

Combined Heat and Power (CHP) Performance Program
Program Opportunity Notice (PON) 2701
\$ 36,000,000

Applications accepted on a first-come, first-served basis through December 30, 2016 by 5:00 PM Eastern Time*

PROGRAM SUMMARY:

The New York State Energy Research and Development Authority (NYSERDA) offers incentives to promote the installation of clean, efficient, and commercially available Combined Heat and Power (CHP) systems with an aggregate nameplate greater than 1.3 megawatts (MW) that provide summer on-peak demand reduction. Incentives are performance-based and correspond to the summer-peak demand reduction (kW), energy generation (kWh), and fuel conversion efficiency (FCE) achieved by the CHP system on an annual basis over a two-year measurement and verification (M&V) period. CHP Systems of 1.3 MW and less should refer to the NYSERDA CHP Acceleration Program.

Incentive Structure*		
	Upstate	Downstate**
Combined Heat and Power	\$0.10/kWh + \$600/kW	\$0.10/kWh + \$750/kW

*Base CHP Incentives are capped at the lesser of \$2,000,000 per CHP project or 50% of Total Project Cost.

**Electric and/or Gas Utility customers paying into the SBC within the following counties: Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk and Westchester

Bonus Incentives, up to \$600,000, are available as noted under Bonus Incentives Available. Overall Incentives are capped at the lesser of \$2,600,000 per CHP Project or 50% of Total Project Cost.

Interested applicants should review the NYSERDA CHP Performance Program Systems Manual (Attachment A), which can be accessed using the link: www.nyserda.ny.gov/chpperform

If you have technical questions concerning this PON, contact:

Jim Hastings Phone: (518) 862 - 1090 - ext. 3492

Email: jth@nyserda.ny.gov

APPLICATION SUBMISSION: Interested applicants are encouraged to submit one (1) paper copy, with an original signature, and one (1) electronic copy of the application to:

CHP Performance Program Administrator NYS Energy Research and Development Authority 17 Columbia Circle Albany, New York 12203-6399 CHPPerform@nyserda.ny.gov

All contractual questions should be directed to Venice Forbes, Contracts Department ((518) 862-1090 - ext. 3507 or vwf@nyserda.ny.gov).

*Late, incomplete, or unsigned applications will be returned. Faxed or e-mailed applications will not be accepted. Applications will not be accepted at any other NYSERDA location other than the address above. If changes are made to this solicitation, notification will be posted on NYSERDA's website at www.nyserda.ny.gov.

I. INTRODUCTION

Combined Heat and Power (CHP), also known as cogeneration, is an efficient, clean, and reliable approach to generating power and thermal energy from a single fuel source. Typical CHP customers include industrial, commercial, and institutional facilities. By installing a CHP System designed to meet the thermal and/or electrical base loads of a facility, CHP can greatly increase the facility's operational efficiency and decrease energy costs. Typically, CHP Systems are used to produce a portion of the electricity needed by a facility some or all of the time, with the balance of electric needs satisfied by purchase from the grid.

AVAILABLE FUNDS

Up to \$36,000,000 in funds are available through this PON and will be paid out on a first-come, first-served basis or until funds are exhausted. If additional funds become available, NYSERDA reserves the right to increase the total available funding under this PON.

II. CHP PERFORMANCE PROGRAM OVERVIEW AND ELIGIBILITY

CHP PERFORMANCE PROGRAM OVERVIEW

The CHP Performance Program funds installations of CHP Systems using energy, demand, efficiency, and environmental performance-based payments. The CHP Performance Program focus is on clean, efficient, cost effective gas-fired systems that maximize ratepayer benefit and system operation during summer peak demand periods. Systems are required to achieve 60% annualized fuel conversion efficiency, with incentive reductions for non-performance. To quantify the performance-based payments, the CHP Performance Program applies rigorous, multiyear system performance measurements.

CHP system viability is affected by external variables such as the spark spread (difference in cost of gridsupplied electricity and pipeline-supplied natural gas), siting and space constraints, adequate fuel supplies, environmental compliance, and interconnection issues. The CHP Performance Program assists end users in developing solutions to the interaction of these variables and uses a performance-based approach to support reliable and persistent energy, economic and environmental performance.

Applicants, entities receiving the approved incentive amount upon project completion and who will be responsible for delivering the energy savings, must meet the Eligibility Requirements as stated within the PON. Applicants can include third parties such as Energy Service Companies (ESCOs), facility owners, management companies, and/or tenants with the authority to make improvements.

See the Attachment A, CHP Performance Program Systems Manual, for CHP Performance Program definitions.

ELIGIBILITY REQUIREMENTS

- The applicant and/or host site must contribute to the Systems Benefits Charge (SBC) on their electric or gas utility bill.
 - For existing facilities, up to 12 months of utility bills may be requested to verify the host facility's annual SBC contribution.
 - All new construction applicants, including those in a negotiated rate class, must pay the SBC in order to be eligible for the CHP Performance Program.
 - Proration of incentives based on SBC contribution is at NYSERDA's discretion.
- The CHP System must consist of commercially available gas-fired reciprocating engine(s) or turbine-based technologies that result in an electrical peak demand reduction during the summer capability period.
- The CHP System must have a 60% annual fuel conversion efficiency
- The CHP System must have a NO_X emission rate ≤ 1.6 lbs/MWhr. Should the New York State
 Department of Environmental Conservation (NYSDEC) establish a more stringent Nitrogen
 Oxides (NO_X) emission rate prior to the issuance of a permit, it will supersede the 1.6 lbs/MWhr
 requirement.

- The CHP System must have the ability to operate during a grid outage.
- If the site is located within a flood zone then the CHP system, including all components required for proper operation (pumps, switch gear, etc) must be located above the expected flood level.
- The total incentive cannot exceed 50% of the project cost. Project cost may include equipment, labor, and engineering expenses.
- An Applicant or a Facility may receive an incentive for a CHP System either through NYSERDA or one of the associated utility companies, but not both.

INELIGIBLE SYSTEMS

Although not eligible under this program, these technologies may be eligible under other NYSERDA programs.¹

- Fuel Cells
- Aggregate Nameplate systems 1.3 MW or less
- A CHP System currently contracted for installation under another NYSERDA program, or projects eligible to submit to the customer sited tier of the Renewable Portfolio Standard

CONSOLIDATED EDISON STEAM SYSTEM CRITERIA

In accordance with the New York State Public Service Commission (hereafter, the "Commission") Order in Case 10-M-0457, *Order Modifying Budgets and Targets for Energy Efficiency Portfolio Standard Programs and Providing Funding for Combined Heat and Power and Workforce Development Initiatives,* effective December 17, 2012, the following applies to current Consolidated Edison Company of New York (Con Edison) steam applicants.

NYSERDA will notify Con Edison of each approval of a project involving an applicant that is a current steam system customer, with information sufficient to support a steam displacement analysis.

Con Edison will perform an annual review of the impact of approved CHP projects on its minimum steam load at the same time that it completes its annual official steam sales forecast, and will file the results of its annual review with the Secretary of the Commission.

1. If Con Edison determines that the net aggregate impact of approved projects would be a reduction in minimum steam system load of 50 Mlb/hour (fifty thousand pounds per hour) or more, it will notify NYSERDA that this threshold has been reached. NYSERDA will thereafter give Con Edison an opportunity to review the potential impacts of any additional projects prior to approving any specific applications. Con Edison will have up to 30 days after being notified of an application to inform NYSERDA that the proposed project would have a substantial impact on minimum load and would contribute substantially to a risk of curtailment of the East River Units.

Con Edison's notification to NYSERDA must be accompanied by a detailed analysis.

- i. If such a notification is not provided within 30 days, NYSERDA may proceed with the approval of the application.
- ii. If Con Edison does provide a notification to NYSERDA, Con Edison will have 60 days within which to reach an agreement with NYSERDA and the applicant or in the alternative to petition the Commission for relief related to that particular application. Such a petition must include both a project-specific analysis and a system-wide analysis of current and projected minimum steam loads sufficient for the Commission to determine the continued usefulness and adequacy of the minimum load threshold. If Con Edison has not filed such a petition within 60 days of notifying NYSERDA of its concern, NYSERDA may proceed with approval of the application.
- 2. In addition, the Commission has adopted a limit on impacts on total annual steam sales volume of 1000 MMlb/year (one-million Mlbs per year).

¹ Please see NYSERDA's RPS CST Fuel Cell Program PON 2157 or subsequent. Please see NYSERDA's CHP Acceleration Program PON 2568 or subsequent for CHP systems 1.3 MW or less.

BASE INCENTIVES

Estimated funding may be set aside upon NYSERDA's receipt of a completed CHP application. Funds will not be contracted until NYSERDA approves the engineering analysis and issues an Agreement and Purchase Order to the Applicant. Project funding is not secure until a Purchase Order is issued. An Applicant will contract two (2) energy components: an annual Electricity Generation target in kilowatt hours (kWh) and a summer capability period Peak Demand Reduction target in kilowatts (kW_{SPC}).

Incentive Structure*	Upstate	Downstate**
Electricity Generation	\$0.10 x kWh	\$0.10 x kWh
Peak Demand Reduction	\$600 x kW _{SPC}	\$750 x kW _{SPC}

*Base CHP Incentives are capped at the lesser of \$2,000,000 per CHP project or 50% of Total Project Cost.

**Electric and/or Gas Utility customers paying into the SBC within the following counties: Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk and Westchester

kWh - The projected annual kilowatt hour production stated in the NYSERDA Agreement, as agreed to between the applicant and NYSERDA based on the Engineering Analysis.

kW_{SPC} - The projected average **summer capability period** peak demand reduction stated in the NYSERDA Agreement, as agreed to between the applicant and NYSERDA based on the Engineering Analysis.

The **summer capability period** is between the hours of 12 pm and 6 pm, Monday through Friday, from May 1 through October 31, excluding legal holidays.

CHP Systems are subject to non-performance incentive reductions for not achieving the contracted summer peak demand reduction, minimum fuel conversion efficiency or the air emissions requirements. NYSERDA reserves the right to adjust project incentives at its sole discretion.

BONUS INCENTIVES AVAILABLE

CHP Systems may receive up to a 30% bonus incentive above the base incentive, up to \$600,000.

- A maximum of 10% additional incentive is available to those projects serving Critical Infrastructure, including Facilities of Refuge.
- A maximum of 10% additional incentive is available to those projects that are within a Targeted Zone as established by a utility as being a load service area of particular interest.
- A maximum of 10% additional incentive is available to those projects that demonstrate superior performance as determined by the measured fuel conversion efficiency (FCE).

Potential maximum incentives are capped at the lesser of \$2,600,000 per CHP Project or 50% of Total Project Cost.

Eligibility requirements are described within the CHP Performance Program Systems Manual.

INCENTIVE PAYMENTS

Incentives will be paid based on review and approval of the appropriate documentation and M&V data by NYSERDA or its consultant. See Attachment A, the CHP Performance Program Systems Manual for payment requirements and Bonus Incentive payment schedules.

Potential Incentive Payment Schedule		
Base Incentive	Brief Description	
15%	Progress Payment Invoice – Bill of Lading	
15%	Progress Payment Invoice – Interconnection Letter	
10%	Project Installation Payment Invoice	
30%	Completion of M&V Year 1 (contingent on performance)	
30%	Completion of M&V Year 2 (contingent on performance)	
100%	Total % of Contracted Base Incentive	

INCENTIVE REDUCTIONS FOR NON-PEFORMANCE

CHP Systems are subject to non-performance incentive reductions for not achieving the:

- Contracted summer-peak demand reduction
- · Contracted electricity generated
- Minimum required FCE
- Emissions requirements

MEASUREMENT AND VERIFICATION (M&V)

CHP systems will undergo M&V for a period of two (2) years. NYSERDA, or its consultant will create a M&V Plan in collaboration with the applicant, this plan will detail how M&V will be monitored and reported. The purpose of M&V is to quantify useful thermal heat recovery, energy generated, fuel consumed and summer peak demand performance. In addition, air emission testing will be performed to ensure CHP Performance Program compliance.

See Attachment A, the CHP Systems Manual, for additional details for how the M&V Plan will be created and implemented. Information regarding the instrumentation specifications is also provided.

All M&V data shall be transmitted to NYSERDA's CHP Website (http://chp.nyserda.ny.gov)

III. PROGRAM PARTICIPATION

The following section provides an overview of participation in the CHP Performance Program. Please refer to NYSERDA's CHP Systems Manual (See Attachment A) for additional detail.

Application. The first step is for the applicant to submit a completed application for the proposed CHP system, including the required engineering analysis, CHP Performance Program forms, and electric and gas utility bills at the time of application. New Construction projects will need to certify their commitment to pay into the SBC-electric and/or SBC-gas.

The engineering analysis must meet the minimum requirements as stated within the CHP Systems Manual.

The following outlines the process for application review and approval:

- a. Eligibility Review
- b. Pre-Installation Inspection
- c. Detailed Application Review
- d. Revised Application and Engineering Analysis

Agreement and Purchase Order (PO). Upon approval of the revised application, NYSERDA will issue an Agreement to the Applicant. The Agreement, signed by both the Applicant and NYSERDA, specifies the Total Potential Project Incentive. After the Agreement has been fully executed by both parties, NYSERDA will issue a PO. Funds are reserved only upon NYSERDA's written approval of the Applicant's application and issuance of the PO.

Progress Payments. Progress Payments may be requested after the issuance of an executed Agreement and PO upon successful completion of CHP Performance Program milestones. Progress Payments are further defined with the CHP Systems Manual.

Interim Documentation Submission. Throughout the design and construction of the CHP System, the Applicant submits documentation to support the ongoing progress of installation. These documents may include, but are not limited to schematic design drawings, final construction documents, operation and maintenance agreements, and commissioning reports. NYSERDA's Technical Consultant will work with the Applicant to develop a M&V Plan. Interim Documentation is further defined with the CHP Systems Manual.

Post-Installation Inspection. After the CHP System has been installed and commissioned, the Applicant submits a commissioning report (third party) and contacts NYSERDA and its Technical Consultant to conduct a post-installation inspection of the CHP System to verify that the system specified in the executed Agreement has been installed and is operating according to its design intent. The NYSERDA Technical Consultant will also conduct emissions testing at this point to ensure CHP Performance Program compliance.

The NYSERDA Technical Consultant will provide a report summarizing the project and its ability to meet CHP Performance Program performance requirements. Upon acceptance of the Post-Installation Report and Applicant approval of the M&V Plan, measurement and verification will commence.

M&V Reporting. CHP Systems will undergo M&V for a period of two (2) years. The purpose of M&V is to quantify useful thermal heat recovery, energy generated, fuel consumed and summer peak demand performance. In addition, air emission testing will be performed to ensure CHP Performance Program compliance.

See Attachment A, the CHP Systems Manual, for additional details.

All M&V data shall be transmitted to NYSERDA's CHP Website (http://chp.nyserda.ny.gov)

IV. GENERAL CONDITIONS

GENERAL CONDITIONS

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, 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 exempt it from disclosure, including a written statement of the reasons why the information should be exempted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 http://nyserda.ny.gov/~/media/Files/About/Contact/NYSERDARegulations.ashx. 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 State 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 anticipates making multiple awards under this PON. It may award a contract based on initial applications without discussion, or following limited discussion or negotiations. Each offer should be submitted using the most favorable cost and technical terms. NYSERDA may request additional data or material to support applications. NYSERDA will use the Sample Agreement to contract successful proposals. NYSERDA expects to notify applicants in approximately 4 weeks from the receipt of an application whether your application has been selected to receive an award.

Limitation - This PON does not commit NYSERDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSERDA reserves the right to accept or reject any or all proposals 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 (5) 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 applicant 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 United States Government or the New York State Department of Labor.

V. Attachments:

Attachment A: CHP Performance Program Systems Manual

Attachment B: Project Summary Application
Attachment C: Environmental Assessment Form

Attachment D: Sample Agreement