RESNET Board of Directors Meeting
February 19, 2016

Members Present:

Ben Adams
David Beam
Dave Bell
Steve Byers
Brett Dillon
Philip Fairey
Matt Gingrich
David Goldstein
Andy Gordon
Roy Honican
Cardice Howard
Mark Jansen
Lee O'Neal
Frank O'Brien-Bernini
Jim Petersen
Nancy St. Hilaire
Kelly Stephens
Daran Wastchak
Barb Yankie

Members Absent:

Jacob Atalla

Staff Present:

Steve Baden
Laurel Elam
Sandra Englund Pfau
Kathy Spigarelli

Meeting Called to Order

RESNET Board President Jim Petersen called the meeting to order at 1:02 p.m. Eastern.

Review of RESNET's Anti-Trust and Conflict of Interest Policies – Sandra Englund Pfau, RESNET Counsel

Sandra Englund reviewed the anti-trust and conflict of interest policies and was included with the agenda of this board meeting prior to the meeting.

Review of the Working Group's Findings and Recommendations – David Goldstein

Previously the RESNET Board appointed a working group to develop a definition of what the board had adopted at its October meeting in New Orleans. The members of the working group are:

David Goldstein, Chairman
Dave Bell
Steve Byers
Dean Gamble
Mark Jansen
Jim Petersen

RESNET's contractor Rob Salcido and Dave Roberts of NREL assisted in the working group's deliberations.

After a long deliberation, the working group unanimously adopted the following resolution for the RESNET Board to consider:

Dave Roberts and Rob Salcido prepared the below background analysis that was adopted by the working group to support the recommended resolution:

Background

The objective of this project is to develop a single, centralized software resource for obtaining a RESNET HERS Index. This capability will be available, or required, for use by third party, RESNET-accredited HERS software providers. This resource will calculate and make available energy and HERS Index values; however, it will not provide user interfaces or formatted reports. Third party software providers will be alleviated of developing and maintaining code implementing RESNET/ANSI/ICC Standard 301 as well as a building energy simulation engine. This will allow them to focus on business support and the user experience. This new resource will leverage the publically available, and broadly supported, EnergyPlus Building Energy Simulation Software.

The reasons for doing this are:
1) Improve consistency within HERS.
2) Provide transparency.
3) Increase the speed with which new, emerging efficiency technologies are recognized in HERS.

Consistency is challenged by lack of robust tool input QA, differences in how the standards are interpreted and implemented, differences in how a limited number of inputs characterizing Rated Features are utilized to drive robust simulation engines[1], and differences in simulation engines.

[1] For example a HERS tool might capture a handful of characteristics about an air-conditioner (capacity, rated efficiency, SHR) where as a robust simulation engine requires hundreds of inputs to model the performance of the equipment over its full range of operation (performance curves as function of load and indoor/outdoor conditions, etc.).

Transparency will foster broad community collaboration and acceptance; it provides an opportunity for a wide range of stakeholders to contribute to the effort (e.g, HERS software developers, manufacturers, trade organizations, etc.), thus improving accuracy and increasing capabilities. The ability to incorporate new technologies into HERS Ratings is stymied by reliance on a small group of volunteers to develop calculation guidance and develop standards, and private software companies who redundantly implement the standards and develop the capability to model the new technologies. The HERS industry is not large enough to support multiple software providers developing and maintaining interfaces, compliance processes, and calculations engines. Competing in all three areas either dilutes resources to the point of being ineffective, or results in a single provider dominating the market. Neither is good for the industry.

Moving portions of this responsibility into a communal environment will reduce risk for the industry. A public-sector, open-source building energy simulation engine, EnergyPlus, already exists and is supported by a large and broad group of stakeholders. RESNET can leverage this resource, and build upon it a communally-developed and supported RESNET/ANSI/ICC Standard 301 calculation module. RESNET can foster this development by providing seed funding, management and stewardship of the resource.

Under this proposal there will be an option for HERS Software Providers to develop their own tools. RESNET accreditation procedures will be changed to provide an accreditation pathway for HERS tools not utilizing the RESNET Single-Source HERS Index resource.

The working group believed that while their proposed resolution may not follow the letter of the resolution the board adopted in October it follows the spirit of the board discussions.

Motion on Working Group's Recommendation –

David Goldstein made the below motion to adopt the recommendation by the working group. Mark Jansen seconded the motion.

RESNET staff shall undertake the RESNET Single-Source HERS Index Project. Salcido Solutions shall be retained to initiate and manage the project. The project will leverage and build upon the publically available EnergyPlus Building Energy Simulation Software. The project will involve developing open-source software that provides a HERS Index and associated data per RESNET/ANSI/ICC Standard 301. RESNET will be the steward of the software, host the program and manage it going forward.

This software shall take input from third party HERS software providers and return results; it will not include an input interface or formatted reports that compete with third-party software providers

A committee of subject matter experts composed of current accredited HERS Software Providers, Dave Roberts of NREL and other individuals with expertise in modeling to facilitate the direction of the HERS Index solution. The subject matter experts shall develop a detailed, technical plan for providing the single-source HERS Index solution and present this to the Board for approval prior to proceeding.

The project will include updating Procedures for Verification of RESNET Accredited HERS Software Tools (RESNET Publication No. 002-15) based on EnergyPlus, providing an accreditation pathway for HERS tools not utilizing the RESNET Single-Source HERS Index resource. This accreditation pathway will expire in a time determined by the RESNET Board. If HERS Index scores remain inconsistent between the RESNET Single-Source HERS Index solution and the private HERS tools, the Board will have the option of hastening the expiration.

This motion supersedes the related motions of the board adopted October 20, 2015.

Discussion

Philip Fairey made a motion to amend the motion by adding "subject to the approval of the expert committee" to the end of the second paragraph.

Steve Byers seconded the motion.

The motion masses unanimously

Philip Fairey made a motion to amend the motion by striking the last two sentences in the 4th paragraph. "*This accreditation pathway will expire in a time determined by the RESNET Board. If HERS Index scores remain inconsistent between the RESNET Single-Source HERS Index solution and the private HERS tools, the Board will have the option of hastening the expiration."*

Brett Dillon seconded the motion.

After discussion the motion masses unanimously

Barb Yankie made a motion to amend the motion by adding a deadline of 60 days with an option for a 30 day extension for the committee of experts to develop the detailed, technical plan for providing the single-source HERS Index solution.

Brett Dillon seconded the motion.

The motion passes. 19 to 0 with Philip Fairey abstaining.

After discussion the below amended motion was voted on:

RESNET staff shall undertake the RESNET Single-Source HERS Index Project. Salcido Solutions shall be retained to initiate and manage the project. The project will leverage and build upon the publically available EnergyPlus Building Energy Simulation Software. The project will involve developing open-source software that provides a HERS Index and associated data per RESNET/ANSI/ICC Standard 301. RESNET will be the steward of the software, host the program and manage it going forward.

This software shall take input from third party HERS software providers and return results; it will not include an input interface or formatted reports that compete with third-party software providers, subject to the approval of the expert committee.

A committee of subject matter experts composed of current accredited HERS Software Providers, Dave Roberts of NREL and other individuals with expertise in modeling to facilitate the direction of the HERS Index solution. The subject matter experts shall develop a detailed, technical plan for

providing the single-source HERS Index solution within 60 days of the formation of the committee, with an option for a 30 day extension, and present this to the Board for approval prior to proceeding.

The project will include updating Procedures for Verification of RESNET Accredited HERS Software Tools (RESNET Publication No. 002-15) based on EnergyPlus, providing an accreditation pathway for HERS tools not utilizing the RESNET Single-Source HERS Index resource.

This motion supersedes the related motions of the board adopted October 20, 2015.

The motion passed on a vote to 18 to 0 with Philip Fairey abstaining because he is software provider.

Philip Fairey moved for adjournment. The meeting was adjourned at 2:00 p.m. Eastern.