

**Vermont Department of Public Service  
ACCREDITATION PROCEDURE  
FOR  
HOME ENERGY RATING SYSTEM PROVIDERS**

Approved and Adopted: May 22, 2003  
Effective Date: July 1, 2003

**1. Purpose**

The Vermont Department of Public Service establishes this accreditation procedure for HERS providers in compliance with 21 V.S.A. § 267(a). The purpose of this procedure is to ensure that accurate and consistent home energy ratings are performed by accredited HERS providers in Vermont and to promote an objective, cost-effective, sustainable home energy rating process as a compliance method for residential building energy codes; as qualification for energy programs designed to reach specific energy saving goals; and as a way to provide Vermont's housing market the ability to differentiate residences based on their energy efficiency.

**2. Accreditation Criteria**

HERS providers seeking accreditation in Vermont must submit an Accreditation Application to the Vermont Department of Public Service ("DPS"). In order to receive either initial or renewal accreditation, a HERS provider must meet the following minimum standards:

**2.1. Minimum Rater Training Standards:**

A HERS provider must adhere to the procedures developed and adopted by the Residential Energy Services Network (RESNET) for rater training and certification as described in the RESNET National Home Energy Rater Training and Certifying Standard that was adopted by RESNET on October 17, 2000, and incorporated in the Mortgage Industry National Home Energy Rating Standard as Chapter Two on June 15, 2002. This Standard is included as Attachment II.

Each person seeking a position with a HERS provider as a full rater, data collector, or data analyst shall receive training by a RESNET accredited rater training organization prior to performing rating tasks without supervision. The training shall be conducted in accordance with the RESNET National Home Energy Rater Training and Certifying Standard and shall include at a minimum the following features:

- a. Classroom training. Each rater shall receive classroom training in accordance with the RESNET National Home Energy Rater Training and Certifying Standard.
- b. Written examination. Each rater shall pass a written examination that evaluates the rater's understanding of the subjects in paragraph (a) of this section.

- c. Field training. Each rater shall perform two ratings (or portions of ratings for those seeking to be data collectors or data analysts), including software operations, in the presence of trainers.
- d. Probationary period. Each rater shall complete a probationary period where close supervision is provided. This period covers a minimum of five ratings, after which the supervisor shall determine if additional training is needed.
- e. Challenge test. A challenge test may be taken, which, if passed in all competencies, will obviate the classroom training requirement only.
- f. Continuing education. Each rater shall complete a minimum of 12 hours of approved continuing education during each 3-year period of certification.
- g. Recertification. Each rater shall be recertified at least every 3 years.

**2.2. HERS Provider’s Operation Policies and Procedures must be written and provide for the following:**

- a. Ratings from plans. If the HERS provider performs ratings from plans, the rating must be labeled as “from plans.” Such ratings may be used to demonstrate energy code compliance or programmatic qualification but must be confirmed through a field inspection upon completion of construction.
- b. Field inspection of all homes.
- c. Blower Door Test completed on all homes claiming credit for reduced air infiltration.
- d. Duct testing completed on all homes claiming credit for reduced air distribution system leakage.
- e. When applicable, improvement analysis given to home owner shall include:
  - 1) Recommended improvements with the cost basis supplied for each recommendation by the HERS provider or the rater receiving quotes
  - 2) Estimated energy and cost savings of improvements based upon assumptions contained in the software program
- f. Written conflict of interest provisions that prohibit undisclosed conflicts of interest but allow waiver with advanced disclosure. For example, raters could be allowed to install measures recommended by the rating with advance disclosure to the homeowner and the HERS provider of financial and other interests.
- g. Written rater discipline procedures that includes progressive discipline involving Probation - Suspension – Termination
- h. Written rater quality control process that contains provision for review of ratings and field evaluation of raters and ratings where problems are identified.
- i. A manual containing procedures for the on-site collection of data must be provided to data collectors.

### **2.3. Minimum Requirements for HERS Provider’s Home Energy Rating Reports**

- a. Stars (1-5+)
- b. Points (1 - 100)
- c. Projected Energy Costs
- d. Projected Energy Use/Savings
- e. Where applicable, energy, economic, and mortgage reports that at a minimum provide the following information:
  - 1) Indication of the energy mortgage programs for which the property qualifies or may qualify.
  - 2) Where property improvements are proposed, improvement analysis reports that include, at a minimum, the following information:
    - The basis of comparison from which costs and savings are derived (i.e. are they projected based on a comparison with the existing home or are they projected from plans of a new home based on a comparison with a recognized, national home energy efficiency standard like the HERS Energy-Efficient Reference home).
    - The incremental cost for each proposed improvement.
    - The anticipated lifetime of the proposed improvement measures.
    - The total annual cost savings resulting from all improvements when taken in aggregate as compared with the annual purchased energy costs for the unimproved property.

### **2.4. Minimum Technical Requirements for Home Energy Rating Software Programs**

Software used by accredited HERS providers must adhere to the Vermont Home Energy Rating Technical Guidelines (“Technical Guidelines”) established by the Vermont Department of Public Service effective on July 1, 2003. The Technical Guidelines are included as Attachment I of this accreditation procedure. HERS providers must provide documentation that the home energy rating software program used by the HERS provider passed BESTEST developed by the National Renewable Energy Laboratory, “Home Energy Rating System Building Energy Simulation Test (HERS BESTEST),” Vols. 1 & 2 (NREL/TP-472-7332), using the criteria and example acceptability ranges as set forth in Appendix H of that document. In order to be certified for the purpose of providing home energy ratings, an energy analysis (rating) tool must be equivalent to Architectural Energy Corporation’s REMrate v.10.3 (Vermont) and it must include the following features:

- a. Estimate the total annual purchased energy consumption associated with minimum rated features set forth in Section B.5 of the Technical Guidelines; and
- b. Calculate energy use of non-rated energy consuming devices set forth in Section B.7 of the Technical Guidelines; and
- c. Reflect the operating condition assumptions described in Section B.6 of the Technical

Guidelines; and

- d. Calculate annual purchased energy consumption for each building type which ratings are provided.

Energy analysis tools certified under this section must be retested and recertified if a new version of the tool is released that includes changes to the engineering algorithms.

## **2.5. Minimum requirements for economic analysis reports.**

If the rating system provides reports based on economic analysis, the following parameters, as used in the analyses, shall be documented as follows:

- a. All maintenance and any other costs considered by the economic analyses conducted.
- b. The incremental cost for each proposed improvement measures and the cost basis (i.e. rater estimate, written bid, contract, or other specific cost) for each proposed improvement.
- c. All mortgage interest, general inflation, fuel escalation, personal discount and any other periodic rates considered by any economic analysis conducted.
- d. The time period(s) considered by any economic analysis conducted on the improvement measure.
- e. The economic “value types” reported by the economic analysis conducted.

## **2.6. Minimum Requirements for Quality Control by HERS Providers**

HERS providers must establish and maintain the following quality control policies and procedures:

- a. All HERS providers shall establish a quality assurance plan that includes–
  - Periodic peer review and reevaluation of raters;
  - Random auditing of each rater’s work;
  - Evaluation of the training program by raters after field experience;
  - Customer evaluation of rating services;
  - Random review of the inputs into the rating tool to ensure that they are consistent with the data collected in the field; and
  - Verification of the accuracy and completion of the input forms and output of the first five ratings performed by each rater.
- b. All HERS providers shall maintain a permanent quality assurance file that is updated at least every two years or when changes to the system are made, and contains:
  - A description of local rate structure for electricity, gas and other locally used fuels;
  - A description of climatological data (including interpolation methods) used;
  - A description of the data storage and maintenance systems including:
    - Software for data base,
    - Training for data entry personnel, and

- Data quality assurance procedures that will be exercised:
  - A description of each rating tool that the HERS provider uses including a list of which home types the tool supports;
  - The results and date of the certified accuracy test conducted for the rating tool;
  - An example of the rating outputs produced;
  - The materials and tests used to provide training for home energy raters;
  - The materials used to document the site data collection procedures; and
  - A description of the individual elements of the quality assurance plan set forth in paragraph (a) of this section.
- c. All HERS providers shall maintain an electronic database of information for each home rated. The minimum content of the database is –
  - A unique file reference of ID number;
  - Date of on-site inspection;
  - Raters name;
  - Tool name and version;
  - Identification of climate data used for the rating;
  - Type of rating, either projected or confirmed;
  - Use of rating, either –
    - 1) Time of sale rating;
    - 2) Pre-home improvement rating;
    - 3) Post home improvement rating; or
    - 4) Information only rating;
  - Address of Rated Home;
  - Home type;
  - Floor area of conditioned space;
  - Fuel types used by building heating, cooling and water heating systems;
  - Minimum rated feature energy efficiency data used to determine the rating;
  - In the four categories of heating, cooling, water heating and all other uses, the:
    - 1) Estimated annual purchased energy consumption in total;
    - 2) Estimated annual purchased energy consumption by fuel;
    - 3) Estimated annual energy costs in total; and
    - 4) Estimated annual energy cost by fuel.
  - Estimated total annual energy cost for all uses; and
  - Rating score of the Rated Home on 0-100 points scale and 1-5+ stars category
  - For 10% or for 500 of the homes rated annually, whichever is less, any energy efficiency improvements made to the home and date of completion.

## **2.7. Required Supporting Documents.**

Applicants for HERS provider accreditation must submit statements indicating the involvement of various market sectors with the HERS provider. These statements may be in the form of letters of recommendation. Specific examples of market partners that can positively impact the success of a rating system include:

- Electric and gas utilities
- Home builders
- Real estate industry
- Mortgage lenders

## **3. Accreditation Process**

### **3.1. Accrediting Body**

HERS provider accreditation is through the Vermont Department of Public Service.

### **3.2. Where to File Accreditation Application**

A HERS provider seeking accreditation must file its application with the Vermont Department of Public Service. Upon receiving an application, the Department of Public Service will review the application using the accreditation standards set forth herein.

### **3.3. Minimum Criteria**

HERS providers must meet the minimum accreditation criteria in Section 2 in order to receive Vermont accreditation.

### **3.4. Review and Notification**

- a. Following receipt of the completed Accreditation Application, the Vermont Department of Public Service will review the submissions and issue a determination of whether the applicant meets the minimum accreditation standard. If the Department of Public Service grants the accreditation, it will issue a unique HERS provider accreditation identification number. This initial accreditation is valid for a period of three years from the date of issuance.
- b. If the Vermont Department of Public Service determines that the applicant does not meet the accreditation standard, it shall inform the HERS provider, identify where the applicant failed to meet the accreditation standard, and inform the applicant of its right to review under Section 6.

### **3.5. Responsibilities of Accredited HERS Providers**

The accredited HERS provider is responsible for insuring that all of the ratings issued by the system comply with all of the criteria by which the system was accredited.

## **4. Renewal**

### **4.1. HERS provider application for renewal**

HERS providers seeking to renew their accreditation must complete and submit an Accreditation Application no later than 120 days prior to the expiration of the current three-year accreditation period, to assure the current accreditation does not expire prior to a final decision of the Department of Public Service. The Department of Public Service will process renewal applications in the same manner as an initial application.

### **4.2. Late Application**

Applications for renewal received later than specified in Section 4.1 will be processed, to the extent feasible, so that the accreditation does not expire. The Department of Public Service may grant an extension of the current accreditation period, for good cause, while a late application for renewal is pending.

### **4.3. Accreditation Renewals**

Applicants for accreditation renewal that continue to meet the minimum accreditation criteria of Section 2 will be granted an accreditation for a renewal period of three years. The Vermont Department of Public Service will issue a renewal of the unique HERS provider accreditation identification number.

### **4.4. Accreditation Not Renewed**

If the Department of Public Service denies an application for accreditation renewal, it will inform the HERS provider, identify where the applicant failed to meet the accreditation standard, and inform the applicant of its right to review under Section 6. When a HERS providers' renewal application has been denied, the current accreditation will not expire until the last day for seeking review of the final decision of the Department of Public Service or such later date as established by order of a reviewing court.

### **4.5. Program Element Changes During Period of Accreditation**

It is the HERS provider's responsibility to provide the Department of Public Service with any proposed changes in the provider's minimum home energy rater certification procedures, minimum

rater training standards, minimum rater certification standards, operation policies and procedures, information contained in the rating report or other information that effects its meeting the minimum accreditation criteria, prior to implementing such changes. Proposed changes will be evaluated by the Department of Public Service in the same manner as the original or renewal application. If the Department of Public Service determines the HERS provider no longer meets the accreditation criteria, the Department of Public Service may revoke the accreditation as provided in Section 5.

#### **4.6. Rating Tool Changes**

Should changes that affect the calculated results of the home energy rating occur in the engineering algorithms of the HERS provider's tool, the HERS provider must submit verification to the Department of Public Service that the tool continues to meet the BESTEST criteria and Section 2.4. If the Department of Public Service determines the HERS Provider no longer meets the accreditation criteria, the Department of Public Service may revoke the accreditation as provided in Section 5.

### **5. Revocation of Accreditation**

#### **5.1. Applicability of this section**

This section applies to revocation of accreditation during the period in which a provider is accredited. It does not apply to denial of an original accreditation application or to denial of accreditation renewal.

#### **5.2. For failure to correct deficiencies of HERS provider**

- a. If the Department of Public Service determines at any time that a HERS provider has failed to adhere to the accreditation requirements, the Department of Public Service shall notify the HERS provider of the specified deficiencies and identify specific corrective action required to meet the accreditation criteria. Within 30 days of the date of the notification of the deficiencies, the HERS provider may file a request for a hearing with the Vermont Department of Public Service or otherwise demonstrate compliance with all accreditation criteria.
- b. If, after opportunity for hearing, the HERS provider fails to demonstrate that the specified deficiencies have been remedied, the Department of Public Service may revoke the HERS provider's accreditation. The HERS provider will be required to cease representing themselves as accredited until such time as the HERS provider receives subsequent accreditation from the Department of Public Service.

#### **5.3. For Cause**

The Department of Public Service may revoke the accreditation issued to any HERS provider if it determines, after opportunity for hearing, that the HERS provider no longer meets the



accreditation requirements, or for cause, including but not limited to any of the following circumstances:

- a. Upon a determination by the Department of Public Service that a HERS provider has acted in such a manner as to impair the objectivity or integrity of the accreditation process including, but not limited to submission of false information to the Department of Public Service;
- b. Failure to submit any material information required to be submitted by the HERS provider, in connection with obtaining or maintaining accreditation;
- c. Knowingly or negligently issuing ratings that fail to meet all of the accreditation criteria;
- d. Misrepresentation by the HERS provider in advertising or promotional materials of its accreditation status in general or with respect to any service provided by the HERS provider;
- e. HERS provider goes out of business;
- f. Investigated and validated consumer complaints;
- g. Willful misconduct; or
- h. Failure to disclose a self-serving interest.

#### **5.4. Extension**

A HERS provider which timely seeks review of a determination to revoke its accreditation may request that its accreditation be extended until a final decision on review is issued.

### **6. Review Procedures for Accreditation Application Not Being Approved**

#### **6.1. Notification**

The Department of Public Service will provide notice that an accreditation application was not approved to the HERS provider by certified mail, return receipt requested. The notice will explain the basis for the determination and inform the HERS provider of the review procedures.

#### **6.2. Review**

In the event that an accreditation application was not approved, the HERS provider shall have the right to request review of the determination by the Commissioner of the Department of Public Service. The HERS provider must request review within 30 days after the date of the notice. A request for review shall be in writing and sent by certified mail or other method, which provides evidence of delivery to the Department of Public Service and shall specify the basis for the request for review. The Commissioner may designate any employee of the Department of Public Service who was not involved in the initial determination to issue a final decision on review. The Commissioner, or designee, may request additional information from the HERS provider prior to issuing a final decision on review.

## **7. Revision of Accreditation Procedures**

The Department of Public Service may revise or amend this accreditation procedure as warranted. Circumstances that may lead to such revision or amendment include but are not limited to the following: changes in law; technological innovations; and proposals for change from interested parties.

### **7.1. Process for submitting proposals to change accreditation procedures:**

Proposals to change these accreditation procedures may be submitted in writing, at any time, to the Department of Public Service. Proposals to change these accreditation procedures shall include the following:

- a. Identification of the proposal to change, including the following minimum information:
  - 1) Proponent(s) full name(s),
  - 2) Organizational affiliation(s) or representation(s),
  - 3) Full mailing address(es),
  - 4) Daytime phone number(s),
  - 5) Signature of primary proponent, and
  - 6) Date
- b. Specific revisions to the procedures in a format that clearly identifies the manner in which the procedures are to be altered (ie. underline/strikeout format or equivalent). Any proposal to change that does not include proposed alteration(s) may be rejected and returned to the proponent.
- c. Substantive reason(s) or justification for each proposed change. The lack of substantive justification for a proposed change may result in the return of the proposals to change to the proponent(s).
- d. Supporting documentation that may be needed for the reasoned evaluation of the proposal.