Tech Tip: 4 Ways to Boost Internal Quality Control

In the Multifamily Performance Program's Comprehensive Option (Version 7), the Provider's expertise is more important than ever. The Comprehensive Option's approach to energy savings calculations allows the Provider the freedom to choose the best path of analyzing potential scopes of work. This helps to reduce energy auditing costs, but also relies on the Provider to make sure that their auditing work is technically sound.

It is important that energy savings are projected correctly because a portion of a project's incentive relies on actual energy usage reduction. The following tips for internal quality control (QC) may be helpful to ensure projected savings are accurate.

1. Be relentlessly systematic

Before any documents are submitted, they should go through a process of internal review. This process should include:

- **A consistent approach.** Apply a set process to every work product to produce consistently high quality work.
- **Consider using checklists.** Using checklists allows staff to see what has been completed. The checklist should include all facets of the MPP process such as completing administrative tasks, ensuring complete measure descriptions, and performing technical calculations.
- **At least two people.** If one person is responsible for working on a project, at least one other person needs to look over the work before it is submitted.
- **An experienced energy analyst.** A senior engineer or analyst must be involved in each project or perform a thorough review of the work.
- **A “Sanity Check.”** Before any project is complete, take a high level look at the results. Are the results reasonable given this particular building? For example, do energy calculations show that the building is saving more energy than it uses? If yes, go back and check your work.

2. Use the built-in SAV-IT QC checks for your benefit

The SAV-IT has built-in flags to help you find potential errors. Use them to make sure that your gut understanding of the building is being represented. The ranges in these QC pages are wide, so use these only as guides. The tool has checks for:

- **Measure Costs.** Are estimated measure costs within reasonable ranges?
- **Energy Savings Estimates.** Are the projected energy savings within reasonable ranges?
- **Energy End-Use breakdown.** Are projected savings estimating reasonable reductions in specific building end-uses?

3. Use conservative assumptions

Projecting energy savings requires making a lot of assumptions about building performance and tenant behavior. When forming these assumptions, always make conservative assumptions. Conservative assumptions will help to avoid overpromising savings and incentives.

4. Be aware of NYSERDA resources

Tools and guidelines provided by NYSERDA can help guide your assumptions for energy saving calculations or models. Access to these are one of the benefits of being a Multifamily Building Solutions Provider.

- **Tech Tip Library (on the Provider Portal).** A library of information on topics ranging from administrative processes, case studies and energy engineering best practices.
- **Simulation Guidelines (on the Provider Portal).** How best to model and calculate savings for energy efficiency projects.
- **Simulation Guidelines spreadsheet tools (on Provider Portal).** Guidance on calculating model inputs for ventilation, infiltration, air sealing, lighting upgrades that include bi-level lighting and occupancy sensors.
- **MPP Staff - Contact your Project Manager or Case Manager if you have questions about the best way to model or estimate savings.** They can help you work through challenging situations.