognized by:

- The mortgage industry for capitalizing energy efficiency in mortgages
- Financial industry for certification of "white tags"
- Federal government for verification of building energy performance for:
 - Federal tax credit qualification
 - EPA ENERGY STAR labeled homes
 - U.S. Department of Energy Building America program
- States for minimum code compliance in 16 states

RESNET has in place the following:

- procedures for conducting comprehensive energy audits
- standards for energy analysis software, and licensing of software to raters
- training and certification of auditors
- continuing education requirements
- quality assurance through an oversight structure of rating providers, funded by auditors
- ethics rules
- a consumer complaint procedure with redress for poor performance

The groups concluded that RESNET covers all program aspects the State compliance program needs precisely, with the exception of insurance and licensing requirements. Since it is also funded by raters themselves, it is the only standard and set of procedures that will fulfill program requirements without causing an insurmountable burden to the State. Enlisting this free-market program in the service of public goals combines the best kind of public/private partnership, reducing the burden to government by using the free market system to accomplish public goals.



structure integrated with State of Nevada energy audit program

RESNET

BPI is the other leading industry organization. Though it does not have the comprehensive structure or procedures of RESNET, it does lead in establishing procedures for combustion safety testing. Combustion safety testing is a crucial part of home energy auditing, as energy retrofit measures (specifically air sealing) affect the safe operation of combustion appliances within the home. Group participants felt it important that BPI combustion testing procedures be incorporated into the State energy audit. The latest RESNET rules incorporate BPI combustion safety testing as part of the comprehensive audit.

See Appendix A for detailed information on RESNET standards and administrative structure.

Precedent government-sponsored home energy audit programs

The group looked into other government-run audit programs of the state of Missouri and Austin, Texas to determine whether these offered a useful precedent. The Austin program allows either BPI or RESNET procedures, and does not provide the kind of oversight we feel Nevada's program should have.

A successful program exists in the City of Las Vegas. . The City has teamed with HomeFree Nevada, the Home Performance with ENERGY STAR (HPwES) affiliate, to run the program jointly, with RESNET rules providing the main oversight for the audit program. Auditors are both RESNET certified auditors and BPI certified Building Analysts. Homeowners who have participated in the program have been satisfied. The administration of the program however requires manpower in addition to the RESNET rating providers, and involves an additional layer of administration and funding that is not necessary for the program to work.

Alternate energy evaluation procedure for new homes

Southern Nevada's building officials are preparing to adopt RESNET analysis as a requirement for permit issuance, with assignment of a HERS score to quantify the energy efficiency of homes. The groups agreed that this should be considered as meeting the energy evaluation requirement of the law, and further recommend that this be adopted as a state-wide requirement, with a HERS score all other requirements of RESNET procedures be met for the issuance of a building permit.

Consumer Value and Protection

The proposed comprehensive audit will deliver tangible value to the consumer for the money spent, with its specific information that provides homeowners a specific path to energy efficiency for their particular home. The audit produces a numeric HERS score which gives concrete information to home buyers with which to compare homes, allows appraisers to give credit to energy efficiency, and provides specific goals for energy improvements.

RESNET procedures provide homeowners redress in the case of improper work or unethical actions by raters. Raters must go through a remedial procedure if they produce substandard work, and will lose their certified status, and their ability to work in the program, if problems warrant.

Auditors should carry liability insurance to protect homeowners, including general liability and automotive. Participants discussed the need for professional liability (errors and omissions) insurance, and found this should not be required. E&O insurance is optional even for professions with much greater liability. The potential for actual monetary damages of any substantial amount in energy auditing are minimal (the most likely errors would cause a homeowner to spend a few thousand dollars on improvements that did not result in the predicted energy savings but would still be an improvement to a home.)

We have suggested insurance standards identical to those required by HomeFree Nevada, which administers the City of Las Vegas' home energy auditing program. This is a successful audit program which runs smoothly.

Auditors should carry the business licenses required by the jurisdiction in which they operate. Auditors operating without a license will be subject to the same penalties as any other business, through existing local regulations. The study groups propose that RESNET providers take on the responsibility to verify their raters' business licenses are current. Nevada's two providers, Energy Conservation Group and American Energy Audit, have concurred with accepting this responsibility.

Bonding of auditors was discussed and found to be both redundant and unnecessary. The above requirements will protect homeowners and provide redress if problems arise. Auditors do not perform construction work and do not need to be regulated as if they were construction contractors.

Coordination with other government and industry programs

RESNET procedures, with its HERS rating, allow homeowners access to programs to assist in energy upgrades.

- National Home Performance with Energy Star and Home Star programs will provide homeowners with financial incentives to perform energy upgrades.
- Energy efficiency mortgages and Energy Improvement Mortgages allow homeowners extra funding based on the home's energy conservation rating.
- HERS scores give appraisers a way to consider the value of energy efficiency features in a home.
- The audit requirement will add a cost to selling a home, which is a medium cost item compared to typical closing cost items. Costs could be negotiated and rolled into mortgages. Federal incentives may be available to help with the cost of the audit. Jurisdictions may choose to assist homeowners by tying financing to the property through taxes or utility bills. Although \$500 was discussed as a ball park price for a comprehensive audit, the market would determine the ultimate value.

Enforcement that the audit is offered by the seller at time of sale, and remedy for noncompliance.

Participants came to consensus that the Real Estate Division should include the audit as a "responsibility of a seller" on the online "Nevada Real Estate Division Residential Disclosure Guide." The Real Estate Division should monitor this as it does the other required disclosures, with the same penalties for noncompliance. The group also recommends the Real Estate Division create a waiver form for the "buyer" if they choose to waive the requirements of the "seller."

The group felt that while the law states that the seller is responsible for providing the evaluation, the payment for the evaluation should remain negotiable between the buyer and seller.

Public education concerning the Audit Program

Discussion group E recognized the need for public education concerning the audit program, and identified numerous ways to get the word out as well as identifying the type of information that should be disseminated. The results of their discussion constitute an action plan rather than draft regulation language, so their recommendations are listed separately. Their report is included in Appendix B.

III. Recommended draft language

1. Home Energy Evaluation Procedures

The State of Nevada shall adopt an audit that conforms to RESNET (Residential Services Network) and BPI (Building Performance Institute) standards for the Energy Audit on Home Sale program.

Auditors shall comply with RESNET and BPI standards.

The Evaluations for the Report shall use RENET Besttest approved software.

Energy Audit Reports shall include:

- a. Improvement Analysis Report
 - calculation of current energy costs
 - calculation of energy costs after improvements
 - total savings
 - HERS Index
 - Information for lenders and appraisers
 - List of itemized recommended improvements with life cycle of item, cost, yearly savings, and simple payback period.
- b. Action Report
 - Ranking of building elements with respect to the largest energy consumption on a component basis
- c. Air Leakage Report
 - Building shell air infiltration
 - Duct leakage
 - Building ventilation information
- d. Lights and Appliances Summary with annual costs
- e. Emissions Report with absolute values for CO₂, SO₂ and NO_x emissions produced by the building
- f. Home Performance with Energy Star Energy Rating Certificate providing a home energy rating index in accordance with RESNET "Mortgage Industry National Home Energy Rating Systems Standards"
- g. RESNET Home Energy Rating Standard Disclosure showing the Rater's affiliation with the home at time the final rating is issued.

2. Audit Program administration

The State audit program shall adopt RESNET standards for administering the Energy Audit on Home Sale program, and shall use the RESNET provider network to monitor audits and ensure program quality.

3. Requirements for Raters

Home energy raters shall comply with the following:

- 1) Auditor must be a RESNET certified HERS Rater
- 2) Auditor must be a member in good standing of RESNET
- 3) Auditors must comply with RESNET standards.
- 4) Auditor must be affiliated with a RESNET Accredited Provider
- 5) Auditor must be subject to Provider's QA/QC (Quality Assurance/Quality Control) processes
- 6) Auditor must full fill all professional development requirements of RESNET
- 7) Auditor must uphold all Standards of Practice, Code of Ethics and Consumer Complaint processes as set forth by RESNET
- 8) Raters must hold current state and local business licenses
- 9) Raters must meet insurance requirements as set forth by Providers and/or appropriate state agency

4. Requirements for Rating Providers

RESNET rating providers shall oversee auditors performing work under the audit program. Rating providers shall comply with the following:

- 1) Provider must be a RESNET member in good standing
- 2) Provider must abide by all RESNET standards, policies and procedures
- 3) Providers will, at a minimum, follow the Mortgage Industry National Home Energy Rating Standards (HERS) standards in sampling audit reports for quality control.
- 4) Provider will provide verification of auditor rater certification to the Energy Commissioner.
- 5) Provider will provide notification of auditor probation, suspension and termination to the Energy Commissioner.
- 6) Provide will requiring insurance and licensing verification from auditors and provide verification to the Energy Commissioner.
- 7) Providers shall report to the Commissioner on a quarterly basis, listing:
 - the number of audits/ratings performed by raters
 - HERS scores for houses audited (in tabular form, without personally identifiable information, for use by Commissioner in gauging energy use)
 - total number of audit reports sampled by Provider for quality assurance review
 - the number of test-outs completed (post-retrofit) and final HERS scores (for use by Commissioner in gauging energy improvements made)
 - the number of audits reviewed that did and did not meet standards
 - disciplinary actions taken
- 8) Providers in Nevada shall ensure raters performing evaluations under this program have:
 - Proof of general liability insurance (\$1,000,000)
 - Proof of workman's compensation insurance
 - Proof of all state and local licenses in which Auditor does work.

5. Other home energy audit programs.

RESNET shall serve as the model program. Other programs may be considered and adopted provided they can demonstrate equivalence to RESNET including:

- 1) a training program for audits, including written and field testing,
- 2) a third-party quality assurance procedures
- 3) remedies for nonperformance
- 4) continuing education
- 5) ethics requirements

6. Procedures related to the real estate sales transaction

The Real Estate Division shall include "Evaluation of the energy consumption of a residential property" as a responsibility of a Seller in the online "Nevada Real Estate Division Residential Disclosure Guide."

The Real Estate Division shall provide a waiver form for the Buyer who chooses to waive the audit required to be offered by the Seller.

Payment for the evaluation shall be negotiable between the buyer and seller.

At time of closing, the title company shall certify one of the following:

- a) The buyer received a comprehensive audit.
- b) The buyer opted out of having a comprehensive audit.
- c) The home was permitted and built according to local building codes that required RESNET analysis and assignment of a HERS score.
- d) The sale or intended sale of the residential property falls under the categories of SB 437, Sections 50.3 and 50.4.

Title companies shall report this information statistically to the Energy Commissioner each quarter.

Appendix A: RESNET Standards and Procedures

Standards

RESNET's purpose is to set the standards for quality of home energy ratings/surveys. Through stringent industry standards and certification, the organization and its members seeks to increase public awareness of home energy ratings and to enhance the technical and ethical performance of home energy raters.

[RESNET Rating Standards of Practice](http://www.natresnet.org/standards/mortgage/RESNET_Mortgage_Industry_National_HERS_Standards_2002.pdf)

http://www.natresnet.org/standards/mortgage/RESNET_Mortgage_Industry_National_HERS_Standards_2002.pdf

Code of Ethics

RESNET's Rating and Home Energy Survey Code of Ethics stresses a home energy rater/home energy survey professional's obligation to present accurate and unbiased information on a home's energy performance in a professional manner and disclose any potential conflicts of interest. Every RESNET certified rater must sign an agreement attesting that they have read and agree to abide by the RESNET Rating Code of Ethics as part of their professional certification. RESNET Rating Providers are responsible for insuring that their certified raters abide by the Code of Ethics and have a progressive disciplinary process in place to deal with violations.

[RESNET Code of Ethics Complaint](http://www.natresnet.org/standards/practice/ethics.htm)

<http://www.natresnet.org/standards/practice/ethics.htm>

Conflict of Interest

RESNET provides written conflict of interest provisions that prohibit undisclosed conflicts of interest but allows waiver with advanced disclosure.

[RESNET Home Energy Rating Standard Disclosure](http://www.natresnet.org/standards/disclosure/default.htm)

<http://www.natresnet.org/standards/disclosure/default.htm>

Complaint Resolution

RESNET's rater members subscribe to high standards of quality and ethics in their rating services. RESNET has adopted a complaint resolution process to address consumer complaints of a rater's services.

[RESNET Rater Complaint Resolution Process](http://www.natresnet.org/consumer/complaint/default.htm)

<http://www.natresnet.org/consumer/complaint/default.htm>

Rater Certification

RESNET Raters are certified based on:

- a. Knowledge base and skill sets defined by RESNET Standards
- b. Training Providers are accredited by RESNET
 - i. Curricula approval
 - ii. Instructors certified by RESNET (must pass examination)
- c. Rater candidates must pass national online test
- d. Rater candidates must perform 5 ratings under the supervision of certified rater
- e. Rater may then be certified by RESNET accredited Rating Provider
- f. Raters must complete 18 hours of professional development through a RESNET Accredited Training Provide or attendance of RESNET conference every three years or pass RESNET rater test.

<http://www.natresnet.org/standards/mortgage/amendments/2009/adopted.htm>

RESNET maintains a directory of certified rater members at [RESNET Certified Rater Directory](http://www.natresnet.org/directory/directory.aspx?MemberTypeID=1).
<http://www.natresnet.org/directory/directory.aspx?MemberTypeID=1>

Quality Assurance

RESNET provides for quality assurance within the Rating industry by:

- Each Rating Provider must employ a certified Quality Assurance Designee
- Quality Assurance Designee must independently verify internal consistency of a minimum 10% of all building input files
- Quality Assurance Designee must independently field verify the accuracy of a minimum of 1% of each certified Rater's homes
- Quality Assurance Designee must annually complete a two hour roundtable and complete 12 hours of attendance at the RESNET conference or 12 hours of continuing education units or document 25 home QA (Quality Assurance) home reviews.
- RESNET monitors the Rating Providers compliance with quality assurance requirements

[RESNET Policy on Quality Assurance of Ratings](http://www.natresnet.org/programs/providers/quality_assurance.htm)

http://www.natresnet.org/programs/providers/quality_assurance.htm

Rater Discipline

RESNET requires Accredited Providers to implement written rater discipline procedures that include progressive discipline involving Probation, Suspension and Termination of certification.

The following is the recommended process for the implementation of the “auditor” qualifications:

Process

RESNET's process sets forth a structure whereby RESNET accredits organizations with Provider status for overseeing and training raters. Raters are required to report to a RESNET Accredited Provider and submit to their over site/training through an established QA/AC (Quality Assurance/Quality Control)/ongoing training process. In turn, the national home energy rating standards requires that RESNET annually randomly select Accredited Rating Providers to conduct a quality assurance review of their files. The purpose of this review is to ensure that the Provider is following the rating quality assurance procedures.

Providers

RESNET Accredited Rating Providers have the responsibility of ensuring the quality of rating services. Rating Providers are responsible for administering rating programs. These responsibilities include:

- Certification of raters
- Selection of accredited rating software programs
- Rating quality assurance Marketing of rating/surveyor services RESNET maintains a directory of certified rater members at http://www.natresnet.org/programs/providers/quality_assurance.htm

The “Audit”

RESNET is a flexible program that covers procedures and standards for different levels of energy assessment..

Categories of energy audits in the RESNET National Home Energy Audit Standard

- Home Energy Survey
 - On-Line Home Energy Survey

- In-Home Home Energy Survey
- Diagnostic Home Energy Survey
- Comprehensive Home Energy Audit

RESNET National Standard for Home Energy Audits

On-line Energy Survey

The On-Line Home Energy Survey shall collect substantially the same data and information and shall be subject to the same limitations as the In-Home Home Energy Survey. On-line Home Energy Survey instruments shall be hosted by a RESNET accredited Survey Provider or another organization approved by RESNET and the on-line instrument shall be approved by RESNET

In-Home Energy Survey

This Home Energy survey shall include on-site visual inspection of the energy features of the dwelling unit, and documentation of its general condition, including envelope features and ages; equipment types, characteristics and ages; and, appliance and lighting characteristics. Where available, the In-Home Home Energy Survey shall include a review of utility use and billing history.

The In-Home Home Energy Survey is a visual inspection only and does not require the use of a blower door, duct leakage test, an infrared camera or other test equipment. An In-Home Home Energy Survey is not a prerequisite for the Diagnostic Home Energy Survey or Comprehensive Home Energy Audit.

Diagnostic/Field Rating Inspection

A homeowner may elect to go through this process with or without a prior In-Home Home Energy Survey. The Diagnostic Home Energy Survey includes all of the provisions of the In-Home Energy Survey, with diagnostic testing and reporting.

Comprehensive Energy Audit

The purpose of the Comprehensive Home Energy Audit is to cause improvement to be made to the audited home. The Comprehensive Audit includes an evaluation, performance testing and proposed treatments for improvement of an existing home. The evaluation shall include a review of the data collected from any previous energy audit or survey, any further required measurement and performance testing, combustion appliance testing, and a computerized simulation analysis of the home's energy performance and a calculation of the energy and environmental savings from improving the energy performance of the home. The performance analysis shall determine the scope of work for the home. The qualified Auditor shall guide the homeowner to a Certified Contractor. A homeowner may elect to go through this process without a requirement of a prior Home Energy Survey or a Diagnostic Energy Survey.

Appendix B: Provisions for Information

PURPOSE

Group E was tasked with creating "Provisions for Information" to describe all public outreach and marketing, including financing, for establishing a program to evaluate energy consumption of residential property for its sale, as described in SB 358 section 1.69 of 2009.

OVERVIEW

Group E developed an overall description of a plan to provide outreach, education, communication, and marketing (collectively referred to as communication) of the new program to a variety of target audiences. Some of these audiences can also be used as resources for communication channels, as they themselves have internal tools for this effort, and customers or constituencies with which they regularly interact.

Reaching each audience effectively would require specific tactics, the detailed descriptions of which are beyond the scope of this document; however, they fall into several general categories: media, Internet, electronic, social networking, and public events.

It is anticipated that basic and continuing education will be ongoing needs for this program, especially for some of the target groups, such as homeowners and consumers. Therefore education will need to be an important component of communication.

It was also determined that whenever possible, the communication for this new state program should interface positively with other similar programs, such as ENERGY STAR® for New Homes, Home Performance with ENERGY STAR®, L.E.E.D. (Leadership in Energy & Environmental Design) for Homes, Home Star, Home Free, Green Chips, and P.A.C.E. (Property Assess Clean Energy), among others, and build on the informational frameworks already established by those programs. This cross-communication will serve to reinforce the overall messages of mutually compatible programs in the minds and hearts of all target audiences.

It is recommended that the outreach be implemented in a minimum of three stages: First, a general conditioning of the market; Second, information to include basic education and resources for further information; Third, refinement, reinforcement, and amplification of the messages and tactics.

The Nevada Energy Commissioner (NEC) and Southwest Energy Efficiency Project (SWEEP) will ultimately be responsible for initiating and overseeing the development of the specific tactics to be used in the implementation of the program communication strategies; however, this document recommends several which could be considered.

TARGET AUDIENCES

The new program will affect a variety of target audiences; therefore, effective communication strategies will be required for each of them, with some crossover potentially possible. The audiences include but are not necessarily limited to the following:

- Homeowners
- Consumers/Renters
- Lenders
- Banks
- Appraisers
- REALTORS □
- Real estate licensees
- Real estate companies
- Title companies

- Municipal governments
- Chambers of Commerce
- Public Utility Commission of Nevada
- Public utility companies
- Municipal utility companies
- Environmental and conservation groups
- Non-profit agencies
- Homeowners' associations
- Property management companies
- Building performance professionals
- Homebuilders
- Contractors and building trades
- Designer/specifiers such as architects and engineers
- Professional trade organizations

RESOURCES FOR COMMUNICATION

The following is a brief, but not exhaustive list of potential organizations that may be favorably disposed toward this new program and possess avenues that could be utilized as communication channels either internally or externally, or both. Most, if not all, have Websites and other means of contacting their constituencies.

RESNET (Residential Energy Services Network)

This is the national oversight organization which accredits home energy rating providers and raters and ensures consistency in their methodology. Their Website is a valuable resource for building performance professionals and others interested in the technicalities of home energy audits.

BPI (Building Performance Institute)

The leading developer of technical standards for home performance and weatherization retrofit work that are recognized across North America. From these standards, they have developed training programs, professional credentialing for individuals and company accreditations – including quality assurance programs – that help raise the bar in home performance contracting.

Real estate organizations

These include the Greater Las Vegas Association of REALTORS, and the Reno-Sparks Association of REALTORS, as well as the Nevada Association of REALTORS, and the Nevada State Division of Real Estate. All have members with whom they regularly communicate either locally or on a statewide level. They also sponsor continuing education events and classes for real estate licensees.

Lending organizations

Groups such as the Mortgage Bankers Association, and others which could potentially offer financing for home improvements under this program, would have a great opportunity to seek customers using program-compatible messages.

Appraisal organizations

These include the Coalition of Appraisers in Nevada, the Las Vegas and Reno-Carson- Tahoe chapters. They all have members with whom they regularly communicate, and they, too, sponsor continuing education events and classes for appraisal licensees.

Training and Education Organizations

Trade schools, RESNET & BPI certified trainers and facilities, universities, career training academies and community colleges have the ability to communicate, facilitate and reach the workforce.

US Green Building Council (USGBC)

Local chapters of this national organization have many members, including designer/specifiers such as architects and engineers. They hold regular meetings and events and serve as a resource concerning green construction and retrofitting. Additionally, they certify building professionals to do the qualifying work for L.E.E.D. (Leadership in Energy & Environmental Design) designation of buildings.

Nevada ENERGY STAR® Partners - GREEN Alliance

This organization of professionals associated with energy performance, energy conservation, and green jobs began as the Nevada ENERGY STAR Partnership in Southern Nevada, and has now broadened its scope to include Northern Nevada. It serves as a networking and cooperative advertising/marketing resource for its members and has a wide communication reach among them, and consequently, their audiences.

News and information media

The Green Alliance's budget for media placement, including newspapers, magazines, billboards, and radio could be made available for this program.

Public and municipal utilities

Public electric and gas companies are required to participate in energy conservation programs. They send monthly bills to their customers, as well as frequent bill inserts and newsletters that could be utilized for communication. They also have Websites. In addition, Southwest Gas has an Energy Services call center and contractor referral program which may be available for use in this program.

Southern Nevada Water Authority (SNWA) & Truckee Meadows Water Authority

These organizations are not-for-profit, community-owned water utilities, overseen by elected officials and citizen appointees from Southern and Northern Nevada, respectively. They oversee all regional water issues including supply and distribution, and are very influential in their jurisdictions.

Environmental/conservation organizations

Examples include Sierra Club, PLAN (Progressive Leadership Alliance of Nevada), Audubon Society, The Nature Conservancy, Center for Biological Diversity, Nevada Clean Energy Coalition, among others. These have large membership constituencies with whom they regularly communicate via Websites, electronic media, social networking sites, newsletters and events. Some organizations also conduct meetings, usually open to the general public. Besides its obvious interest in energy conservation, the Sierra Club in particular is very proactive in promoting renewable energy and green jobs for Nevada.

Labor and professional trade organizations

These organizations are very interested in the potential for green jobs that the new program and its possible offshoots may present. As such, they could be used as a communication channel for their membership.

Homebuilder associations

They have newsletters for their members, and they hold regular membership as well as committee meetings.

Grant and Funding Opportunities

New and existing state and federal programs available for funding weatherization, retrofit, auditing and other services.

Marketing and public relations organizations

For Profit and Non-Profit companies identified with green market programs and incentives.

Chambers of Commerce

These pro-business organizations can promote the opportunities for green jobs with their membership.

Home owners associations (HOAs)

Many HOAs conduct monthly meetings for their member homeowners - a perfect opportunity to communicate with them about the program.

Building performance professionals

These are likely to be the qualified companies who will perform audits or ancillary services; their communication to reach potential customers could be enhanced with program- compatible messages. They also conduct on the job training for their home energy raters.

Public Utilities Commission of Nevada

This organization is influential throughout the state and provides approvals for utility companies to participate in energy programs.

Local school districts

These organizations have the capability of reaching many people due to their stature in the communities they serve.

FINANCING/FUNDING

It is beyond the scope of this document to establish or enumerate potential funding sources for this program. It appears that at a minimum funding would be needed for the following:

- Production and placement of media
- Production of program collaterals such as brochures, flyers, etc.
- Other communication expenses such as Website creation and maintenance, conducting of public events, etc.
- Creation and maintenance of a call center as a central information and referral source.
- Financing for home energy improvements undertaken by participating homeowners

It is recommended that wherever possible the program should capture and utilize existing or incipient financial mechanisms created both locally and nationally, such as Green Chips and Home Star. Opportunities for federal grants, such as State Energy Grants from the US Department of Energy should also be explored and applied for, where feasible.

In addition, it is recommended that Energy Efficient Mortgages (EEMs), Energy Improvement Mortgages (EIMs) and Green Mortgages be explored and utilized by the lending industry to their fullest potential.

IMPLEMENTATION

Prior to implementation, Group E recommends that concise, coherent program messages be developed, i.e. a "brand identity," that might be modified slightly yet would remain consistent for all target audiences. It would be very valuable to create a program Website and have all messages drive people to the site as a resource for all information. In addition, a centralized call center would serve as a resource for those who do not have computer access.

It is recommended that communication be implemented in stages as follows:

Preliminary Stage - messages to condition the market

Initial Website development and "soft" messages about the value of energy efficiency and home energy improvements.

During this stage the program Website should be developed, and pages created on social networking sites, such as MySpace, Facebook and Twitter. Program messaging can drive people to the Website as a central repository for information; however, it should be recognized that since not all members of a target audience are necessarily computer literate or have ready access to a computer, other means must be created for people to access program information and resources. One option might be a centralized call center.

Stage I - messages will build general awareness prior to program introduction

- The home energy audit is a legal requirement commencing Jan. 01, 2011
- What is a home energy audit and why is it valuable?
- What are the options for the seller and buyer of a home?
- Who can do energy audits/what to look for when selecting an energy auditor
- How to obtain more information

Stage I will also include educational activities geared toward housing industry and building performance professionals so they are ready for program implementation.

Stage II - will evaluate, revise and expand on the targeted messages as well as reinforce them through a communication and education campaign such as:

- On-line Webinars
- Public informational events
- Continuing education for target audiences
- Program evaluation
- Program updates
- Traditional multi-media

SUMMARY

Under the guidance of the NEC and SWEEP, an outreach development team should create the "brand" for this program, with appropriate messages that are consistent yet flexible for all target audiences identified in this document. This team would also be charged with developing the program materials and resources necessary for the initial stage of the program, and engaging all the available channels for communication also described in this document. Communication should be implemented in stages, as determined by the NEC and SWEEP, and described above.

Appendix C: Discussion Group Participants

Group A: The Audit

Paul Taylor
Ron Clark
Don C Jeppson
Kelly Vagianos
Kipp Cooper
Les Lazareck
Chris Cadwell
jtoth@att.net
Mary Winston
michele@boggis.com
Paul Andricopulos [P](#)
Richard Sevigny
abhilasha@uerlv.com
matt@newberryinspections.com
Cordell Sanders
Kathy Grant
Scott Terrell
Annette Bubak
Tracy Fogelsong
Mary Venable
dstapleton@wrec.coop;
legacybuilders@ltol.com;
David Zheng
Erik King
Jess Traver
Jenny Reese

Group B: The Auditor

"Don Jeppson" <dcjeppson@washoecounty.us>,
"Daniel Rose" <dan@88training.com>,
"Jenny Reese" <jennyw@carraranv.com>,
"Kipp Cooper" <kcooper@nevadaenergyaudit.com>,
"Leon Mills" <energyinsight@nvbell.net>,
"Matt Newberry" <matt@newberryinspections.com>,
"Paul Andricopulos" <Paul.Andricopulos@cityofhenderson.com>,
"Robert Sprague" <robertsprague@sustainableenergyservices.biz>,
"Richard Sevigny" <SEVIGNYR@co.clark.nv.us>,
"Walter Michaels" <waltm@jusalt.com>,
"Tracy Foglesong" <Tracy@LoveECG.com>
Cordell Sanders" <cls@smw88.com>,
Jess Traver <jesst@thebuilders.com>

Group C: The Sales Transaction

Paul Andricopulos

Karen Miller
Jenny Reese
Kipp Cooper
Brian Plaster
Linda Rheinberger

Group D: Compliance and Enforcement

Paul Andricopulos
Kipp Cooper
Steve Gannon
Alison Haugh
Don Jeppson
Walt Michaels
Karen Miller
Tom Perrigo
Brian Plaster
Jenny Reese
Cordell Sanders
Jess Traver
Marco Velotta
Mary Venable

Group E, Provisions for Information

Lou Baker	Energy Factories of Nevada Inc.
Annette Bubak	NVESP – GREEN Alliance/Distinct ENERGY Performance
Kipp Cooper	Nevada Energy Audit, LLC
Jacqueline Garcia-Green	Environmental Business Network Campaign
Joe Johnson	Lobbyist, Sierra Club, Toiyabe Chapter
Pam Kinkade	Coalition of Appraisers of Nevada & the Las Vegas Chapter of the Appraisal Institute
Joanne Levy	Levy Realty Co./Nevada Association of REALTORS®
Karen Miller	KMM's Total Green Solutions
Rita Ransom	Sierra Club, Southern Nevada Group
Linda Rheinberger	Nevada Association of REALTORS ☐
Matthew Weinman	Environmental Alternatives