Remote Audit Strategies

Background

Under the Climate Leadership and Community Protection Act of 2019, New York State seeks to achieve the most aggressive clean energy goals in the country even as we emerge from the COVID-19 crisis. As we re-open the state for business, Governor Cuomo has challenged businesses to reimagine the workplace to emerge stronger and smarter.

This creates both a need and an opportunity to reconsider our traditional approaches to residential energy audits. The goal of this initiative is to respond to this opportunity by **developing revised, updated, and reimagined energy auditing practices for both single family and multi-family buildings.**

Best Practices During COVID-19

- Minimize in-person interactions and transactions
- Favor outdoors over indoors
- Wear a well-fitting mask when indoors with people you don't live with. Always.
- Limit indoor exposure to other people to 15 minutes or less
- Avoid situations where people are in shared airflows

NYSERDA's Remote and Low Touch Audit Project Components

Project	Partners	Target Dates
Modified blower door procedures	NYS HCR, NYS DOH, BPA, BPI	Issued week of 9/7
Modified energy audit procedures	BPI, BPCA	In-field testing to begin week of 9/21
Remote Audit Challenge	TBD, NYSERDA PON 4423	PON went live 9/17
Research on blower door impact on person-to-person airborne small particle transmission	University of Illinois Urbana Champaign – Indoor Climate Research and Training Group	Results available before EOY 2020

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Remote Audit Project Objectives

Protocols will be designed to achieve a combination of goals including:

- Returning our energy auditing workforce to work safely

- Re-orienting energy auditing practices to support the transition to clean energy to meet NYS decarbonization goals.

- Establishing new and improved methods for energy audits in the long term as we "build back better"

Project Scope

To meet the combined objectives, new energy auditing procedures will include:

- Leveraging of technology to minimize in-person and on-site contact necessary to complete an energy audit

- Making use of remotely accessible data to develop base assessments and minimize the need for on-site data collection

- Modified on-site audit protocols that conform to safe work practices provided by NYSERDA, and the NYS Departments of Health and Labor

Modified Energy Audit Protocols Project Scope

BPI is developing revised energy audit protocols to meet these goals and objectives

- Develop a draft set of revised procedures for energy audits

- Review revised procedures with an advisory panel of subject matter experts (SME).

- **Collect feedback from field deployment of the draft energy audit procedures**

- Make modifications to the energy audit procedures based on feedback

- Review modified energy audit procedures with SME panels

- Develop training modules and provide train-the-trainer sessions to training organizations

Timeline

Project Phase	Project Activity	Target Completion Date
1	Develop and Deploy Draft Audit Procedures to Support Initial Post-COVID-19 Re-entry	September 25, 2020
2	Test Draft Audit Procedures in Market and Track Results	December 15, 2020
3	Develop and Deploy Final Audit Procedures	March 1, 2021

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BPI's Draft Energy Audit Procedures: Approach

- Guiding Principles – minimum criteria for remote building science based residential energy assessments

- Designed to limit exposure time and therefore limit COVID-19 risk to workers and customers

- Use of remote strategies wherever possible

- Use of lower touch, shorter duration strategies for activities that cannot be completed remotely

BPI's Draft Energy Audit Procedures -- Format

Three Categories of Activities

- **Remote Aspects** – activities that can be completed remotely in most cases
- **On-Site Verification** – activities that can mostly be completed remotely but may require on-site verification/validation
- **On-Site Inspection Only** – activities that cannot be completed remotely (e.g. blower door tests, combustion safety tests)

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BPI's Draft Energy Audit Procedures -- Content

Topics Covered

- Health and Safety Requirements
- Combustion Appliance and Fuel Distribution System Inspection
- Indoor Air Quality and Ventilation
- Moisture Control
- Building Enclosure
- Heating, Cooling, and Domestic Hot Water systems
- Baseload Energy Efficiency

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NYSERDA's Residential Remote Audit Challenge (PON 4423) – Category 1

- Open Enrollment Grant Application

- Open to all NYSERDA residential program participating contractors

- Development grants $5,000-$25,000

- Applications accepted through 10/26/20 or until funds are expended

NYSERDA's Residential Remote Audit Challenge (PON 4423) – Category 2

- Competitive solicitation for projects targeting the following objectives
  1. Increased market adoption rates for energy efficiency and clean energy solutions
  2. Reduced transactional soft costs
  3. Increased lead-to-sales conversion rates
  4. Peak demand and load reduction
- Open to anyone, targeting developers and providers of virtual and remote audit tools and platforms
- Project funding up to $200k, with 30% cost-share
- Proposals due 10/26/20

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Next Steps

- Results of UIUC project will be used to further adapt blower door procedures as indicated by research findings

- Results of in-field testing of BPI procedures and Remote Audits will be reviewed over the next 5-6 months

- Contractor engagement and feedback will be important to inform final decision-making

- Targeting adoption of fully revised "build back better" energy audit procedures in 2021

Questions?