

New Construction & Major Renovations

Memorandum of Understanding for Path 3:
Whole Building Streamlined Path

The Whole Building Streamlined Path (“Program”) is provided by National Grid as a comprehensive new construction offering for buildings between 20,000 and 100,000 square feet (sf) when National Grid is engaged early in the project’s design process. The purpose of the Program is to reduce building electrical and thermal energy demand and consumption by implementing cost-effective design alternatives early, before the end of design development, when changes are still feasible.

Project Eligibility:

1. Customer should engage National Grid before the end of design development.
2. Projects must be new buildings, building additions, or complete renovations of existing buildings. Qualifying major renovations are such that occupancy is not possible during construction and where the project scope includes at least 3 of the following systems: (1) HVAC, (2) DHW, (3) lighting, (4) envelope, and (5) process equipment.
3. Participants must be a customer of National Grid.
4. Lab buildings, grocery stores, industrial projects (including data centers) and multifamily projects are not eligible for this Program. National Grid offers a different program for new and renovated multifamily buildings. Lab buildings, grocery stores and industrial projects may be able to participate in the Whole Building Energy Use Intensity (EUI) Reduction Path.

Key Customer Commitments:

1. Engage National Grid between pre-schematic design and the completion of the projects design development phase.
2. Work collaboratively with each other and with National Grid’s technical assistance (TA) vendor to maximize energy savings.
3. Participate in an energy efficiency charrette before the end of design development.
4. Provide design drawings through 90% Construction Documents.

Key National Grid Commitments:

1. Assign a pre-qualified technical assistance TA vendor to lead an Energy Charrette and provide technical assistance throughout design (TA vendor participation in charrette and all design assistance is funded 100% by National Grid).
2. Provide energy analysis to determine savings and incentives.
3. Assist customer in making informed decisions about including energy conservation strategies in the project.
4. Pay customers an incentive for each energy conservation measure (ECM) that is included in the project (see summary of incentives in step 5 below).
5. Offer an optional Verification Incentive to help customers and their teams achieve the predicted EUI once the building is operating (see Table 1 that follows).

This document outlines the roles and responsibilities of each party to set transparent expectations for all parties participating in the Program. Under no circumstances does this Memorandum require customers or design teams to incorporate any particular energy conservation measure or group of measures into a project. Building designs proceed at the direction of customers and their design teams. All assistance offered by National Grid through this Program is offered in an advisory capacity only.

National Grid understands that the following customer:

The Customer

will undertake the following (check one) new construction major renovation addition

Premises Address

This project is being designed by the following design professionals (collectively, the "Design Team"):

Architect

Electrical Engineer

Mechanical Engineer

IMPORTANT:

Customers participating in this pathway may not also participate in National Grid upstream programs where incentives for HVAC, domestic hot water, and lighting equipment are offered directly to distributors. To ensure participation in only one National Grid program pathway, designers must include language in project documents informing contractors that this project is participating in National Grid downstream program pathway, and that they may not pursue or accept any HVAC, domestic hot water or lighting upstream incentives for this project. Customers can and should participate in upstream offerings for food service equipment only.

Detail Process:

Step 1 – Coordination with National Grid

During schematic design or in pre schematic design, inform National Grid of your new construction project to see if the Whole Building Streamlined Path is a good fit. The Whole Building Streamlined Path is only available when National Grid is engaged early in design and an Energy Charrette (see Step 2) can be scheduled during schematic design or design development. The earlier you contact National Grid, the better the opportunity for energy savings and incentives. Following your initial conversation with National Grid, they will identify a TA vendor who will provide design support and technical assistance to the project team at no cost to the customer, starting with an Energy Charrette.

All customers and architects must sign this Memorandum of Understanding (MOU) and agree to the following steps.

Step 2 – Energy Charrette

During the schematic design or design development phase of the project, the TA vendor provided by National Grid will lead an Energy Charrette with the project's design team. The customer, the architect, the MEP (Mechanical, Electrical and Plumbing) Engineers, the lighting designer (if there is one), the commissioning agent (if there is one) and the general contractor (if selected) together with National Grid should participate in this brainstorming session intended to identify, discuss/analyze and compare potential building ECMs. The charrette, which can be part of a larger green building/LEED charrette, or a separate meeting, should be long enough to enable a full discussion of each energy system in the building and a wide range of energy conservation measures for each of these systems (2 hours is usually sufficient).

In advance of the Energy Charrette, the customer shall provide National Grid with any existing project drawings and design narratives. The outcome of the Energy Charrette shall be a report that identifies the ECMs that the team agreed to pursue further, and ideally include in the building design.

Step 3 – Interim Report and Consultation

After the charrette, the TA vendor will be available as needed to answer questions and otherwise consult with the design team on the best way to include the efficiency measures discussed in the charrette into the design.

The TA vendor will conduct a mid-design review based on the 50% or 100% design development set, depending on the project, to assess progress on incorporating the strategies agreed upon during the charrette into the design. At this time, the TV vendor will provide feedback on additional changes to the design that will result in further energy savings. The TA vendor will issue a report to National Grid and the customer based on this mid-design review.

Step 4 – Energy Analysis

The TA vendor will review the design drawings to assess the energy conservation measures (ECM) identified in the project and recommend additional ECMs for consideration. The TA vendor will calculate the potential energy savings and incentive amounts of the ECMs using incremental construction cost and comparing the energy savings against National Grid program baseline.

Step 5 – National Grid Incentive Pre-Approval

The TA vendor will prepare the draft final savings calculations and report for National Grid to review based on the 90% Construction Documents (CD) set. The TA vendor will prepare these draft final documents for National Grid review within 4 weeks of receipt of the 90% construction documents set.

National Grid will review the draft final savings calculations and report and may issue comments to the TA vendor for incorporation, and will then request the final calculations and report from the TA vendor. A completed Custom Application including the Minimum Requirements Documents (MRDs) which describe in detail the ECMs that are contributing to the project's energy savings will accompany the final calculations and report. The customer must review and sign both the Custom Application and the MRDs to receive incentive offer letters from National Grid.

Custom measure incentives are capped at 100% of the combined incremental cost of the energy conservation measures (ECMs) the project includes. National Grid will screen the ECMs through their benefit cost tool that is in the worksheet. Note that all measures must be cost effective for the customer to receive the maximum incentives and are subject to National Grid's program budget. Incentive levels for each measure are determined by National Grid based on predicted annual energy savings. Note that several measures supported in this Program are "custom" measures where energy savings are calculated on a project-by-project basis: See the following page for incentive rates.

Select projects are subject to 20% hold-back pending receipt of trend data or other information stipulated in the Minimum Requirements Document (MRD) that National Grid will prepare and provide for customers.

Upon acceptance of the final analysis and report, the signed Custom Application and MRDs, National Grid will issue a formal letter offering an incentive to the customer.

Summary of Customer Incentives*			
Incentive	Energy Conservation Measure (ECM)	Rate	
Custom Incentive	Building Envelope	\$0.35/kWh	\$2.00/therm
	Unitary HVAC (RTU, AC, HP, VRF)		
	High Efficiency Chillers		
	Energy Recovery		
	Demand Control Ventilation		
	Variable Flow Kitchen Hood		
	DHW Heaters		
	Low Flow DHW Fixtures		
Prescriptiv Incentive	Lighting	Current program rate	
	Variable Frequency Drives		
	Condensing Boilers		
Design Team Incentives			
Calculated at \$0.07 kWh or \$0.34/therm (as applicable) and capped at \$10,000			

Step 6 – Construction Completion, Construction Phase Incentive Payment, Design Team Incentive Payment

The customer and design team must keep the list of final ECMs in mind during construction administration so that ECMs for which incentives are being offered are not substituted or removed during construction.

A few weeks before substantial completion, National Grid may request a set of the approved submittals, invoices and photographs associated with all of the ECMs being supported with incentives, including controls submittals. National Grid may also request a copy of the project’s payments.

All projects participating in the Program are subject to inspection by National Grid. Customers may be asked to arrange for these post inspections to take place once all ECMs are installed and functioning.

Upon National Grid review of submittals and invoice documents, and upon completion of the post inspection, National Grid will provide the incentive payment to the customer and will provide 100% design team incentive payment (an invoice is required).

Design team incentives are paid to the design team lead, which may disperse to other team members as appropriate. The full design team incentive will be paid at the conclusion of construction.

Select projects are subject to 20% incentive hold-back pending receipt of trend data or other information stipulated in the Minimum Requirements Documents (MRDs).

Disclaimers

Except for payment of incentives as set forth hereunder, National Grid does not make any representations, warranties, promises or guarantees in connection with the Program, energy conservation measures (ECMs), EUI reduction strategies, energy savings, benefits, adequacy or safety of ECMs or other items, or any work, services or other item performed in connection with the Program including, without limitation, the warranty of merchantability or fitness for a particular purpose. Also, other than the (i) energy cost savings realized by Customer, (ii) energy or ancillary service market revenue achieved through market sensitive dispatch, (iii) alternative energy credits, and (iv) renewable energy credits (altogether, the "Customer Credits"), National Grid has unilateral rights to apply for any credits or payments resulting from the Program or ECMs (the "National Grid Credits"). Such National Grid Credits include but are not limited to credits and payments for: (a) ISO-NE capacity, (b) forward capacity credits, (c) other electric or natural gas capacity and avoided cost payments or credits, and (d) demand response program payments. Customer waives, and agrees not to seek, any right to any National Grid Credit. National Grid is not responsible for the payment of any taxes assessed by federal, state or local governments on either benefits conferred on the owner by the National Grid or design incentives paid to the design team.

By signing below, the customer represents that he/she (1) shall be the sole and lawful owner of the Premises and (2) has read, understands, accepts and agrees to the terms and conditions for participation in the Program outlined above.

Owner Signature:		Owner Printed Name:
Date:	Phone:	Email:
Architect Signature:		Architect Printed Name and Company Affiliation:
Date:	Phone:	Email:

THIS DOCUMENT MUST BE SIGNED BEFORE ENGINEERING SERVICES APPLICATION CAN BE REVIEWED

PROCESS CHECKLIST

Path 3: Whole Building Streamlined Path

Pre-Design Phase

- Engage National Grid early about the project
- Incorporate commitment to work with National Grid and to achieve or exceed program energy goals in the request for proposal (RFP) and Owners Project Requirements (OPR) documents

Schematic Design and Design Development Phases

- Sign a Memorandum of Understanding (MOU)
- Provide early design drawings/narratives
- Participate in brainstorming charrette
- Confirm the list of Energy Conservation Measures (ECM) included in project
- Provide 100% Design Development (DD) drawings for Mid-Design Review Report
- Review/discuss the Mid-Design Review Report provided at 100% DD

Construction Document Phase

- Provide following language to the purchasing agent: **“This project will be receiving incentives through National Grid energy efficiency program directly. Equipment Distributors: Please Do Not include an upstream program incentive in the bid response, as this project can’t be reported through the Commercial Upstream Program.”**
- Provide 50% Construction Documents (CD) and discuss and value engineering changes
- Provide 90%/100% CD for final report
- Review/discuss the Final Report including ECM, energy savings and incentives at 90% or 100% CD
- Sign the customer application and Minimum Requirements Documents (MRD)

Construction Phase

- Keep the final ECMs in mind during construction

Post Construction

- National Grid may request submittals, photographs, invoices and possibility schedule of values to support the ECMs
- A post inspection may be scheduled to validate equipment installation and operation
- Sign the post-inspection customer application and MRD
- Customer incentives will be paid upon ECM validation
- Design team incentives will be paid upon ECM validation and receipt of invoice