Charter of the RESNET Software Consistency Committee
Adopted by the RESNET Board of Directors on July 12,2018

Background of Software Consistency Committee (SCC) – The SCC was formed as part of a mechanism by which RESNET can improve consistency of HERS Index scores and modeled energy consumption (based on the RESNET/ICC ANSI Standard 301) among RESNET accredited HERS Rating Software Tools and enhance accreditation testing parameters. This is intended to be a continuous, ongoing process aimed at improving consistency.

This process will only address HERS ratings moving forward, it will not address ratings that have already been completed. This process is not meant to provide an immediate resolution for a specific rating, but to improve consistency problems over time.

Responsibilities of the SCC

The purpose of the SCC will be to hear, evaluate, and respond to software modeling consistency inquires put forth by RESNET members. The SCC will also have the ability to proactively promote consistency through group discussion, creation of RESNET Modeling Guidelines, recommended updates to Publication 002 and requests for Standards interpretations.

The SCC will be comprised of one member from every RESNET accredited software vendor, along with the RESNET Energy Modeling Director (EMD) and other industry experts that are able to contribute. Only the EMD and software vendor representatives shall be voting members.

RESNET will hire a technical consultant with extensive knowledge of building energy software modeling, who will serve as the RESNET Energy Modeling Director (EMD). The EMD will be recommended by RESNET staff and, approved by the RESNET Board. The person will serve as the Chairman of the SCC.

The EMD shall be authorized to make proposals to the RESNET Standards Development Committee 300 on needed changes to RESNET Publication No. 002 "Procedures for Verification of RESNET Accredited HERS Software Tools". Such proposals will be subject to full committee consideration only if requested by any SCC member, in which case voting members of the SCC shall vote to approve the proposed change by majority rule.

SCC Modeling Consistency Inquiry Process

Any RESNET accredited HERS Rating Software Provider, certified RESNET HERS Rater or RESNET member may submit a "Modeling Consistency Inquiry" to the Chairman of the SCC (EMD). The inquiry must consist of the following content:

- A description of inconsistent modeling results between two or more software tools with as equivalent as possible input parameters, including the results from all of the software tools.
- Approval from one or more of the involved software vendors agreeing that the inputs are correct for that vendor's software.
- Access to a set of inputs in all relevant software that will allow the SCC to reproduce the inconsistency. The RESNET EMD shall have access to all accredited software tools.
- Any additional research, notes, or suggestions relevant to the inquiry.

Once an inquiry has been submitted, the SCC will proceed with a resolution process.

SCC Modeling Consistency Inquiry Resolution Process

1. Inquiry is filed by interested party.
   a. The RESNET EMD must first verify that software inputs are equivalent between subject software tools. The SCC may also develop other filtering criteria that an inquiry must meet.
   b. The inquiry must be accepted by the RESNET EMD. The EMD shall assess magnitude of the inconsistency and the effort required to solve the issue. The EMD will then decide whether to address the inquiry immediately, dismiss the inquiry, or add the inquiry to a prioritized backlog.
2. Inquiry is distributed to software vendors involved in the inquiry.
3. The EMD will analyze the inconsistency and attempt to determine the root cause. The EMD Chair will rely on assistance from software vendors to access diagnostics and help determine root cause of inconsistency. At this point, the EMD can dismiss the inquiry if it does not meet the filtering criteria.
4. The EMD shall then distribute a summary of the inconsistency to all SCC members (excluding information that was provided to the EMD by software vendors and marked as proprietary), soliciting suggestions on how to resolve the inconsistency. If necessary, the EMD will schedule a SCC meeting and set an agenda to discuss. Meeting can cover several inquiries if necessary and appropriate.
5. The EMD shall draft a Consistency Resolution Proposal (CRP), including resolution timeline (see description below). The CRP shall be based on meeting discussions as well as follow up analysis by the EMD and committee members.
6. The CRP shall be developed by the EMD with input from the members of the SCC and presented to SCC within 30 business days of original inquiry receipt.
7. The CRP will be subject to a committee vote only if requested by any SCC member, in which case voting members of the SCC will vote to approve the CRP. A simple majority rules. If not approved, CRP must undergo revision until approved. The first vote shall be executed within 10 business days after final CRP is presented to SCC.
   a. Grievances: Any RESNET accredited software vendor, or the submitter of a consistency inquiry, may appeal any decision of the RESNET EMD. These appeals shall go directly to the RESNET Board. The RESNET Board will review a written description of the appeal and vote to either uphold the EMD's decision or give guidance to the EMD and request a revised decision.

8. The SCC will deliver the CRP to the original inquirer, as well as to RESNET staff, and RESNET staff shall execute required action items.
9. (If necessary) Software tools will follow compliance requirements within the timeframes specified by the CRP.

SCC Consistency Resolution Proposal (RP)

A consistency resolution proposal must be one of 5 determinations. The RESNET EMD will have flexibility to adjust timing of resolution action-items to allow bundling several changes into one update cycle if appropriate.

Option 1: Interpretation
It is deemed that there is a difference in how software tools are interpreting a RESNET Standard or Policy, an interpretation shall be requested. Software tools must comply with the interpretation in their first released version after the interpretation is issued. If appropriate, test coverage may be added to RESNET Publication 002.

Option 2: Infraction
It is deemed that one or more software tools are not in compliance with RESNET Standards or Policies, the tools must achieve compliance. Infraction will be reported to RESNET staff as an official complaint.

Option 3: Prescribed Modeling Methodology
It is deemed that all software tools are in compliance with RESNET Standards, but have chosen different methodologies or assumptions in their energy modeling engine. The EMD may determine that the best resolution will be a prescribed modeling method mandated by RESNET. This can involve either an amendment proposal to ANSI 301, or a RESNET policy creation/update to prescribe certain required modeling techniques.

Option 4: Modeling Guideline & Test Criteria Change
It is deemed that all software tools are in compliance with RESNET Standards, but have chosen different methodologies or assumptions in their energy modeling engine. With this type of proposal, the SCC must also issue a modeling procedure to be added to a RESNET Modeling Guidelines (new RESNET document), which is recommended to be followed by all RESNET accredited software tools (but not required). Modeling Guidelines must be consistent with RESNET/ICC ANSI Standard 301. RESNET Publication 002 shall be updated with tighter test coverage based on the new modeling guidelines, thereby enforcing consistency. The EMD shall propose how much time software vendors will have to pass new tests. Implementation timing may vary significantly depending on complexity of the issue.

Option 5: Dismissal
Inconsistency is deemed insignificant, acceptable, or unsolvable within a reasonable effort, and no action is required. If deemed significant but unsolvable, this will be

recorded and a description of the inconsistency will be posted by RESNET, accessible by all members. SCC should strive to avoid this resolution whenever possible.

Confidentiality of Materials
All documentation submitted to the members of the SCC, the RESNET Energy Modeling Director and RESNET staff shall be handled in strict confidence and not distributed without the express written approval of the party that provided the material . without the express written approval of the party that provided the material by the party.