



Customer Tailored Energy Efficiency Pilot Program

FY19 PROGRAM GUIDE

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Ι. INTRODUCTION

New Jersey's Clean Energy Program offers a portfolio of Commercial, Industrial, and Local Government energy efficiency programs for state-wide utility customers. The programs have been designed to address different subsectors of the Commercial and Industrial ("C&I") sector along with the differing efficiency needs of building types and uses. The programs offer varying financial incentives to help offset the costs of installing or implementing various energy efficiency upgrades and technologies that reduce a building's overall energy consumption footprint.

This new Pilot program, the Customer Tailored Energy Efficiency Pilot Program (CTEEPP) supplements the current New Jersey C&I incentive programs (mostly NJ SmartStart Buildings) by offering a streamlined approach to developing and implementing energy efficiency projects for mid-to-large customers. This pilot program is mainly for facilities, buildings, or campuses that consume between 200 to 400 kW annually or have energy costs between \$150,000 to \$350,000 annually. This size category was targeted because buildings/facilities of this size were often too large to participate in the Direct Install program and too small to participate in the Large Energy Users Program.

This pilot program is unique in that:

- Customers can bundle multiple prescriptive and custom measures into one application with one project delivery approach.
- Customers can install advanced and emerging technologies which are not currently addressed under SmartStart Buildings.
- Larger customers with multiple measures can access to incentives for their targeted energy efficiency projects without enrolling in a whole-building program.
- Performance Verification engages with customers after their project is complete to ensure persistence of savings.

Incentive funding for this pilot program is limited and is estimated to serve approximately 40 projects. The Pilot has been approved by the New Jersey Board of Public Utilities (BPU) and was launched December 1, 2017.



2. PILOT PROGRAM DESIGN

Participating projects will be subject to the following pilot program requirements.

2.1 Eligibility

Eligible projects must meet the target size criteria1:

Target Customer Size					
Existing Buildings	New Construction & Substantial Renovation				
200 kW	50,000 square feet				

A single application may cover multiple sites, technologies and/or utility meters. The incentive will be payable to one entity; thus, each application must be covered by a single customer Tax ID number and Tax Clearance certificate.

There are no minimum energy savings requirements for CTEEPP.

Previously Installed Measures are not eligible. Equipment being replaced must still be present at the time of the Outreach Walkthrough, where pre-existing conditions are documented. Customers may start work at their own risk prior to the Notice to Proceed if the old equipment is installed at the time of the Outreach walkthrough or Scoping Session.



2.2 Incentives

There are two types of incentives available. Base incentives are based on the equipment installed. Technical Assistance incentives help to offset the soft costs associated with developing and planning an energy efficiency project.

2.2.1 Base Incentives

Prescriptive Measures: Measures meeting the requirements of the current SmartStart Building Program will

receive the established incentive under that program.

Custom Incentives: \$0.16 per kWh

\$1.60 per therm 50% of project cost

Buy-down to 1 year payback

¹ The Program Manager may adjust the size criteria on a case-by-case basis.



Incentive cap: \$250,000 per project

50% of project cost

Buy-down to 1 year payback

This does not include the Technical Assistance incentive detailed below.

The incentive cap may be adjusted up to 20% on a case-by-case basis at the Program Manager's discretion based on available incentive budget, participation level and project merit. Any additional incentive cap increase will be subject to NJBPU staff

approval.

2.2.2 Technical Assistance (TA) Incentive

Technical Assistance incentives are offered to help minimize the soft costs associated with developing an energy efficiency project. The Technical Assistance incentive allows customers to be reimbursed for 50% of soft costs up to \$10,000 per application.

Soft costs may include:

- **Energy auditing & analysis**
- Technical Assistance on individual building systems and opportunities
- Third party energy use monitoring service
- **Performance Verification Services**

Customers may use their own technical assistance provider. Those needing Technical Assistance to assess their buildings will be referred to a qualified Partners. A qualified Partners is one that has satisfactorily completed at least one Pay for Performance Existing Buildings project. Technical Assistance incentives require pre-approval based on demonstration of need in the Energy Efficiency Plan.

Schedule of Payments 2.2.3

Incentive payments are made along the life of a project, and differ between Technical Assistance Incentives and Base Incentives. The Technical Assistance incentive, intended to help with project development, is paid at Construction Kick-off (50%) and Substantial Completion (50%).

Base Incentives may be either prescriptive or custom. Prescriptive incentives are paid at substantial completion. CTEEPP pays 90% of custom incentives at substantial completion and the remaining 10% at Performance Verification. Project material/labor invoices will signify projection completion followed by a post-inspection as deemed appropriate.

Applications with multiple sites and/or buildings may use project phasing to allow multiple incentive payments based upon the completion of installation completion at individual buildings. Phasing is defined in the Energy Efficiency Plan via the Construction Schedule. Phased projects with staggered incentives may require multiple post-construction inspections. The table below displays the Payment Milestones and payout schedule.



Schedule of Payments								
Type of Incentive	Milestone 1 Construction Kick-Off	Milestone 2 Substantial Completion	Milestone 3 Performance Verification					
Technical Assistance Incentive	50%	50%						
Base Incentives – Prescriptive		100%						
Base Incentives – Custom		90%	10%					

Milestone 1: The Energy Efficiency Plan is approved and construction contracts are in place

All work is installed and new equipment and systems are generating energy savings. Milestone 2:

Multiple payments may be provided.

Milestone 3: Performance Verification is complete. Multiple payments may be provided. This

milestone may occur between 3-6 months after substantial completion.



3. **TECHNICAL REQUIREMENTS**

3.1 **Baselines**

Baselines establish the pre-construction energy use of a building, system, or group of systems and are used when calculating energy savings from proposed measures. Baselines are not needed for Prescriptive measures, only those using custom calculations in the Energy Efficiency Plan.

The baseline for existing buildings is the existing condition prior to renovation. For new construction or gut rehabilitation projects, the baseline is ASHRAE 90.1 2013 and/or applicable current industry standard.

3.2 Minimum Performance Standards

CTEEPP uses Minimum Performance Standards to assure that the equipment installed performs in a way that generates energy savings.

- Prescriptive measures must meet the minimum requirements of the SmartStart Buildings program.
- Custom measures must meet or exceed current SmartStart Custom requirements or the Minimum Performance Standards for the Large Energy Users Program.
- Advanced Lighting Control Systems must be listed on the Design Lights Consortium's Qualified Products
- **Emerging Technologies** must meet current building codes or industry standards, as applicable.

3.3 Ineligible Measures

Measures not eligible for incentives include:

- Renewable and power storage technologies including, but not limited to, photovoltaics, fuel cells, battery storage, and microturbines
- Combined heat and power systems are incentivized under New Jersey's Combined Heat and Power program and are not eligible for CTEEPP incentives.
- Previously Installed Measures are not eligible, with the exception of certain mechanical Prescriptive measures. Equipment being replaced must still be present at time of the Outreach Walkthrough, where pre-existing conditions are documented. Customers may start work at their own risk prior to the Notice to Proceed if the old equipment is installed at the time of the Scoping Session.
- Measures that do not save energy (kWh or therms) are ineligible. Customers are welcome to install measures which exclusively reduce operating costs and/or energy/demand costs, but they may not be included in the CTEEPP Energy Efficiency Plan.
- Operations & Maintenance or behavioral measures are ineligible. Behavioral measures include those where existing equipment is adjusted to improve performance or change energy use. Behavioral measures may include boiler clean & tunes, commissioning of existing equipment, thermostat adjustment, or seasonal equipment removal.



BUSINESS PROCESS 4.

The CTEEPP application process can be categorized into eight distinct phases which is detailed further below.

4. I Outreach and Recruitment into CTEEPP

Applicants that have sites or buildings that meet the eligible criteria as defined in Section 2 may contact a CTEEPP outreach support specialist to gain more information about the program and schedule a Walkthrough of the property to identify whether the project is appropriate for participation in CTEEPP. After the Outreach support specialist deems the project is suitable for participation in the program, they will document facility information, general existing conditions and technologies, areas of customer interest and identify efficiency opportunities as part of the walk-through. The Support Specialist will then forward all this information to a TRC Case Manager who will be the main point of contact for the CTEEPP Applicant and project.

4.2 **Enrollment**

The Case Manager will perform a Scoping Session with the Applicant to establish customer interest, identify likely energy efficiency measures, document existing conditions, review program requirements and responsibilities, and identify sources of possible funding. During the Scoping Session, the Case Manager performs a needs assessment to determine whether the customer needs additional assistance such as referral to technical expertise, financial assistance, internal sales, or benchmarking.

4.3 Benchmarking

Benchmarking is an optional component of CTEEP and will be offered to projects with a complete application to help identify which opportunities and facilities may benefit most from energy improvements. Benchmarking will be performed by TRC benchmarking staff.

4.4 **Energy Efficiency Plan Development**

Once the application is received, deemed complete, and accepted by the Case Manager, the customer works with their technical experts to develop an Energy Efficiency Plan which is a spreadsheet workbook ("Energy Efficiency Plan Tool" or "Tool"). Associated documentation provides additional detailed information about the project. The Workbook incorporates areas for documenting existing conditions, scope of work, and quality control comments. Additionally, the Tool calculates incentives for all measures, both prescriptive and custom. A primary benefit of the Tool is to standardize the data collection on a building-level and measure level basis. During the Scoping Meeting, the Case Manager will work with the customer and energy professionals to detail the information needed for the Plan development and Tool.

Energy Efficiency Plan submittals include:

- 1. Energy Efficiency Plan Tool: This spreadsheet workbook (provided by CTEEPP) includes a measure-bymeasure scope of work with financial and energy savings metrics. The Tool provides calculations for prescriptive measures as well as space for custom measure calculations (#2, below).
- 2. Engineering Calculations: Custom measures require individualized measure-by-measure energy and cost savings calculations. Calculations are typically performed by the customer's technical assistance provider.
- 3. Specification Sheets: Manufacturer's cut sheets or specification sheets are provided for all proposed equipment.
- 4. Utility Bills. Customer will provide at least one month of recent utility data for prescriptive measures and twelve (12) for custom measure evaluation.



- 5. Financing Plan: A sources and uses table to determine whether the project has identified funding to allow the project to proceed.
- 6. Construction Schedule: The construction schedule shows the proposed timeline for installing all the proposed measures.
- 7. Performance Verification Checklist: Custom measures delineate the proposed operating conditions, setpoints, and controls parameters for ongoing operation. The Performance Verification Checklist is used 3-6 months¹ after construction to determine whether the measures installed are operating as intended.
- 8. **Additional information** as specified by program Terms and Conditions.

Upon receipt of the Energy Efficiency Plan, the Case Manager reviews the submittal with support from technical staff as needed. Should the Energy Efficiency Plan require revision, the Case Manager will provide comment to the customer in writing per established procedures. The submittal of a revised Energy Efficiency Plan is due 30 days from the provision of comments to the customer.

4.5 Incentive Commitment

Upon acceptance of a complete Energy Efficiency Plan, TRC will commit incentives as defined by the Energy Efficiency Plan and program requirements. The Case Manager issues a Notice to Proceed to the customer which notifies them that their incentives are committed and establishes upcoming milestones and due dates.

In keeping with SmartStart Buildings program requirements, most projects are anticipated to have one year from Notice to Proceed to install the work approved in the Energy Efficiency Plan.

Construction Kick-off 4.6

Construction kick-off is the point at which the project has completed design and development, and construction contracts are in place. Projects taking advantage of the Technical Assistance incentive will be eligible to receive 50% of that incentive.

Submittals for the Construction Kick-off include:

- 1. Request for Incentive Form
- 2. Copies of contracts, purchase orders, and/or schedules of values for approved measures
- 3. Tax Clearance Certificate

Upon receipt of the Construction Kick-off Package, the Case Manager reviews the submittal. Should the Construction Kick-off Package require revision, the Case Manager will provide comment to the customer in writing per established procedures. The submittal of a revised Construction Kick-off Package will be due 30 days from the provision of comments to the customer.

4.7 Substantial Completion

Substantial completion is the point at which all the energy efficiency measures have been installed and are generating energy savings. All the energy improvements are installed and functional (or capable of functioning) to the intent of the Energy Efficiency Plan.

¹ This pilot allows the opportunity to test different scenarios for performance verification, including the optimum time period for customer follow-up. The Program Manager may assign a performance verification date based on measure type and complexity.



The Case Manager must receive the Substantial Completion Submittal Package after all the energy improvements have been installed. An improvement is considered "installed" when it adheres to the American Institute of Architects definition of Substantial Completion defined as

the "stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with Contract Documents so that the Owner can occupy or utilize the Work for its intended use."

For energy savings measures, the "intended use" is to generate the proposed level of energy savings. All measures must be installed per the Minimum Performance Standards.

The Substantial Completion Package should include the following items:

- 1. Final invoices/receipts for all measures. Cost documentation must list material and labor separately.
- 2. Request for Incentive Form
- 3. If the project has changed since the initial Energy Efficiency Plan was received and approved, an updated Energy Efficiency Plan Tool reflecting the as-built conditions.
- 4. Tax Clearance Certificate (if applicable per entity type)

When the Substantial Completion Package is received, the Case Manager will schedule a post-construction site visit to verify project completion and accuracy of the Substantial Completion Package. The site visit will also allow a review of any revisions to the Substantial Completion Package.

Should the Substantial Completion Package require revision, the Case Manager will provide comment in writing per established procedures. The submittal of a revised Substantial Completion Package will be due 30 days from the provision of comments to the customer.

When the Substantial Completion Package is approved, the customer is eligible to receive incentive payments of the remaining 50% of the Technical Assistance incentive, 100% of prescriptive Base Incentives, and 90% of the custom Base Incentive.

4.8 Performance Verification

Performance Verification is intended to provide customers with assurance that their energy efficiency project will continue to provide energy savings once their construction contract has been completed. Performance Verification only applies to Custom measures; it does not apply to Prescriptive measures.

The Energy Efficiency Plan includes a Performance Verification Checklist for all custom measures. This checklist is used 3 to 6 months after substantial completion to document whether the installed custom measures are operating as intended.

Performance Verification is intended to help with persistence of savings once the contractor has left the site; to make building owners more aware of the effects of operations on energy usage, and to provide on-going customer engagement. Additionally, for emerging technologies and ALCS, Performance Verification provides data about installations under a range of conditions to inform future program design.

Performance Verification must be submitted between 3 to 6 months of the Substantial Completion Package submittal. The Performance Verification package consists of the following:

1. Performance Verification Checklist

When the Performance Verification Checklist is received, the Case Manager will perform a desk review of the submittal to verify completeness. If the Performance Verification package requires revision, the Case Manager will provide comment in writing per established procedures. The submittal of a revised Performance Verification package is due 30 days from the provision of comments to the customer.



The customer is eligible to receive incentive payments of 10% of the Base incentive for custom measures when Performance Verification is approved.

Performance Verification is intended as a documentary and educational milestone; there is no calculation of delivered energy savings, metering, or measurement. If project documentation indicates that a building is not performing as planned, the applicant it may keep the full incentive.

The final determination of the Performance Verification is that a project is meeting or not meeting expectations. For projects that are not meeting expectations, the customer will be alerted that their equipment is not operating as expected. The Case Manager will provide possible explanations and suggestions about how to get back on track.

4.9 Pre & Post Inspections and Quality Control Procedures

All approved projects will be subject to a Pre-Installation inspection and Post-installation site inspection. The purpose of the Pre-Inspection is to document site conditions and that no efficiency measures/technologies have been installed that are not yet approved and to verify that any pre-existing measures/technologies are excluded from CTEEPP incentives, except where allowed via Prescriptive protocols. The Post-Inspection documents that measures/custom measures/and technologies listed in the EEP Tool are the ones installed at the facility along with the proper quantities.



5. **PROGRAM DISPUTE RESOLUTION**

Disputes, concerns, or complaints that arise will be addressed initially by the Case Manager or TRC Program Staff at the point of contact. If resolution for whatever reason is not possible, there is a dispute resolution process backed by the NJ Board of Public Utilities.

For contractual disputes between an applicant and installer or contractor, the NJ Division of Consumer Affairs (DCA) is the point of contact and the agency has an online complaint form.

The program is designed to allow for participation by any third-party contractor that meets the program requirements. One of the primary responsibilities of the program is to oversee the level of performance of the contractors that participate in the program. There are BPU approved contractor remediation procedures that will be followed if a contractor is found to violate program procedures and rules or consistently violates program requirements which may include being barred from participating in the program.