



TARGETED MULTIFAMILY PROTOCOL

VERSION 2.2 – March 2025

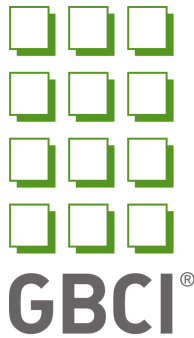


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THE INVESTOR CONFIDENCE PROJECT

The Investor Confidence Project (ICP) represents a global initiative focusing on increasing energy efficiency deal flow by ensuring that projects are engineered robustly, financial returns are predictable, and project underwriting can be streamlined. The ICP system comprises the ICP Protocols and the Investor Ready Energy Efficiency™ certification, offering a standardized roadmap for project developers, a market-tested methodology for program administrators, and a certification system for investors and building owners to accurately and efficiently assess project risk.

ICP is administered by Green Business Certification Inc. (GBCI) and was conceived, incubated, and developed by the Environmental Defense Fund (www.edf.org).

For more information, please visit:

ICP North American (www.eepperformance.org)

IREE™ Certification for Building Decarbonization Projects

Investor Ready Energy Efficiency™ (IREE) is a certification awarded to energy efficiency retrofit projects that conform to the requirements of the ICP Protocols, were originated under the direction of qualified providers, have been independently reviewed by an ICP Quality Assurance Assessor, and are certified by GBCI. IREE projects give investors, building owners, and other stakeholders increased confidence in project quality.

Investor Ready Energy Efficiency™ certification occurs after the completion of the project developer and engineering but before construction.

Development of an ICP-compliant project includes the following two periods:

- **Certification Period** (pre-IREE Certification). The Certification Period includes all procedures and documentation associated with project development before construction. This includes the development of the M&V plan (as well as the OPV and OM&M plans if the project's complexity warrants their development), which describes the tasks and documentation that will be performed during the Performance Period.
- **Performance Period** (post-IREE Certification). The Performance Period refers to the construction and post-construction (post-retrofit) period after achieving IREE certification. The ICP Protocols require specific procedures and documentation during the Performance Period specified in plans developed during the Certification Period. The investor or building owner should explicitly require these plans and their requirements to be included in the project developer's scope of work and contract. If necessary, the services of the Quality Assurance Assessor or other third parties may be retained during the Performance Period to oversee implementation.



Selecting the most appropriate protocol is one of the first steps in your ICP project journey. Retrofit projects are complex to classify. Project Developers should work with their Quality Assurance Providers and Investors to select the best protocol for each project based on its size, scope, and risk profile.

ICP TARGETED MULTIFAMILY PROTOCOL

To conform to the ICP Protocols, projects must meet the specified procedural and documentation requirements detailed in this document. To ensure the protocol requirements optimally fit the project, the developer must select the [correct ICP Protocol](#). This protocol is intended for Multifamily building retrofits and project scopes that include:

- **Single-measure projects or multi-measure projects with no interactivity** (apart from lighting energy conservation measures)
- **The scope of the measures is typically not that complex**, and the project does not require dynamic building simulation modeling.

Additional resources to this protocol include:

- [The Project Development Specification](#) is the reference guide for all ICP Protocols. It includes detailed explanations of the requirements and supporting references and tools.
- [ICP Protocol Glossary](#) defines industry terminology found in the ICP Protocols.
- [ICP Acronym Dictionary](#) defines the various industry acronyms.

ICP PROJECT FRAMEWORK



The ICP protocols are structured based on five project lifecycle phases representing the entire lifecycle of a well-conceived and well-executed energy efficiency project. For each phase, the protocol establishes minimum requirements for:

- **Procedures** - specific tasks to be performed during the certification period.
- **Documentation** - required documentation supporting procedures, calculations, models, and plans that specify procedures to be executed during the performance period.

1.1 BASELINING

The baselining efforts involve the development of a baseline specific to the proposed energy conservation measures (ECMs) and collecting all information needed to perform the tasks associated with the savings calculations, economic analysis, and commitment to developing the procedures required for the performance period.

The baseline must establish how much energy a system or equipment can use over a representative period. The baseline model should be normalized by factoring in the impact of independent variables such as weather, occupancy, and operating hours of the building's energy use as necessary. Where demand charges or time-of-use pricing are in effect, load profiles must show the daily demand pattern and incorporate annual adjustments.

The retrofit isolation baseline analysis will compare the projected energy savings to the affected systems' current annual energy use. Subsequently, this baseline will be used for the IPMVP Option A or B efforts.

1.1 PROCEDURES

1. **Collect energy source data, independent data, and utility rate schedules** for all energy sources to inform baseline and savings calculations. Data to gather should include:
 - a. **Energy Use Data for Retrofit Isolation Baseline:** Collect energy use data specific to the ECMs, including all meters and energy accounts for related end-uses - refer to ASTM E2797- 11 Building Energy Performance Assessment (BEPA) Standard methodology. [[PDS Section 1.2.1](#)]
 - i. These data should be used as the basis for an analysis that is compliant with IPMVP Option A or B.
 - ii. For non-metered fuel types, install sub-metering, utilize billing, or use other final data to estimate energy use.
 - iii. The baseline period represents all operating conditions of a normal operating cycle for parameters relevant to the ECMs. Parameters may be continuously measured or periodically measured for short periods. The expected variation in the parameter will determine the measurement frequency. For weather-dependent end-users or end-uses that vary based on other independent variables, the metering period should cover a period that will capture both minimum and maximum loads.
 - iv. Cost data for electricity and each energy source should also be collected, including unit and total annual costs.
 - v. Monthly peak demand (in kW) for electricity should be recorded as the peak output from any on-site generation and the associated fuel source, if relevant to the ECMs.
 - b. **Measurement Boundary:** Clearly define the measurement boundary. The boundary can be defined by a specific piece of equipment, a combination of equipment comprising a building subsystem, or a specific end-use. Any interactive effects should also be established and included within the measurement boundary or their impact estimated for lighting retrofits that significantly impact heating and cooling loads. [[PDS Section 1.5](#) and [PDS Section 5.2](#)]

- c. **Measured and Estimated Parameters:** When considering an Option A M&V approach, and what variables to estimate, consideration should be given to the amount of variation in baseline energy consumption or the energy impact that variables have on the ECMs. Estimates should be based on reliable, documentable sources that provide a high degree of confidence. These estimates should never be based on “rules-of-thumb” or proprietary sources (“black box”). Key parameters inconsistent enough to be used for estimates must be measured. Spot sampling is permitted when multiple versions of the same ECM installation are included within the measurement boundary.
 - d. **Weather Data:** Where the ECM-related baseline energy consumption for the defined baseline period would be affected by weather, acquire weather data (at least degree days for heating and cooling) from the closest weather station or on-site measurement for the time interval coinciding with the interval of the energy use. [[PDS Section 1.2.3](#)]
 - e. **Occupancy Data:** Where the ECM-related baseline energy consumption for the defined baseline period would be affected by occupancy, acquire vacancy rates, space uses, and occupancy schedules for the defined baseline period from the tenant, building owner, or building operator. This should include the tenant information (e.g., the nature of their lease, type of business, occupancy times) where relevant as well as an assessment of how occupancy patterns affect energy consumption. [[PDS Section 1.2.4](#)]
 - f. **Other Independent Variable Data:** Acquire other independent variables that significantly affect the energy use, such as sales or production volume, for the defined baseline period chosen or as otherwise needed for an accurate regression model. [[PDS Section 1.2.1](#)]
 - g. **Building Asset Data:** These data will be specific to the ECMs and systems involved in the project and, therefore, only need to address the relevant systems. They do not necessarily need to include a comprehensive data set for all building systems. Acquire data including accurate total floor area (for conditioned and unconditioned spaces) based on ANSI/BOMA Z65.3 and material specifications/inventories based on building drawings according to ASTM E2797-11 Building Energy Performance Assessment (BEPA) Standard methodology. This information will be referenced in any future adjustments to the building asset that may be made. [[PDS Section 1.2.5](#)]
 - h. **Baseline Operational/Performance Data:** Acquire system performance data to inform the energy savings calculations (e.g., equipment efficiencies and capacities). These data should include data for building systems associated with the project ECMs. They can be collected through interviews, reviews of building documentation (as-built plans, control sequences, etc.), observations, spot measurements, short-term monitoring, and/or functional performance tests. [[PDS Section 1.2.5](#)]
 - i. **ECM Characteristics:** For the proposed ECMs, load and hours-of-use components, as well as whether these components are constant or variable, should be documented. [[PDS Sec 1.5](#)]
2. **If appropriate, normalize the independent variable data** to the same time interval as the defined baseline period.
 3. **Develop the retrofit isolation baseline** conforming to the requirements of IPMVP and informed by the energy-use characteristics of the equipment or end-use broken down into load and hours-of-use components and whether these components may be considered constant or variable. Sources of information should include equipment inventories and operating performance and should be consistent with calculated energy end-use consumption.

4. **Achieve an appropriate goodness of fit** of energy data variability to independent variables according to ASHRAE Guideline 14-2023 if regression analysis is being performed to develop the retrofit isolation baseline. The adjusted R^2 value shall be at least 0.75, and a CV[RMSE] shall be less than 0.2, subject to extenuating circumstances. Extenuating circumstances must be described and documented if the fit is outside the range.
5. Establish monthly peak demand and pricing (where peak demand pricing is in effect, and the ECM(s) has demand pricing-based savings) based on the monthly bills. Where monthly data are unavailable, explain why and describe any potential impacts this may have on the baseline and savings calculations and how these issues will be addressed. [[PDS Section 1.6](#)]
6. Chart average daily demand (where demand charges or time-of-use pricing is in effect) in 15-minute intervals (maximum available frequency if 15 minutes is not available) with time on the x-axis and kW on the y-axis for typical weekday and weekend days in the spring, autumn, winter, and summer. [[PDS Section 1.6](#)]

1.2 Documentation

- Complete energy data as a computer-readable file, including:
- Raw meter readings should include from-date and to-date, energy-unit value, energy use charges, demand quantities, and demand charges. Energy sources must be consolidated for the same periods if relevant to the ECMs. Data may include bulk-delivered fuel information, units delivered, and associated costs.
- The dataset must cover all forms of purchased energy and energy produced on-site that are part of the baseline. Where applicable, this will include aggregated tenant data or an approximation of tenant energy use, descriptions of the metering and sub-metering of energy in the building, and an explanation of how building occupants pay for energy costs.
- If relevant, provide a brief description of how periods are consolidated to the baseline periods applied. Dates of meter reading periods will vary from one energy source to another. Refer to the ASTM E2797-11 Building Energy Performance Assessment (BEPA) Standard methodology for guidance on partial year/month data “normalization.”
- The start and end dates of the baseline period and why that period was chosen.
- Definition of the measurement boundary.
- Weather data (if utilized) used in the regression analysis correspond to the baseline period (containing heating and cooling degree day and/or average daily temperature data).
- Include building drawings, equipment inventories, system and material specifications, field survey results and/or CAD take-offs, observations, short-term monitored data, spot measurements, and functional performance test results as appropriate for recommended upgrades.
- Utility rate structure, as published by the utility and the commodity provider (if the two are separate), including a breakdown of distribution costs, commodity costs, demand charges, taxes, and time-of-day variability for each element.
- Copies of at least one bill or equivalent data, preferably in a machine-readable format for all energy sources consumed, including describing the tariff structure and any fixed charges. If tenants pay their bills directly, provide a breakdown by owner-paid and tenant-paid utilities.

2.1 SAVINGS CALCULATIONS

Estimated savings calculations for projects of the scale this protocol is designed for must be based on “open-book” calculation methods or tools. The calculations must also be based on sound engineering methods and consistent with ASHRAE principles. Using post-retrofit monitored data, these same calculations will be used to perform verified savings calculations as part of the Option A/B M&V effort.

The use of proprietary “closed book” calculation methods is not recommended. However, if proprietary tools are used for savings calculations, they must be well documented. The documentation must include a history of previous use, a detailed description of the calculation methodologies and assumptions used by the tool, and papers, studies, or documentation demonstrating the technical rigor of the tool and methodologies employed.

Multifamily projects may involve split incentives, potentially inhibiting a building owner’s incentive to invest in the energy efficiency project. A split incentive (or misaligned incentive) is a transaction where the benefits do not accrue to the person who pays for the transaction. This occurs in situations involving tenant-paid utility bills - the building owner pays for the retrofits but does not recover savings from reduced energy costs that accrue to the tenant. This situation warrants consideration, and methods such as Green Leasing or other savings recovery methods should be used to incentivize the building owner’s investment in the energy efficiency project. While critical to the financing component of project development, these considerations are beyond the scope of this protocol.

However, for these projects in which the tenants pay their utility bills, savings estimates should be developed separately for those that accrue to the building owner and those that accrue to the tenants so that appropriate savings recovery efforts can be created and potentially employed to incentivize the project. Additionally, investment costs should similarly be developed separately for those measures applicable to owner-paid and tenant-paid utilities, such that methods can be designed to pass on these capital expenses directly to the building tenants.

2.1 PROCEDURES

Develop energy savings calculations [\[PDS Section 2.5\]](#)

1. **Use an open-book spreadsheet(s) or commercially available or in-house method(s)** to develop energy savings estimates.
2. **Choose an individual to perform energy savings calculations with one of the following:**
 - a. Nationally/Internationally recognized energy savings calculation certification including:
 - i. [ASHRAE BEAP](#) certification **or**
 - ii. [AEE CEM](#) or [CEA](#) certification, **or**
 - b. Five or more years of energy savings calculation experience documented in the form of a CV outlining relevant project experience.
3. **Prepare input values** using on-site observations and measured data.
 - Prepare transparent calculations in a readily readable and usable form based on

building documentation from plans, equipment schedules, field confirmations, observations, and tests.

- Document calculation processes, formulas, assumptions used, and their sources.
- Where inputs must assign efficiencies, rates, and other values that are not readily measurable, the basis of such assignments must be clearly stated.
- Identify equipment part-load profiles, operating conditions, and associated efficiencies.
- Confirm operating schedules for seasonal variations, zone variations, overtime use, cleaning schedules and practices, etc..
- Disclose and describe inputs/outputs (identify and document defaults versus assumptions), including those from any companion tools (e.g., load calculators, field testing) used to create inputs for the savings calculations.
- Tune energy savings calculations and input variables. Calibrate pre-retrofit energy consumption estimated for each system involved in an ECM to the estimated or measured energy end-use consumption. Compare estimated energy savings to “rules of thumb” or “back-of-the-envelope ” calculations and previous estimates from similar past projects. Inform inputs based on actual project data.

Analysis of Energy Conservation Measures (ECMs) [\[PDS Section 2.5\]](#)

1. **Ascertain the preferred financial analysis metrics** and criteria of the investor (or owner) to evaluate ECMs. Metrics may include simple payback period (SPB), return on investment (ROI), internal rate of return (IRR), net present value (NPV), cash-flow analysis, and/or savings-to-investment ratio (SIR). [\[PDS Section 2.6\]](#)
2. **Develop a set of recommended ECMs** and select ECMs that are likely to achieve the investment criteria based on the experience of the engineers involved, building owner preferences, observed condition and operation of existing systems, preliminary calculations, and contractor recommendations. [\[PDS Section 2.1\]](#)
3. **Establish preliminary cost estimates for each ECM under consideration.** [\[PDS Section 2.7\]](#)
 - Initial quotes may be obtained from the contractor(s) at the feasibility stage. Alternatively, cost estimates may be based on the engineer’s experience with previous projects, detailed conceptual estimates, R.S. Means estimation, general contractor quotes, or other sources.
4. **Calculate each ECM's energy savings performance and cost-effectiveness** individually using calculation methods such as temperature bin analysis and regression analysis. For each ECM, document the calculation methodology, formulas, inputs, assumptions, and their sources. [\[PDS Section 2.5\]](#)
 - See [Uniform Methods Project \(UMP\)](#) for detailed calculation methods and best practices guidelines.
 - Vetted calculation tools can be used (sometimes referred to as models) for calculation methods.
 - Screening tools are acceptable for preliminary consideration of measure applicability but must not be used as a substitute for detailed calculation methods.
 - Note: If third-party proprietary calculation tools are used, sufficient

documentation must be included to validate unbiased assessment of energy savings estimates.

5. **Provide a statement of the energy prices** used to establish the monetary value of the savings. This conversion from energy savings to cost savings must be based on the appropriate local utility rate schedule or the commodity price if the facility purchases from an independent vendor.
6. **Evaluate the economics of each ECM** and package of ECMs with the owner to select a final list of ECMs to be included in the bid package.
7. **Develop final pricing for ECMs** selected in the project scope, including operation and maintenance costs. Finalize model-based analysis and recommendations based on pricing from bids received.
 - Note: final pricing is required before official certification, but in many cases, it may be submitted after an initial screening earlier in the process (see [Certification Timing](#)).
 - The final documentation package must include pricing based on bids that represent the price at which a contractor has committed to making the improvements.
8. **Prepare a final report summarizing ECMs** and compiling all required supporting data. The report must include a summary table with final energy cost savings, pricing for each measure, and the package of measures.

2.2 Documentation

- Qualifications of the person(s) performing the savings calculations.
- ECM savings results including:
 - Workbooks, spreadsheets, and other calculation tools used to develop savings estimates.
 - Disclosure and description of inputs (identify and document defaults versus assumptions), including those from any supporting tools (e.g., load calculators, field testing) used to create inputs for the spreadsheet calculations.
 - A calculation description with the necessary input information would allow a reviewer to reconstruct the calculation, including documentation of the formulas used, assumptions used, and their sources.
 - Description of interactive effects (e.g. heating and cooling loads associated with lighting retrofits) and documented estimates of impacts on energy savings where relevant.
 - Weather files that were used for ECM savings calculations if relevant.
 - Report: It is recommended that results be reported and methods and underlying data compiled using an industry-accepted format. For the industry standard for report presentation of ECM, building, and energy use data, refer to ASHRAE Standard 211P for Commercial Building Energy Audits.
 - Annual predicted energy savings by fuel type shall be documented in terms of energy units, a percentage of the total volume of each energy source and as cost savings using the correct marginal rate for that energy type. [\[PDS Section 2.8\]](#)
 - Basis for ECM cost estimates: If applicable, include the scope of work and bid packages on which they are based, or sources of cost estimates.

3.1 DESIGN, CONSTRUCTION AND VERIFICATION

Design, construction, and verification comprise the inter-related tasks associated with designing, installing, and verifying prescribed ECMs. The ICP Protocols do not address specific requirements related to design and construction. Still, the teams involved must commit to realizing the intent of the recommended ECMs accepted by the project owner.

The ICP verification methodology utilizes an Operational Performance Verification (OPV) approach to ensure that the individual-implemented ECMs were installed correctly and could achieve the predicted energy savings. OPV utilizes a targeted process that focuses specifically on the ECMs involved in the project and differs from traditional commissioning (Cx), which typically refers to whole-building optimization.

The OPV process involves various methods based on measure type, complexity, and other factors. OPV processes may include visual inspection, targeted functional performance testing, spot measurements, or short-term monitoring of the installed systems and control sequences.

The OPV effort may be performed by an independent party or by the project developer as long as a Quality Assurance Assessor oversees these efforts. Procedures performed during the performance period should be specified in the OPV Plan and addressed in the proposal and contract.

3.1 PROCEDURES

1. **Appoint an Operational Performance Verification Resource** who has one of the following qualifications:
 - a. Nationally/Internationally recognized commissioning certification, or:
 - b. Five years or more of commissioning experience documented in the form of a CV outlining relevant project experience
2. **Develop a Simple Operational Performance Verification Plan** (pre-construction) that includes:
 - a. Procedures to consult with the project developer
 - b. Procedures to verify that the ECMs have been implemented as designed and can be expected to perform as conceived and projected by the energy audit. Simple ECMs with targeted projects usually involve simple methods such as visual inspection or spot-checking system operation. [[PDS Section 3.2](#)]
 - c. Provisions for the development and implementation of a training plan for operators to be conducted at the conclusion of the OPV effort, which will train them in the correct operation of all new systems and equipment, including how to meet energy performance targets.
 - d. Provisions to update an existing Systems Manual (if one exists) after the OPV effort to document the modified systems and equipment and the process and responsibilities for addressing any future operational issues. [[PDS Section 3.4](#)]
 - e. Description of a simple OPV report will be developed after the OPV effort that will detail activities completed as part of the OPV process and include significant findings from those activities.

3.2 DOCUMENTATION

- Qualifications of the Operational Performance Verification Resource.
- Simple Operational Performance Verification Plan.

4.1 OPERATIONS, MAINTENANCE, AND MONITORING

Operations, Maintenance, and Monitoring (OM&M) systematically monitors energy system performance and implements corrective actions to ensure “in specification” energy performance of ECMs over time. Good OM&M processes involve a proactive strategy for achieving occupant comfort while optimizing energy performance. Procedures to be performed during the performance period should be specified in the OM&M Plan (if warranted by the complexity of the ECMs or the scope of the project) and addressed in the proposal and contract.

4.1 PROCEDURES

1. **Select ongoing management regimes** including periodic inspection, Building Management System (BMS) reporting, software-based monitoring and fault detection, periodic recommissioning, or a combination of these approaches. [[PDS Section 4.1](#)]
2. **Develop a Simple Operations, Maintenance and Monitoring Plan** (pre-construction) that includes:
 - a. A description of the OM&M management regime to be selected [[PDS Section 4.1](#)]
 - b. Defined roles and responsibilities of the OM&M staff and plans for issue resolution and preventative (or predictive) maintenance.
 - Develop an organizational chart establishing contact information for all personnel involved in the ongoing commissioning process and clear internal responsibility for the monitoring and response activities.
 - c. Provisions for developing and implementing a Training Plan that will be conducted for facility staff and service providers on new/modified equipment, management and monitoring software, and reporting regime. This training is to be conducted after the OPV effort and can be combined with the training described in the OPV section. Refer to ASHRAE Handbook-2023 for guidance [[PDS Section 4.3](#)]
 - d. Description of the process to develop performance verification criteria based on the OM&M regime(s) selected.
 - e. Provisions for updating the Operator’s Manual (if one exists) targeting the new systems and their operation, including assigning responsibilities for communicating performance issues and implementing corrective action. [[PDS Section 4.2](#)]
 - f. Provisions for the development and execution of instructions to notify building tenants of the project’s implemented building improvements and descriptions of any associated best practices or recommended behavior modifications.

4.2 DOCUMENTATION

- Simple Operations, Maintenance, and Monitoring Plan.

5.1 MEASUREMENT AND VERIFICATION

Measurement and Verification (M&V) activities verify actual versus predicted performance and are crucial to understanding the efficacy of energy efficiency measures and projects. Prior to investment decision-making (e.g., as part of contract development and investment due diligence), an International Performance Measurement and Verification Protocol ([IPMVP](#))-adherent M&V Plan for an energy efficiency improvement project must be developed and specified to ensure that reliable accounting methods for verified energy savings are in place.

The M&V procedures for this protocol are consistent with the methods outlined in IPMVP Core Concepts Option A (Retrofit Isolation: Key Parameter(s) Measurement) and/or Option B (Retrofit Isolation: All Parameter Measurement). This approach uses the pre-retrofit baseline energy use of the components affected by ECM savings developed in this protocol's Baseline section as the starting point for M&V calculations. The approach requires the following adjustments to retrofit isolation baseline energy use:

1. **Routine adjustments:** Account for expected changes in energy use.
2. **Non-routine adjustments:** Account for unexpected changes in energy use due to factors other than the installed ECMs.

This adjusted baseline represents what the baseline energy use would have been if the project ECMs had never been installed under the same set of post-retrofit conditions. Realized savings are then determined by comparing this adjusted pre-retrofit baseline energy use model with the actual post-installation energy use of the components affected by an ECM from the energy use of the rest of the building. In the case of Option A, some of these parameters are estimated rather than measured.

The energy savings are verified by comparing the system (s) 's pre- and post-retrofit energy performance.

The selection of an Option A and/or Option B approach should depend on the level of energy savings, the degree of confidence or variability associated with savings predictions for each ECM, and the parameters associated with the energy savings. Refer to the IPMVP documentation for guidance on selecting the most appropriate Option for an ECM.

The M&V effort may be performed by an independent party or by the project developer as long as a quality assurance provider oversees these efforts.

5.1 PROCEDURES

The M&V efforts must fully comply with applicable IPMVP Core Concepts-2022 Option A or B sections. [[PDS Section 5.1](#)]

1. **Appoint an M&V Professional** during the certification period who has one of the following qualifications:
 - Efficiency Valuation Organization Performance Measurement and Verification Analyst (PMVA) or Performance Measurement and Verification Expert (PMVE) certification, **or**
 - Association of Energy Engineers (AEE) Certified Measurement & Verification Professional

- (CMVP) certification, **or**
- At least five years of demonstrated M&V experience documented in the form of a CV outlining relevant project experience
2. **Develop an IPMVP-based M&V plan** as early in the project development process that adheres to the IPMVP Core Concepts-2022, Section 13. This plan should be developed pre-construction.

5.2 Documentation

- M&V plans to adhere to the IPMVP Core Concepts-2016, Section 7.1

6.1 PROJECT DEVELOPER REQUIREMENTS FOR IREE CERTIFICATION

ICP's IREE certification ensures that projects are robustly engineered and their savings predictions are reliable. To support this goal, project developer firms that submit projects seeking IREE certification must meet a number of requirements to ensure that they possess adequate experience, credentials, training, and other criteria. These qualifications will be verified during the IREE certification process.

IREE project certification requirements shall consist of the following:

- To be certified, the Qualifying Individual (a licensed Professional Engineer or AEE Certified Energy Manager or approved national equivalent) associated with the project development firm must sign off on a project's compliance with the ICP Protocols.
- The qualifying individual or other employees of the project developer firm seeking IREE certification of a project must possess and demonstrate five years of relevant industry experience via a CV, project history, or other means.
- Firms must submit three example projects that demonstrate that the project developer seeking IREE certification of a project has experience performing, planning, or managing tasks associated with all five of the ICP Lifecycle Phases consisting of Baselineing; Savings Calculations; Design, Construction & Verification; Operations, Maintenance & Monitoring; and Measurement & Verification.
- Project developer firms seeking IREE project certification must provide proof of insurance coverage for error and omissions / professional liability (or equivalent coverage) with a minimum of \$1MM per claim in the United States or appropriate coverage for other countries.

These requirements serve as minimum requirements to determine the experience and capability of project developer firms. There are cases where these qualities may be difficult to demonstrate, and ICP will review and consider such cases when necessary. Please contact ICP with any questions or concerns.