Program Description

NYSERDA's Advanced Submetering Program (ASP) is designed to help reduce electricity use in buildings where residents do not pay for their electricity usage. The program offers incentives for both building owners and residents through the installation of advanced submetering as well as the installation of ENERGY STAR®® refrigerators and in-unit lighting. The installation of these energy efficiency measures will help to lower the owner's and/or residents' energy costs each month. The program goal is to increase energy efficiency so that residents have energy efficient apartments when they begin to pay for their electric consumption.

Advanced submetering involves the installation of a master meter in each building, as well as a submeter for each apartment unit and the common area. Electricity usage for each apartment can then be measured and occupants can be billed for their actual usage.

The program includes the following steps:

1. Building submits completed Application packet to NYSERDA.
2. NYSERDA schedules a site visit to inspect the participating building and to verify that no submeters are installed.
3. NYSERDA approves the Application and issues a notice to proceed.
4. Building installs equipment as required by program rules and as outlined in the Application.
5. NYSERDA inspects the installation to verify that equipment has been installed and meets requirements.
6. If installation is complete and meets requirements, NYSERDA pays the agreed-upon incentive.

Here is the list of equipment and the incentive for which each type of equipment is eligible:

Advanced sub-meters	$250 per meter up to 50% of cost of system
Master meter(s)	$1,500 per Master Meter
Refrigerator, ENERGY STAR®	$250 Each
In-unit lighting (permanent fixtures)	$25 Each

Program Eligibility

In order to be eligible for NYSERDA's Advanced Submetering Program and receive incentives, the following requirements must be met:

1. The property must be located in New York State and be an electric distribution customer that pays a System Benefits Charge to an investor-owned New York State utility company.
2. The property must have at least five (5) units to be considered a multifamily building.

3. The building(s) must be master-metered, i.e., no mechanical system exists in the building to facilitate the provision of an individually metered electric bill for each apartment in the building.
4. The application and all attachments must be filled out completely and submitted to NYSERDA.
5. An applicant cannot receive incentives for appliances only. An advanced submetering system must be installed in every participating building.
6. If existing refrigerators found in rental dwelling units are greater than 10 years old at the date of application to the program, the owner of the building(s) is required to offer to replace all refrigerators that are greater than 10 years old with similarly sized ENERGY STAR® refrigerators at no cost to the residents of the apartments in question. If the owner has in writing that a tenant has declined the new refrigerator, it does not have to be replaced as part of this program.
7. If the refrigerators are less than 10 years old, it is not a requirement that they be replaced. Owners wishing to replace refrigerators within the building will be able to access incentives to replace non-ENERGY STAR® units that are less than 10 years old. They must be replaced with similarly sized units that are ENERGY STAR® labeled.
8. If residential refrigerators are replaced, the replacement refrigerators must be ENERGY STAR® labeled. In the case of replacement of in-unit lighting fixtures, replacement of these measures must be ENERGY STAR® compliant.
9. All refrigerators and in-unit lighting fixtures that are replaced must be recycled and properly decommissioned. These refrigerators and lighting fixtures cannot be resold.
10. All terms and conditions presented in the 'Terms and Conditions' sheet must be met.

List of Approved Submetering Technologies

Submeters installed under the Advanced Submetering Program must be approved by Public Service Commission staff.

Meters Currently Approved for Installation Include:

- Intech 21 Power Meter PM-2104
- Quadlogic S-10 Submeter
- Leviton Mini Meter
- Platinum Meter Services – PMS Submeter

Technical Requirements for Advanced Submeters in the Advanced Submetering Program:

Electric submeters are instruments of commerce and should be compliant to the applicable American National Standards Institute - ANSI C12.1, C12.22, and C57.13 to ensure accuracy. The ANSI performance tests on submeters should be performed at a recognized laboratory using equipment that has traceability to the National Institute of Standards and Technology. The following ANSI requirements should be performed on submeters based on electric service classification.

C12.1 – Code for electricity meters

Test 1 - No load
Test 2 – Starting load
Test 3 - Load Performance
Test 4 - Effect of variation of power factor
Test 5 – Effect of variation of voltage on metering devices
Test 5a – Effect of voltage on solid state ancillary devices
Test 7 – Equality of current circuits – must be performed on three-wire single element meters
Test 9 – Effect of temperature rise
Test 11 – Effect of internal heating
Test 12 – Effect of meter tilt
Test 13 – Stability of meter performance
Test 15 – Insulation between circuits
Test 16 – Voltage interruption test
Test 17 – Effect of high voltage line surges
Test 18 – Effect of external magnetic field
Test 19 – Effect of variation of ambient temperature
Test 19a – Effect of variation of ambient temperature on solid state ancillary devices
Test 20 – Effect on meter performance due to temporary overloads
Test 21 – Effect of current surge on ground conductors
Test 28 – Effect of electrostatic discharge
Test 29 – Effect of Storage temperature
Test 30 – Effect of operating temperature
Test 31 – Effect of humidity
Test 32 – Effect of mechanical shock
Test 33 – Effect of transportation drop
Test 34 – Effect of mechanical vibration
Test 35 – Effect of transportation vibration

Provide end to end security of meter data as described in ANSI C12.22

Comply with the necessary requirements as mentioned in ANSI C57.13(6)

Other minimal requirements for Submeters

- Each submeter must have a visual display capability for cumulative usage;
- Ability to provide time-stamped interval data, at hourly or shorter time intervals;
- On-board meter memory capable of storing at least 60 days of readings;
- Direct, real-time (defined as a time lag of five minutes or less) remote read-only access for customers and/or competitive providers to meter data;

- Capability to remotely read meters on-demand;
- Utilizes open standards-based communication protocols and platforms, e.g., broadband, PLC, Internet, XML, MV-90, Zigbee, DNP3, etc;
- Two-way communications capability, including ability to remotely upgrade meter firmware;
- Ability to send signals to customer equipment to trigger demand response; functions, and/or connect with a home area network (HAN) to provide direct or customer-activated load control;
- Self diagnostics, including tamper flagging capability; Upgrade capability

Submission

Application Packets must be submitted to:

NYSERDA Advanced Submetering Program
c/o TRC Energy Services - Program Implementer
10 Maxwell Drive, Suite 200
Clifton Park, NY 12065

Applications can be submitted electronically via email to:

ASP@TRCsolutions.com

A *complete* Application Packet for the Advanced Submetering Program (ASP) consists of the following documents:

1. Application Form
2. Terms and Conditions (executed with signature)
3. W-9 for the Participating Building
4. Documentation of compliance with the requirements of the Department of Public Service submetering regulations, Title 16, Part 96 of the New York Codes, Rules and Regulations, i.e., a copy of the PSC Order approving submetering in participating building(s).

Questions about the program's requirements, your building's eligibility, the application process or any other program information can be directed to NYSERDA's Program Implementer.

Rose Hamm, ASP Pipeline Manager
TRC Energy Services - Program Implementer
10 Maxwell Drive, Suite 200
Clifton Park, NY 12065

Email: ASP@TRCsolutions.com
Telephone: (518) 688-3116