New Construction Services: Program Approaches

Whole Building Approach
The Whole Building Approach is designed for customers who have the opportunity to construct a new building or facility from the ground up or a major renovation that triggers code compliance in many areas. National Grid has found that the best outcomes in a new construction building or major renovation, requires early intervention, communication, coordination and expertise. National Grid can assist in providing critical support throughout design and construction, maximizing energy savings. There are two different pathways available when participating in National Grid’s Whole Building Approach,

1. the Integrated Design Path, and
2. the Advanced Building Path

Integrated Design Path
The Integrated Design Approach targets the primary decision-makers in new construction and major renovation projects: building owners, developers, architects, engineers, designers, construction managers, and energy consultants. By working collaboratively with the design team during the course of the preliminary conceptual design phase, this approach generates detailed analyses and recommendations that allow owners and design teams to make informed decisions regarding energy efficiency features. This approach requires the involvement and collaboration of all parties, from conceptual through project completion. The Integrated Design Approach generally results in substantially higher levels of energy savings, including the capturing of interactive savings and provides higher levels of incentives as a result of increased energy savings. This pathway is most applicable for buildings that are greater than 100,000 square feet or buildings smaller than this size that are not a good fit for the Advanced Buildings Path (see below) for reasons of complexity or specific use. Please reach out to the National Grid contacts listed at the beginning of the guide for assistance in determining the proper pathway for your building.

Advanced Buildings Path
Advanced Buildings® Core Performance® is a comprehensive set of prescriptive criteria for commercial new construction built around delivering the New Building Institute’s national Advanced Buildings (AB) Program.

The Advanced Buildings New Construction Guide (The “Guide”) applies proven and available energy efficient technology and building science to the design of commercial and institutional buildings in the 10,000–100,000 square foot range. The Advanced Building Approach is designed for a range of building types including office, schools, retail, and public assembly in the 10,000 to 100,000 square foot range.
There are three tiers currently available for participants to choose from.

**Tier 1 – Advanced Buildings Core Performance Guide (version 1.2)**
The Advanced Buildings Tier 1 represents the previous version of the Advanced Buildings Core Performance Guide (1.1.2 and 2012 IECC Supplement). The Tier 1 guideline requires that the Base Measures (Section 1) and the Design Strategies (Section 0) are implemented, at minimum, to reach 15-20% above ASHRAE 90.1-2007/IECC 2009.

**Tier 2 – Advanced Buildings New Construction Guideline (Version 2.0)**
The Advanced Buildings Tier 2 represents the new Guide (new version 2.0). The Tier 2 guideline requires that Base Measures (Section 2.1-2.17) and the Design Strategies (Section 0) are implemented, at minimum, to reach approximately 15% above ASHRAE 90.1-2010/IECC 2012 (equivalent of 30-35% of IECC 2009). Additional enhanced requirements (Section 2.17-2.23) may provide for additional savings. Tier 2 represents the next level of efficiency for whole-building energy performance, beyond the requirements in Tier 1. The measures in Tier 2 supersedes the strategies listed in Tier 1 above.

**NOTE:** Depending up the project’s permit date, it will be determined whether the project is eligible for Tier 1 or Tier 2 of this package.

**Tier 3 – Advanced Buildings Pathways (Advanced Systems)**
This tier represents the New Construction Guide (new version 2.0) enhanced with advanced systems’ focused pathways. The Tier 3 guideline requires that all Tier 2 measures (2.1-2.23), Design Strategies and the Performance Pathways are implemented, at minimum, to reach approximately 20-25% above ASHRAE 90.1-2010/IECC 2012 (equivalent of 35-40% above IECC 2009).

The Performance Pathways represent broader design strategies that require an integrated and informed design approach to more advanced efficiency strategies than those represented by individual savings measures. They require deeper analysis or expertise from the design team and may not be applicable to all project types or conditions. They represent an opportunity for significant additional savings beyond the basic requirements of the Advanced Buildings pathway.
**Systems Approach**

The Systems Approach is designed for new construction projects involving the replacement of a piece or pieces of equipment near the end of their useful life or when focused on one or two aspects of a building’s energy use due to a remodel or change in space use type. National Grid’s New Construction Services are designed to encourage customers to think broadly as systems are frequently interrelated and may be more economical to install when walls and ceilings are open or down, or large equipment is being moved into a space. Customers selecting the System Approach will utilize the necessary New Construction prescriptive application for each measure for which a prescriptive application exists, or complete a National Grid custom application for non-prescriptive energy efficiency measures which will result in energy savings.

**Custom Path**

The Custom Path is designed to facilitate creative and deeper energy savings in systems of a new construction or major renovation project. Custom Path projects rely on engineering calculations to estimate energy savings. Incentives are directly related to a number of variables, total project costs and associated savings. Eligibility requirements are clearly delineated on the actual custom application.

**Prescriptive Path**

The Prescriptive Path is a standard approach for energy efficiency incentive delivery. There are specific requirements for equipment available under National Grid’s prescriptive offerings and each specific prescriptive application clearly identifies the qualification requirements and the incentive dollars associated with each specific measure.

**Sustainable Office Design**

National Grid is launching a new lighting incentive initiative called Sustainable Office Design (SOD) that promotes high-performance office lighting for quick turnaround tenant fit-outs. This initiative is for office building Owners or Tenants depending on the building lease profile.