Residential Remote / Virtual Energy Audit Stakeholder Webinar

May 21, 2019
Purpose Statement

• The purpose of this webinar is to share insights on the state of the market for platforms, tools and approaches that support remote and virtual energy audits in the residential sector.

• The information gathered during the webinar will help identify areas ripe for innovation and market-testing of remote and virtual energy audit solutions and will inform an upcoming NYSERDA solicitation.
Agenda

• Welcome
• State of the Market for Remote/Virtual Energy Audits
• Consumer Attitudes -- Survey Results
• Lightning Round Presentations: Available Tools and Solutions
• Guided Discussion
• Wrap-up and Next Steps
**Today’s Presenters**

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<td>Courtney Moriarta</td>
<td>NYSERDA</td>
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<td>Richard Faesy</td>
<td>Energy Futures Group, Inc.</td>
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<td>Scott Johnstone (Moderator)</td>
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<td>Mark Brescia</td>
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<td>Seth Little</td>
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<td>Veronique Bugnion</td>
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<td>Adam Stenftenagel</td>
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Current State of the Market Solutions

Tools by Category Overview

- Remote energy audit
- Virtual energy audit (including behavioral)
- Customer Acquisition/Lead generation
- Special purpose tools (e.g. Google maps, Zillow, Hover)
Key Terms

**Remote Energy Audit** - Auditors conduct building assessments remotely using tools such as video conferencing, phones, or photos.

**Virtual Energy Audit** - Software that collects and analyzes remotely available data sets to prospect for leads, develop a building model, pre-screen customers and/or develop preliminary energy efficiency recommendations.

**Customer Acquisition/Lead generation** – Customers engage with a digital platform where they can get energy savings recommendations and be guided to marketplaces to purchase energy savings products or enroll in energy reduction programs.
Current State of the Market

Special purpose tools (examples)

- **Google Earth** – Review home exterior details and orientation
- **Zillow** – Review home interior and exterior details, square footage, and other property characteristics such as age of home, heating fuel, and mechanical equipment
- **Hover** – Home measurement application that creates 3-D models from photos
- **NYSERDA’s Faraday Customer Targeting Tool** – uses data sets from multiple public and program sources to target specific customer and housing types
Customer Attitudes Towards Remote / Virtual Audits - Survey Findings

Objectives
• Test homeowners’ receptiveness to a remote home energy audit
• Determine the appeal and concerns of a remote home energy audit

Methodology
• Online survey targeted to 600 homeowners in New York State, ages 25+
• Survey conducted July 2019

How likely would you be to complete a remote home energy audit in the next 12 months if it were available to you?

- Extremely Likely
- Very Likely
- Moderately Likely
- Slightly Likely
- Not at All Likely
Customer Attitudes Towards Remote / Virtual Audits - Survey Findings

Which aspects of a remote home energy audit are appealing? (check all that apply)

- No in-home visit needed
- Very little time commitment
- Can complete anytime
- Don't have to schedule...
- High level actionable report
- Data-driven approach
- Ability to access results on...
- Other

What would make you feel more confident about remote home energy audits? (check all that apply)

- In person followup visit
- Access to an advisor
- Testimonials
- Knowing how...
- Municipal Endorsement
- State endorsement
- Utility endorsement
- Other
NYSERDA’s Faraday Customer Targeting Tool

Faraday’s Identity Graph (FIG)

- Searchable database
- Incorporates property, building, HVAC system, fuel type, ownership data
- Used for targeting high probability customer prospects
Faraday Customer Targeting – Identify Priority Customer Prospects

Produces lists of quality prospects which can be customized to program specifications for targeting:

- Neighborhood canvassing
- Direct mail
- Social media

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Virtual and Remote Energy Assessments
SURVEY RESULTS

Energy Futures Group and Optimal Energy
Overview of Survey Goals and Process

• COVID-19 has halted in-premises programs, so there is an opportunity for virtualization of assessment processes
  ▪ Already in the plans due to loss of lighting, but COVID accelerated research

• Survey gathered information on “virtual” and “remote” energy assessments
  ▪ What exists?
  ▪ What could be on the horizon for residential, low-income and C&I energy efficiency programs?

• Survey was sent to 28 firms and received 19 responses

• Respondents were split into “remote” and “virtual” assessments and questions were aimed at the specific type of assessment they provide
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Results

Sectors Served

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Results

Building Type Served

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Results

“Other” responses included:
- Utility program implementers and incentive providers
- MUSH market
- Governments and municipalities
- End user/building owner
- Service organizations
Results

Do you offer Remote or Virtual Energy Assessments?

Responses

Virtual

Remote
Results – REA Respondents

- Pre-screen to generate leads
- Take the place of on-premise assessments until we can get back into buildings
- Conduct building assessments
- Develop customer mail-back kits

• “Other” responses included:
  - Provide information for customers to do energy saving projects
  - Sign project agreements with homeowners
  - Help utilities save time and money by targeting the homes that have the most potential energy loss
Results – REA Respondents

- "Other" responses included:
  - Commercial Building Asset Score data collection from facility manager for C&I and multifamily
  - Photos of specific items in the home
  - Collect and process high resolution thermal data via aircraft (VEA?)

Pre-REA Data Collection Methods

- Initial customer phone interview/survey
- Onboarding data collection (owner vs renter; type of home; type of heating; etc.)
- Building research using publicly available data (energy usage history, solar assessments, sq footage, etc.)
- Other

![Graph showing data collection methods with respondents numbers]
Results – VEA Respondents

Features Included in VEA Software

- Measure recommendations
- Assessment for non-energy efficiency opportunities
- Collection of publicly available data
- Building modeling
- Customer survey
- Prospecting tool for future leads
- Remote energy assessments

Responses
Key Takeaways - REA

- 9 out of 19 respondents provide REAs
- Most use REAs as a way to generate leads and to take the place of on-premise assessments while those are unavailable
- REAs are using technology that customers already have access to – Smart phones, tablets, and computers
- 4 of the 9 REA providers surveyed provided a customer kit – some of which included lighting, smart strips, showerheads, and aerators
- Most of the REAs last about 1-2 hours with the customer
- Most utilize property tax assessor and/or utility data, which can be supplemented with Google Maps or other tools
- This is new territory for most providers; some have piloted REAs, but there is not a lot of widespread experience
Opportunities - REA

• Greater use of customer kits to provide energy improvements without entering the home

• Many people have the availability to spend an hour on the phone for an audit right now – a great time to line up future projects

• Create a pipeline of projects

• Make in-premise programs more cost-effective by assessing weatherization barriers (e.g., mold, asbestos, lead etc.) before rolling the truck
Key Takeaways - VEA

- 10 out of 19 respondents provide VEAs
- VEAs may require a longer lead time to establish, but once set up can assess buildings rapidly
- C&I VEAs primarily look at utility data and interval (smart or AMI meter) data at the building level, then most are supported with some basic customer input about their building
- Most residential VEAs involve a simple customer questionnaire supplemented by utility or tax assessor building information to generate recommendations or pre-screen customers
Opportunities - VEA

• VEAs are accessible – designed to be used and understood by the average person and generate an equally understandable report

• There are multiple VEA approaches and options to be considered, some of which may be complimentary

• Some VEAs have a track record for verification of results

• As lighting savings go away, VEAs may provide an opportunity to prospect and screen for eligible customers cost-effectively
Con Edison Remote Audit Experience by Sealed

• Con Edison Weatherization Program
  – Pilot launched 2018
  – Rebate plus optional financing paid back with energy savings
  – Local contractor network administered by Sealed
  – Single Family residential, owner occupied, detached homes
  – Primarily Westchester gas heating customers
  – 2020 expansion territory-wide and to central AC with delivered fuel heating customers

• Currently testing remote scope verification

• Early feedback is that homeowners value the convenience and safety of a remote energy audit

“To have somebody come here and measure…it just wouldn’t work in these times…

The beauty of this and the ease of interaction with Sealed is that they’re able to do everything remotely.”

- Dan Ricci, Sealed Customer
Remote Processes

Remote processes were a key part of program delivery prior to COVID-19

1. **Qualify** – Online eligibility quiz and solution design questionnaire

2. **Consult** – Speak to a Sealed representative by phone to learn more and share additional details of the home

3. **Propose** – Sealed Solution Architect presents a custom upgrade plan, created from online questionnaire, initial call, energy usage history analysis, and remote measurements

4. **Verify** – Homeowners confirm their scope of work by taking pictures of their home in an online, guided experience

5. **Waitlist to Install** – Homeowners sign a project agreement that will be installed when it is safe to do so

Unchanged

Updated in response to COVID-19
Remote Education

• Leverage educational content to demonstrate core building science principles
  – Visit sealed.com/home-tour
Remote Project Scoping

- Sealed creates an initial upgrade plan and estimate by combining customer-submitted data from the initial questionnaire, energy history analysis, and remote house measurement via Google Maps.
Remote Sales

- Sealed Solution Architects provide personalized recommendations to each homeowner based on pain points, remote scoping, and budget
- Solution Architects can adjust scope in real time to provide homeowners with different project options
- Project integrates available incentives and financing options

Left: Sealed Solution Architect, Will, scoped an insulation project by measuring the attic square footage on google maps, and walks a homeowner through his analysis of the house.
Remote Verification

- Prior to COVID-19, homeowners received a “Verification Visit” from a contractor to confirm scope similar to a traditional in-home energy audit.
- Now interested homeowners can verify their scope remotely.
- Homeowners leverage an online remote verification guide to take the pictures. Sealed and contractor partners need to finalize a project agreement.
Remote Effectiveness

Remote processes continue to be effective

1. Key conversion rates from verification to agreement signed have remained steady with in-home versus remote process
2. Time from proposal to agreement signed has improved by > 60%
3. Sealed has received high quality pictures from the remote verification process

Based on Sealed sales data for proposals presented in April 2019, January 2020 and April 2020 to date. April 2019 and January 2020 represent in-home verification data and April 2020 represents remote verification data.
Thermal Data Collection

Initial: Focus on awareness and engagement for municipalities

Current: Energy efficiency as a resource
Platform Overview

Raw Thermal Data
identify personalized thermal attributes for each building in a city

Processing of Thermal Data
and development of personalized HEAT Maps & HEAT Ratings

Online Interactive Profiles
Presented with links to local efficiency programs
Touch-free Remote Engagement Solution

Platform Overview

Contract Negotiation

Remote Data Collection

Data Processing, Platform Delivery & Integration

Contactless, Homeowner Engagement

MyHEAT

myheat.ca
Popular Uses of MyHEAT Data

- Targeting Specific Homeowner Segments
- Behavioral Randomized Control Trial
- Non-pipe / Non-wire Alternatives
- Locating Vegetation on Transmission Lines
- Economic Recovery Tool
Distribution System Management

MyHEAT

myheat.ca
MyHEAT Partnerships

MyHEAT + National Fuel Gas Distribution
Thermal data collection for ~160,000 households in Buffalo, New York with a project launch in fall 2020

Program Implementation
Accounts in collection area will be analyzed and homes will be sorted into outreach groups to be targeted with specific messaging developed by MyHEAT

Program Design & Evaluation
Program participation and consumption reduction will be tracked and evaluated for each group with a Randomized Control Trial
Homeowner Perception – Customer Survey

A US NE Gas and Electric Utility recently conducted a customer survey highlighting MyHEAT in preparation for a regulatory filing. Response from over 1,000 customers indicated that:

- **74%** said that MyHEAT would be beneficial in helping them identify home heat loss.
- **79%** would be likely to access their MyHEAT info on the utility platform.
- **97%** said MyHEAT would either increase or maintain their current opinion of their utility provider.
In partnership with Natural Resources Canada

**Behavioural Results – Program Participation**

MyHEAT imagery led to **25% higher participation** in the weatherization rebate program.

The imagery also motivated **19% more online rebates** for other home upgrades.
In partnership with Natural Resources Canada

Behavioural Results – Consumption

3.9% vs. 1.8% per $150 of estimated savings
Remote / Virtual Energy Audit Program

National Grid

➢ National Grid is an electric, gas and clean energy delivery company serving more than 20 million people throughout NY, MA and RI.
➢ National Grid is transforming its electric and gas networks with smarter, cleaner and more resilient energy solutions designed to meet the goal of reducing greenhouse gas emissions.
➢ The company’s energy efficiency portfolio provides a variety of programs to help commercial and residential customers save energy, money and the environment.

➢ Uplight is the leading provider of end-to-end technology solutions dedicated solely to serving the energy ecosystem. More than 80 utilities around the globe use Uplight solutions to power their customer energy experience.
➢ Uplight creates a more sustainable future by empowering customers — bringing together all of the pieces of customer energy action management.
Remote / Virtual Energy Audit Program

➢ The **Online Home Energy Assessment** allows customers to take a fast and easy 5-10 minute survey – at home – without any outside contact

➢ Customers learn about their home, heating & cooling equipment, appliances, lighting, electronics and energy use behaviors
  
  ▪ **Structure**: Age, size, insulation, windows
  ▪ **Heating & Cooling**: Heat type, age of furnace and A/C
  ▪ **Appliances**: Dryer, stove, fridge, water heater
  ▪ **Usage**: Lighting, electronics, showers, T-stat set points

➢ National Grid, acting as a home energy advisor, is providing useful, actionable outreach and education for energy management
Remote / Virtual Energy Audit Program

Results Page

- Unique Home Energy Profile
- Specific energy saving recommendations
- Behavioral usage “Tips” (low cost / no cost)
- Potential annual dollar savings
- Targeted promotion EE programs
- A push to online marketplace

- The program is currently in market in Upstate NY (2017) and Downstate NY (2019).
- Targeted to residential customers who own or rent.
- Market penetration is generally low as marketing has not been aggressive. However, when an email blast goes out participation spikes. And the survey completion rate is an impressive 93%.
Virtual Assessment - Overview

What is it?

CLEAResult’s Virtual Assessment is a live augmented reality (AR) remote support approach enabling:

- Remote energy advisor-guided home assessments
- Safe direct customer engagement
- Faster EE initiative rollouts for Program Partners
- Lower costs for everyone
Virtual Assurance - Overview

What is it?

Virtual Assurance removes the time between installation and inspection, enables lower program costs, and increases convenience for customers.

It can be coordinated with onsite contractors at the conclusion of work if needed, or totally remote if preferred.

Virtual inspections are ideal for detecting and preventing fraud and are well-suited for all field installations. Using built-in collaboration tools, our expert inspectors can:

- Remotely view any in-progress installation
- Guide the participating contractor through the inspection
- Correct issues in real time
- Capture the required data for the program
Virtual Assessment is a new solution that respects customer privacy and choice. Customers are in control every step of the way, with the ability to pause video or audio at their fingertips at all times.
## Virtual Assessment – The Tech

### Powerful, Built-in Tools for Virtual Advisors

<table>
<thead>
<tr>
<th>Tool</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Laser Pointer</strong></td>
<td>Enables pointing and movement-based gestures that appear on the customer’s screen in real time.</td>
</tr>
<tr>
<td><strong>QuickDraw™</strong></td>
<td>Allows advisors to draw temporary shapes and lines highlighting physical objects, outlining areas, or indicating movements.</td>
</tr>
<tr>
<td><strong>Streemshot™</strong></td>
<td>Enables full-res photos with embedded depth and scale data for later analysis—and automatically transcribes any model and/or serial numbers in the shot, saving time and data entry costs.</td>
</tr>
</tbody>
</table>

### Location Tracking

Customers are prompted to optionally enable GPS permissions that, if accepted, grant advisors access to their exact location and estimated street address.

### Automatic Call Logging

All data collected during a call—including a full video recording—goes into a convenient multimedia call log for easy review and quality assurance.
## Virtual Assessment – A Remote Solution

**CLEAResult’s Virtual Assessment** is the most advanced remote expertise platform on the market powered by true augmented reality features.

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>VIRTUAL ASSESSMENT</th>
<th>OTHERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>True AR</td>
<td>✓</td>
<td>NO</td>
</tr>
<tr>
<td>Spatial Mapping</td>
<td>✓</td>
<td>NO</td>
</tr>
<tr>
<td>3D Intelligent Photos</td>
<td>✓</td>
<td>NO</td>
</tr>
<tr>
<td>Custom Machine Learning</td>
<td>✓</td>
<td>NO</td>
</tr>
<tr>
<td>OCR &amp; Object Recognition</td>
<td>✓</td>
<td>NO</td>
</tr>
<tr>
<td>AR Walkthroughs</td>
<td>✓</td>
<td>NO</td>
</tr>
<tr>
<td>Mobile AR</td>
<td>✓</td>
<td>NO</td>
</tr>
</tbody>
</table>

- **True AR**: Computer vision identifies and maps objects in a space, creating a shared experience within the customer’s environment for improved collaboration.
- **Spatial Mapping**: Creates an accurate & interactive 3D mesh of the facility (via iOS app).
- **3D Intelligent Photos**: Review, markup, & store spatial maps w/ remote measurements & more, AR data, object & character data—all captured in the high-resolution image.
- **Custom Machine Learning**: Computer vision is trainable—can recognize custom objects, products, & context.
- **OCR & Object Recognition**: Recognizes objects and captures serial/model numbers automatically.
- **AR Walkthroughs**: Guides customers with AR instructions that anchor to their environment.
- **Mobile AR**: A full AR experience, directly through a mobile phone browser.
Energy Estimator
Presented By Northeast Energy Efficiency Partnerships (NEEP) and ClearlyEnergy

Northeast Energy Efficiency Partnerships
A non-profit, regional energy efficiency organization with the mission to ensure all homes, buildings, and communities are healthy, efficiency, and affordable places to live, work, and play.

ClearlyEnergy
"We believe in empowering you with a clear and informative platform to understand and simplify energy choices"

In 2019, NEEP & ClearlyEnergy jointly developed - Energy Estimator
Energy Estimator – Powered by HELIX & ClearlyEnergy

• Virtual energy audit performed jointly by homeowner and contractor:
  – Interactive and educational tool
• Automated baseline estimate uses tax assessor data (age, size, type, primary fuel, ac...) & HELIX for solar and home certifications
  – Adding home energy features and/or utility bill data refines baseline estimate
  – Zip code level utility data
• Targeted improvement recommendation logic
• Energy profile pdf highlights energy features

Provides a scalable solution for homeowners to make more informed decisions about the full costs of operating home
Key Product Features and Functionality

Allows for contractors and homeowners to work together to collect home system information and/or bill data to gauge efficiency of the home

Product Features:

• Secure login, home claim, and lock process
• Intuitive, easily understood audit questions
• Interface to share energy profile and web access with customers
• Interaction with HELIX to recognize work the home has already done - saving time
• Custom savings page with links to incentives, professionals, product sites, etc.
• MLS ready with HELIX integration (opt-out available)

Energy professionals can review audited homes, share the customized energy report with homeowners and proceed to contracting.
State of the Product in the Market

**Status**
- Energy Estimator is ready for market deployment, no setup time

**Target Customer**
- Home energy auditors, contractors, utilities, state and local governments, program administrators, & real estate professionals

**Market Penetration**
- Montpelier Energy Disclosure Ordinance
- VT voluntary energy assessment and labelling
- Being Considered in CT for Home Energy Solutions
- HELIX tracks solar & certifications across Northeast and Mid-Atlantic
Data analytics, customer targeting, and implementation tools for reducing greenhouse gas emissions.

Cost-benefit analysis for global carbon reductions
Homeowner Roadmap for Electrification

Homeowners need to understand the true cost of maintaining a fossil fuel powered lifestyle.
Homeowner Roadmap for Electrification

Every address has an hourly energy model attached to it with multiple scenarios of electrification improvements and associated savings and cash flow analysis.
Status of the tool

• The DIY version of this tool for homeowners is currently in development
  
• Version 1 has been in use by our sister company Fuel Switch in Boulder, CO as a sales and marketing tool
  
• The DIY version will allow homeowners to look up their own address, fill in details about their home and lifestyle, and generate their own roadmap for electrification
  
• The roadmap can be shared with installation contractors to help generate a work proposal
Many NYSERDA contractors already use Snugg Pro for in home audits. It can easily be used for remote audits as well.

www.snuggpro.com/blog
Halco Virtual Audit overview
1. **Lead intake**
   a. Gather basic homeowner information
   b. Offer remote or onsite audit
   c. Send homeowner links to Survey and Hover Applications

1. **Auditor review**
   a. Auditor & Homeowner video chat
      i. Gather information about homeowner goals & needs
      ii. Review some possible options
      iii. Gather additional missing information
   b. Build scope
   c. Sign agreement
We cannot do diagnostic testing without visiting the home!

We need to make **some assumptions:**

a. Air leakage  
b. Health & Safety concerns such as gas leaks and combustion appliance operation

Then we verify...

Project is moving forward:  

a. If diagnostic data is required for equipment, we schedule a short testing only visit  
b. Otherwise, we do testing on the install day, prior to any installation work
The Survey

Now let’s spend a few minutes on your home. Which of the following best describes your living situation?

A I own my home
B I rent my home
The results

### Exterior Measurements

<table>
<thead>
<tr>
<th>Facade</th>
<th>Area</th>
<th>Inside Corners</th>
<th>Outside Corners</th>
<th>Openings</th>
<th>Shutters</th>
</tr>
</thead>
<tbody>
<tr>
<td>SI-1</td>
<td>56 ft²</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>SI-2</td>
<td>310 ft²</td>
<td>0</td>
<td>2</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>SI-3</td>
<td>289 ft²</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>SI-4</td>
<td>22 ft²</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>SI-5</td>
<td>8 ft²</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SI-6</td>
<td>363 ft²</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>SI-7</td>
<td>279 ft²</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>SI-8</td>
<td>26 ft²</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>SI-9</td>
<td>38 ft²</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SI-10</td>
<td>77 ft²</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SI-11</td>
<td>8 ft²</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SI-12</td>
<td>334 ft²</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>SI-13</td>
<td>101 ft²</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>SI-14</td>
<td>100 ft²</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>SI-15</td>
<td>13 ft²</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>SI-16</td>
<td>210 ft²</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>
### Roof Facets

<table>
<thead>
<tr>
<th>Roof</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ridges (RI)</td>
<td>93' 4&quot;</td>
</tr>
<tr>
<td>Hips (H)</td>
<td>9' 9&quot;</td>
</tr>
<tr>
<td>Valleys (V)</td>
<td>75' 7&quot;</td>
</tr>
<tr>
<td>Rakes (RA)</td>
<td>160' 4&quot;</td>
</tr>
<tr>
<td>Eaves (E)</td>
<td>150' 1&quot;</td>
</tr>
<tr>
<td>Flashing (F)*</td>
<td>37' 2&quot;</td>
</tr>
<tr>
<td>Step Flashing (SF)*</td>
<td>37' 2&quot;</td>
</tr>
<tr>
<td>Transition Line (TL)</td>
<td>-</td>
</tr>
</tbody>
</table>

### Roof Measurements

<table>
<thead>
<tr>
<th>Facet</th>
<th>Area</th>
<th>Pitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF-1</td>
<td>18 ft²</td>
<td>8/12</td>
</tr>
<tr>
<td>RF-2</td>
<td>18 ft²</td>
<td>8/12</td>
</tr>
<tr>
<td>RF-3</td>
<td>289 ft²</td>
<td>10/12</td>
</tr>
<tr>
<td>RF-4</td>
<td>352 ft²</td>
<td>10/12</td>
</tr>
<tr>
<td>RF-5</td>
<td>38 ft²</td>
<td>1/12</td>
</tr>
<tr>
<td>RF-6</td>
<td>157 ft²</td>
<td>14/12</td>
</tr>
<tr>
<td>RF-7</td>
<td>137 ft²</td>
<td>12/12</td>
</tr>
<tr>
<td>RF-8</td>
<td>156 ft²</td>
<td>14/12</td>
</tr>
<tr>
<td>RF-9</td>
<td>349 ft²</td>
<td>10/12</td>
</tr>
<tr>
<td>RF-10</td>
<td>3 ft²</td>
<td>3/12</td>
</tr>
<tr>
<td>RF-11</td>
<td>15 ft²</td>
<td>3/12</td>
</tr>
<tr>
<td>RF-12</td>
<td>135 ft²</td>
<td>12/12</td>
</tr>
</tbody>
</table>
ROUND TABLE DISCUSSION – QUESTION 1

• Where are the biggest opportunities for innovation and market testing around remote / virtual energy audits?
How can remote / virtual audits support an effective sales process and robust levels of energy efficiency measure adoption?
• What are the gaps in the market created by or not addressed by moving to remote / virtual energy audits?
ROUNDTABLE DISCUSSION – QUESTION 4

• What elements of an energy audit cannot be accomplished remotely and must be done in the field?
ROUNDTABLE DISCUSSION – QUESTION 5

• How do we balance support for proprietary solutions while moving toward open source standard protocols?
NEXT STEPS

• NYSERDA will release a solicitation within weeks based on feedback gathered today
THANK YOU

Questions or Comments can be directed to:

resmarket@nyserda.ny.gov