



RENEWABLE PORTFOLIO STANDARD
CUSTOMER-SITED TIER
SMALL FUEL CELL PROGRAM

Program Opportunity Notice (PON) 2157
Total Program Funding \$0.6 Million
\$100,000 per Year

Financial incentives are available to support the installation and operation of continuous duty fuel cell systems in New York State, with up to \$50,000 available for fuel cell systems rated at 25 kW or less. Funding is on a first-come, first-served basis until February 29, 2016 at 5:00 PM Eastern Daylight Time, or until all funding has been fully committed, whichever comes first.

Generally, only electric customers that pay the Renewable Portfolio Standard (RPS) Program Surcharge on their electric bill are eligible to receive funding through this program.

In order to participate in PON 2157, Applicants must comply with all program rules, procedures, and eligibility requirements, submit all required forms and supplemental documentation, and enter into a Standard Performance Agreement (SPA) with NYSERDA. Applicants must also adhere to the performance measurement requirements throughout the term of the SPA.

Application Submission: A digital copy of the Application Package on CD-ROM plus one (1) printed copy (**which must contain an original signature**) of all Project Application materials must be sent to the following address:

Roseanne Viscusi, PON 2157
NYS Energy Research and Development Authority
17 Columbia Circle
Albany, NY 12203-6399

All Program Questions should be directed to the following Project Managers: Scott Larsen, (518) 862-1090 ext. 3208, LSL@nyserda.org, or Ed Kear, (518) 862-1090 ext. 3269, ebk@nyserda.org

All Contractual Questions should be directed to: Nancy Marucci, (518) 862-1090 ext. 3335, nsm@nyserda.org.

*Applications lacking the appropriate completed and signed Application Checklist will be returned. Faxed or e-mailed applications will not be accepted. Applications will not be accepted at any NYSERDA location other than the **Albany** address above. If changes are made to this solicitation, notification will be posted on NYSERDA's web site at www.nyserda.org.*

I. INTRODUCTION

The Customer Sited Tier Fuel Cell Program seeks to support the purchase, installation, and operation of continuous duty stationary fuel cell electric power generation equipment in New York State. This is one of several Customer-Sited Tier (CST) programs of the New York State RPS. The CST, commonly described as “behind the meter” generation, refers to generation that is sited at the electric customer’s location and used primarily to serve the electric customer’s load (i.e., not primarily exported to the utility grid).

For the purposes of the PON 2157 Small Fuel Cell Program, a fuel cell module with a nameplate rating of 25 kW or less shall be considered “small”. A “fuel cell system” may consist of one or more small fuel cell module(s) installed at a project site.

The CST Fuel Cell Program is aimed at quickly maximizing the amount of electricity produced by fuel cells in New York State, and therefore addresses rapid installation and long-term operation of mature, commercially-available continuous duty fuel cell systems. NYSERDA has other programs that are aimed at the development and product-testing of fuel cell prototypes. NYSERDA maintains a list of fuel cell systems which are eligible to participate in this solicitation (see Appendix E – check NYSERDA’s website for periodic updates to Appendix E).

Since the CST Fuel Cell Program is aimed at electric generation, the recovery and beneficial use of heat produced by the fuel cell is not mandated under this program, however, applicants are advised to consider maximizing the efficiency of their systems by including heat recovery features, if applicable, as an approach to optimizing the economic life cycle of their projects. Furthermore, the applicant is not prohibited from seeking support from other NYSERDA programs for certain benefits attributable to heat recovery, such as electricity peak load reduction.

Renewable Portfolio Standard (RPS) Attributes: Orders issued by the NYS Public Service Commission provide that the RPS Program will support and promote an increase, to 30%, of the percentage of the energy consumed in NYS that comes from renewable sources. The implications for projects participating in this PON are specified in Section VII of this solicitation.

II. INCENTIVES

PERFORMANCE-BASED INCENTIVES

Performance-based incentives will be paid to those facilities operating with an annual capacity factor greater than or equal to 50%. For any given year, performance based payments of \$0.15 per net kWh are offered through this program for the system’s net production (the portion of verified fuel cell electricity generation, which exceeds the fuel cell system’s parasitic consumption) and may be provided for up to three consecutive operating years subsequent to commissioning. Each annual performance payment is capped at a maximum of \$20,000 per year per project site. Facilities with annual capacity factors of less than 50% in a given year will not be eligible for performance payments for that year.

Annual Capacity Factors (ACF) will be determined by dividing the net output of the fuel cell system during a one-year period by the maximum rated output (nameplate rating) of the fuel cell times 8760 hours per year (see Equation 1 below).

$$\text{Eq. 1: } ACF = \frac{\text{Actual Net Annual Output}}{\text{Nameplate rating} \times 8760} \quad \text{where;}$$

- *Actual Net Annual Output* is the total verified electrical energy delivered by the fuel cell system to the site per year (i.e., fuel cell stack production minus parasitic consumption)

Projects receiving performance-based payments will require performance measurement to ascertain appropriate payment. The project site will be required to install and maintain an on-site kilowatt hour meter capable of reporting the net annual electricity production delivered to the site. Projects must provide annual electricity production data for a minimum of three consecutive years. All data acquired by NYSERDA may be made available to the general public.

A representative from the project site must read the installed kilowatt hour meter at least once every 3 months, record the electricity production data and provide such data to the NYSERDA Project Manager. NYSERDA will exercise its option to visually inspect the kilowatt hour meter on an annual basis.

MAXIMUM TOTAL INCENTIVE

NYSERDA will calculate the Maximum Total Incentive based on the nameplate rating of the proposed system. NYSERDA will encumber the Maximum Total Incentive upon execution of the SPA. Projects accepted into the program will be reviewed annually to evaluate the electricity generated and calculate performance-based incentive payments. After each annual performance payment, NYSERDA will calculate NYSERDA's residual maximum financial obligation and may reprogram any surplus funds for use in other projects.

Incentives will only be paid for systems installed as approved by NYSERDA. Any system modifications or equipment changes must be approved by NYSERDA in writing before a system is installed. Failure to get NYSERDA approval on any and all modifications may result in revocation of the incentive reservation or nonpayment of the incentive.

Small Fuel Cell System Incentive Summary

Definitions: Fuel Cell Modules 25 kW or less

CST Program Funding Allocation: \$100,000 per year

Project Funding Caps: \$50,000 per project site.

Performance Incentives (three consecutive annual payments):

- \$0.15/kWh for operation with an annual capacity factor greater than or equal to 50%
- Maximum Performance payment: \$20,000 per year per project site

III. PROGRAM STEPS

This section describes the program steps for participation in the CST Small Fuel Cell Program. NYSERDA will place applicants in a queue for contracting. An applicant's spot in the queue will be secured only when NYSERDA deems their application package to be full and complete. Thereafter, the applicant must adhere to a rapid-paced timeline in order to remain in the program; timely execution of NYSERDA's SPA is essential for an applicant to maintain their spot in the queue for entering the program. Applicants must meet all of the deadlines outlined in the Program Steps to avoid being ejected from the program (if ejected, projects will be eligible to re-enter the rear of the queue and seek re-admittance to the program contingent upon the availability of funds).

1. Submit Application Package

The Applicant's first step is to submit a completed Application Package to NYSERDA. Procedures for submitting the Application Package are described in *Section V*. NYSERDA or its Agent may conduct a site inspection to verify the accuracy of the information in the Application Package.

2. Provide Purchase Agreement from OEM or Manufacturer

Once NYSERDA has informed the applicant their application has been approved and sufficient funds are available and have been set aside, the applicant has thirty (30) days to furnish documentation that they have signed a purchase agreement with a fuel cell manufacturer and a letter from the fuel cell OEM confirming the delivery date of the fuel cell system to the applicant's site. If the applicant fails to provide this information within the time allotted the applicant will automatically forfeit their position in the queue and be placed at the rear of the queue – such a forfeiture of position in the queue may result in the release of funds to the next eligible applicant.

3. Sign Standard Performance Agreement (SPA)

Upon acceptance and approval of a completed Application Package and signed purchase agreement, NYSERDA will offer the Applicant an SPA. The SPA will specify the Maximum Total Incentive. The Applicant must sign and return the SPA to NYSERDA. Funds for a project will be encumbered only upon issuance of a fully-executed SPA, a sample of which is included as *Appendix B*.

4. Equipment Delivery

The Applicant *has 9 months* upon transmittal of the fully executed SPA to demonstrate to NYSERDA that the Fuel Cell System has been delivered on site. If delivery is not completed within this timeframe, the Applicant must request an extension from NYSERDA for continued reservation of the incentive funding. This request must describe the reasons for the delay and the expected timeframe to complete the delivery. *Continuation will be at NYSERDA's option. Only a limited number of short term extensions will be granted. Requests for extensions will only be granted upon demonstration of sufficient and reasonable cause for the delay.* NYSERDA will notify the Applicant in writing whether or not the extension has been granted.

5. Installation and Commissioning

The Applicant *has 12 months* upon transmittal of the fully executed SPA to complete Installation and Commissioning of all system equipment. *Installation and Commissioning* is defined as the completion of installation of the Fuel Cell System, interconnection of the System with the utility grid, and at least one month of satisfactory operation of the system according to its design intent. If Installation and Commissioning are not completed within this timeframe, the Applicant must request an extension from NYSERDA for continued reservation of the incentive funding, which describes the reasons for the delay and the expected timeframe for completion of this task. *Continuation will be at NYSERDA's option. Only a limited number of short term extensions will be granted. Requests for extensions will only be granted upon demonstration*

of sufficient and reasonable cause for the delay.. NYSEERDA will notify the Applicant in writing whether or not the extension has been granted.

6. Submit Project Installation Report

After Installation and Commissioning have been completed, the Applicant must submit a Project Installation Report to NYSEERDA, which includes As-Built Drawings of the system. Details on the requirements for the Project Installation Report are located in *Appendix D*. NYSEERDA's approval of the Report is contingent upon the result of a Post-Installation Site Inspection, which will confirm the information provided in the Project Installation Report, the post-installation inspection will be performed by NYSEERDA and/or NYSEERDA's designated agent.

7. Annual Performance Reporting

The Applicant is responsible for monitoring the electric generation from the fuel cell system. The verified electric generation will provide the basis of the performance incentive payments. At the end of each annual performance period, the Applicant shall produce a performance report summarizing the performance of the system based on the data collected during that period.

8. Requesting Performance Incentive Payments

Based on the information provided in the three required Annual Performance Reports, three annual Performance Incentive payments will be made for the verified electricity generated. These payments will be made after the Annual Performance Reports have been approved by NYSEERDA, and invoices have been submitted to NYSEERDA for payment.

IV. ELIGIBILITY

To participate in PON 2157 Small Fuel Cell Program, the following criteria must be met:

- Only new generation equipment purchased or installed under a fully executed PON2157 Small Fuel Cell Program Standard Performance Agreement will be eligible for the program;
- Fuel cell modules must be 25 kW or less;
- Project sites must be located in New York State;
- In general, projects must be located at sites that pay the NYS RPS Program Surcharge
- Fuel Cell electricity must be generated and used primarily by the project sites, where the utility meter, which is interconnected with the grid, is located;
- Fuel Cell Systems must:
 - Consist of Commercially Available Technologies as listed in Appendix E,
 - Be warranted for continuous duty for the duration of the 3 consecutive year performance period by the original equipment vendor, and
 - Have a detailed maintenance agreement with a factory service provider for the duration of the project.
- Applicants (and Project Sites, if different) must comply with all applicable:
 - Federal, State and Local codes, rules, and regulations;
 - Federal, State and Local permitting requirements; and
 - Federal, State and Local emissions limits

Eligibility Note 1: THIRD PARTY OWNERSHIP

Under a third-party ownership scenario, contractors that meet the eligibility requirements included in this solicitation may be permitted to build, own and operate a fuel cell project at a customer's site if the

customer pays the RPS surcharge and if the contractual relationship between the customer and the third party clearly indicates that the entire incentive payment is being passed on to the customer.

Eligibility Note 2: It is preferred that the Fuel Cell Electric Power Generation Equipment be located at project sites owned or operated by customers who currently pay the NYS RPS Program Surcharge, however, projects located in New York State at project sites owned or operated by customers who currently do not pay the NYS RPS Program Surcharge may request special dispensation seeking eligibility. Projects will be evaluated depending upon the circumstances involved and whether a significant amount of **widespread** public benefit will result. Exceptions that demonstrate significant public benefit consistent with NYSERDA's program objectives may be considered on a case by case basis. Applicants are directed to fill out the appropriate question box on Section FC.2 of the Application Form Worksheet (see Appendix A) and provide any necessary supporting documentation to substantiate the request. Determination of host site eligibility is at NY State Department of Public Service (DPS) Staff's discretion. Applicants will be notified in writing of DPS's decision. Project sites seeking exemption from the RPS program surcharge requirements will not be deemed full and complete, and therefore, will not be admitted to the queue until DPS staff has rendered a decision regarding the host site's eligibility.

V. APPLYING FOR THE PROGRAM

APPLICATION PACKAGE

Detailed Application Package requirements are included in *Appendix A*. The Application Package consists of the following:

- Completed, Signed, and Notarized Application Form (2157Small-appform.xls);
- Description of Tariff Impacts and Interconnection Requirements;
- Site Plan;
- Applicable Permits;
- Environmental Assessment Form; and
- Other forms as applicable – i.e. Form Requesting Addition to the List of Eligible Fuel Cells

The submitted application package shall consist of one (1) hard copy of the entire application package with the original signatures and a CD in a format viewable on Windows 98 containing a PDF of the entire application and the digital versions of the completed 2157Small-appform.xls in Microsoft Excel format.

All project application materials must be sent to the following address:

Roseanne Viscusi, PON 2157
New York State Energy Research and Development Authority
17 Columbia Circle
Albany, NY 12203-6399

NYSERDA will date/time-stamp and log all application materials as they are received. NYSERDA recommends that all application materials be sent via delivery service, certified or registered mail. Applicants should retain proof of delivery (such as a return receipt for certified, registered, or overnight mail) for all application materials submitted.

APPLICATION PACKAGE REVIEW

Upon receipt of application materials, NYSERDA will review the materials to ensure the following requirements are met:

- The project meets the CST Small Fuel Cell Program requirements;
- The Application Package is complete; and
- The *Maximum Total Incentive* and *Estimated Annual Production* estimates (from *Section FC.6 of the Application Form Worksheet*) and related assumptions and projections are reasonable and supportable, and the supporting data and calculations are correct.

NYSERDA or its Agent may conduct a site inspection to verify the accuracy of the information in the Application Package.

VI. PROCESSING OF APPLICATIONS

Funds are provided to the program on an annual (funding year) basis. NYSERDA anticipates that there may be times when there will be more requests for funds than there are funds available, and therefore establishes the following rigid procedure for establishing and managing a queue of applicants.

- a) An application will be entered into the rear of the queue when NYSERDA deems the application to be full and complete. If two or more applications are deemed to be full and complete on the same day, the position in the queue for each application will be determined by the time and date that the application was surrendered to a carrier service that provided a tracking number that can be used to track a shipment on-line, or the time and date received by NYSERDA if such a carrier service was not used or if a suitable tracking number was not provided. If an application had previously been deemed by NYSERDA to be deficient, the time and date of receipt of the supplemental application materials that resolve such deficiencies will be used.
- b) Unprocessed applications will retain their position in the queue from one funding year to the next.
- c) NYSERDA has an interest in promoting diversity of equipment in the program. As such, if a queue exists at the beginning of a funding year, applications in the queue will be processed in the following order:
 1. The first application for each fuel cell original equipment manufacturer (OEM) represented in the queue at the start of the funding year will be processed based on their relative positions in the queue.
 2. Once one application representing each fuel cell OEM in the queue as of the start of the funding year has been processed, any remaining applications will be processed in queue order. Otherwise, applications will be processed in queue order.
- d) NYSERDA will inform the applicant when it is its application's turn to be processed and sufficient funds are available and have been set aside. The applicant will then have thirty (30) days to provide NYSERDA with:
 1. A copy of the signed purchase agreement with a fuel cell OEM; and
 2. A letter from the fuel cell OEM confirming the scheduled delivery date of the fuel cell system to the project site. Such scheduled delivery date shall not be more than 9 months after the start of this thirty (30) day period.

e) If the applicant fails to provide this information within the time allotted, the applicant will automatically forfeit its position in the queue and be placed at the rear of the queue – such a forfeiture of position in the queue will result in the release of funds to the next eligible applicant.

f) For those applications where funds have been set aside, and the applicant has furnished the required documentation within the prescribed thirty (30) days, NYSERDA will then enter into a Standard Performance Agreement with the applicant.

NYSERDA will promptly review applications and supplemental application materials in the order that they are received, and applications deemed full and complete in their “as received” form will be entered into the queue in the order the application was received. Deficient applications will not be entered into the queue until the application has been revised to become full and complete (at which point the applicant will be placed at the rear of the queue).

Applicants should be “ready to go” when submitting their application so that the applicant will be capable of complying with the thirty (30) day requirement to submit a signed purchase agreement with the fuel cell OEM along with a letter from the fuel cell OEM confirming the delivery date of the fuel cell system to the project site.

VII. ADDITIONAL INFORMATION AND REQUIREMENTS

RENEWABLE PORTFOLIO STANDARD (RPS) ATTRIBUTES: Orders issued by the NYS Public Service Commission provide that the RPS Program will support and promote an increase, to 30%, of the percentage of the energy consumed in NYS that comes from renewable sources. When assessing and reporting on progress towards that goal, or on the composition of the energy generated and/or consumed in NYS, NYSERDA and the NYS Department of Public Service will include all electrical energy created by any project receiving funds through the NYS RPS Customer-Sited Tier Program, for the life of such projects, and the environmental attributes associated with such energy, whether metered or projected, as a part of any report, evaluation, or review of the RPS Program, whenever any such report, evaluation, or review may be conducted or issued, as renewable energy consumed in NYS. No party, including but not limited to owners, lessees/lessors, operators, and/or associated contractors shall agree to or enter any transaction that would or may be intended to result in the exportation or transmittal of any electrical energy created by any project receiving funds through the NYS RPS Customer-Sited Tier Program to any party or system outside of New York State.

STATE ENVIRONMENTAL QUALITY REVIEW ACT (SEQRA)

NYSERDA is required under SEQRA to consider the environmental implications of all funded projects. All proposals must include a completed SEQRA Short Environmental Assessment Form (Appendix G).

VIII. GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your application. Review should include whether it is critical for evaluating an application, and whether general, non-confidential information, may be adequate for review purposes.

The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a

commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the Applicant wishes to have treated as proprietary and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 www.nyserda.org/nyserda.regulations.pdf. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development
Division for Small Business
30 South Pearl Street
Albany, NY 12245

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development
Minority and Women's Business Development Division
30 South Pearl Street
Albany, NY 12245

Contract Award –NYSERDA may request additional data or material to support applications including, but not limited to supporting invoices, and manufacturer's technical data sheets. NYSERDA may elect to inspect any and all projects prior to final approval. NYSERDA expects to notify Applicants in approximately four weeks from the date of receipt of a completed application whether an application has been selected to receive an incentive.

Limitation - This solicitation does not commit NYSERDA to award a contract, pay any costs incurred in preparing an application, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all applications received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSERDA's best interest.

Disclosure Requirement - The Applicant shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When an Applicant is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSERDA after the award of a contract, NYSERDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Applicants must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

IX. OTHER OPPORTUNITIES

NYSERDA PON 1219 Existing Facilities Program

Fuel Cell projects may be eligible to qualify for additional incentives from NYSERDA by making efficient use of the waste heat from the Fuel Cell System. For example, NYSERDA will provide incentives for Peak Electric Demand Reductions (for example utilizing the waste heat from the fuel cell in an absorption chiller to displace electric chillers) as described in Program Opportunity Notice (PON) 1219 and subsequent offerings. Information can be found on NYSERDA's website at www.nyserdera.org, by e-mailing info@nyserdera.org or by telephoning toll free at 1-866-NYSERDA.

NYSERDA PON 2276 RPS-CST Anaerobic Digester Gas Program

NYSERDA has a dedicated CST program for providing financial support for the procurement and installation of power generation systems using anaerobic digester gas (ADG) as a fuel to produce electricity. Fuel cell projects which will operate exclusively on anaerobic digester gas are directed to apply to NYSERDA under the ADG program while funds are available. Fuel cells that will be operated exclusively on ADG fuel will be allowed to apply under PON 2157 only when NYSERDA's program funds in the ADG program have been depleted. Please contact Tom Fiesinger at (518) 862-1090, ext. 3218, twf@nyserdera.org or Kathleen O'Connor at (518) 862-1090, ext. 3422, kmo@nyserdera.org for information regarding NYSERDA PON 2276.

NYSERDA PON 2156 RPS-CST Regional Program (Geographic Balance Program)

NYSERDA has a dedicated CST program for providing funding support for the procurement and installation of certain renewable power generation systems in downstate regions of New York (ISO zones G, H, I & J). Fuel cell projects that seek funding from PON 2156 are not eligible to receive further incentives under PON 2157. Please contact Paul Vainauskas at (518) 862-1090, ext. 3554, pv2@nyserdera.org for more information.

Potential non-NYSERDA Opportunities

Customers may be eligible for State and federal tax credits.

Tax Incentives: If the Applicant has been provided with information regarding the expected tax benefits (real property, federal or state tax incentives, or sales and use tax exemptions), as with any tax issue, the Applicant is encouraged to consult the Internal Revenue Service (See, www.irs.gov), the NYS Department of Taxation and Finance (See www.tax.state.ny.us) and with an accountant/tax adviser for details on eligibility for the credit provided in the law). NYSERDA does not provide tax advice.

X. APPENDICES

Appendix A: Application Form

Section FC.1: Contact Information

Section FC.2: Project Site

Section FC.3: Fuel Cell System Definition

Section FC.4: Environmental Questionnaire

Section FC.5: Costs and Schedule

Section FC.6: Estimated Incentive

Section FC.7: Project Site Control Letter

Section FC.8: Applicant Agreement

Appendix B: Sample Standard Performance Agreement

Appendix C: Small Fuel Cell Performance Monitoring Form

Appendix D: Project Installation Report Requirements

Appendix E: List of Eligible Fuel Cell Modules by Manufacturer Make and Model

Appendix F: Instructions to Manufacturers of Fuel Cells – How to Request Addition of Your Equipment to the List of Eligible Fuel Cells

Appendix G: SEQRA Short Environmental Assessment Form