Industrial and Process Efficiency
Program Opportunity Notice (PON) 2456
$ 135,600,000 available

Applications are accepted on a first-come, first-serve basis through December 31, 2015* or until funds are exhausted.

Program Summary

The **Industrial and Process Efficiency Program** Opportunity Notice (PON) 2456 offers performance-based incentives to manufacturers and data centers that implement cost-effective electric and natural gas efficiency and process improvements. This PON offers Process and Energy Efficiency Incentives, as well as Operations and Maintenance (O&M) Incentives and Peak Demand Reduction Incentives as outlined below:

- **Industrial Manufacturing Improvements** are offered to offset the cost of energy projects at industrial sites. The focus is on cost effective projects that result in a gross reduction of energy usage, or a net reduction of energy usage per unit of production**.**

- **Data Center Improvements** incentives are offered to offset the costs of energy projects at data center sites. The focus is on increasing data processing efficiency, increasing information technology (IT) efficiency and minimizing support system energy consumption per unit of compute.

- **New Construction** incentives are offered to offset the costs of installing energy efficient process and building equipment in new industrial and data center facilities. The focus is to design energy efficiency into both the building and the process.

- **Operations & Maintenance (O&M) Incentives** are offered to support the upgrades and initiatives that generate energy savings based upon improved operations that promote persistent and measurable operations based energy savings.

- **Peak Demand Reduction** incentives are available through the Demand Management Program (DMP) to Consolidated Edison Company of New York, Inc. ("Con Edison") electric customers to offset capital costs of projects that result in summer peak demand reductions between June 1 and September 30 between the hours of 2:00pm-6:00pm.
  ***DMP projects must be installed and operational by June 1, 2016.**

Facilities can receive both electric and natural gas incentives from the Industrial and Process Efficiency Program, subject to program requirements. Program caps are $1 million dollars per Facility per year for gas funds and no program cap on electric funds. Further details appear in Section III: Program Eligibility Requirements.

Application Submission: Incentives are offered both Upstate and Downstate. Please see Section II: Incentives for details.

Applicants for upstate only facilities should visit the NYSERDA Consolidated Funding Application (CFA) page to fill out the CFA on-line form and NYSERDA will receive the application: http://www.nyserda.ny.gov/Funding-Opportunities/Consolidated-Funding-Application.aspx

Applicants for downstate projects should fill out the Demand Management Program application available at: http://www.nyserda.ny.gov/demand-management-program.

All Program questions should be directed to:
Upstate: Stacey Sabo, 866-NYSERDA ext. 3037, stacey.sabo@nyserda.ny.gov
Downstate: Angela Mu, 866-NYSERDA ext. 3589, angela.mu@nyserda.ny.gov
All Contractual questions should be directed to: Venice Forbes ext. 866-NYSERDA 3507, venice.forbes@nyserda.ny.gov.

I. Introduction

The Industrial and Process Efficiency Program's goal is to help manufacturers and data centers improve the energy efficiency of their operations. Incentives are calculated, when appropriate, based on a reduction in energy usage per unit of production or workload. Projects may include those that increase productivity and capacity, enhance reliability, and/or increase uptime. Incentives are available for both electric and natural gas projects for the custom and site-specific use of commercially available technology. Incentives are based on one (1) year's energy savings from installed projects. Both existing and new facilities are eligible to participate. Projects may involve Process Efficiency, Energy Efficiency, O&M, or Demand Management.

NYSERDA is jointly administering the Demand Management Program for Con Edison customers who pay the Monthly Adjustment Clause (MAC). Please see details as described herein.

Process Efficiency – Projects that install a new process or improvements to an existing process resulting in a gross reduction of energy usage, or a net reduction of energy usage per unit of production. Projects may involve:

- Industrial and data center process improvements or new installations
- Capacity additions that improve the energy use per unit processed
- Quality improvement
- Waste and scrap reduction
- Throughput increase
- IT improvements including server virtualization, storage consolidation, thin clients, applications management, and server load prioritization and optimization

Energy Efficiency – Projects that result in the reduction of on-site consumption of energy in new or existing facilities. Projects may involve:

- Energy recovery from an industrial process
- Space conditioning improvements
- Pumping system improvements
- Compressed air efficiency
- Fluid and support system improvements
- Other projects that reduce energy consumption

Bonus Incentive: Super Efficient Electric Chiller Bonus (SECB)- Water-cooled electric chillers greater than or equal to 300 tons may be eligible for a bonus if the proposed efficiencies exceed by specified levels the centrifugal standard as detailed in [Addendum 'bt'] of ASHRAE 90.1 2007 by specified levels. For more detailed information, please review Technical Guidance Document for Chillers: http://www.nyserda.ny.gov/Energy-Efficiency-and-Renewable-Programs/Commercial-and-Industrial/CI-Programs/Existing-Facilities-Program/Performance-Based-Incentives/Electric-Efficiency-Incentives.aspx

O&M – Projects that deliver verifiable annual energy savings resulting from upgrades or initiatives to improve operations. Projects may involve:

- Compressed air system leak management
- Replacement of leaking steam traps
- Installation of cogged styles fan belts
- Burner tune-up
- Server power management
- Air flow controls optimization
- Dynamic temperature monitoring and adjustment

Demand Management Program – Incentives are offered in the Downstate region to Con Edison electric customers who pay the Monthly Adjustment Clause (MAC) to partially offset capital costs of system coincident projects that reduce peak demand between the hours of 2-6 PM, Monday through Friday, from June 1 to September 30. Eligible measures may include but are not limited to:

- Thermal (Ice) Storage
- Battery Storage
- Chiller and HVAC upgrades
- Controls and Building Management Systems
- Demand Response
- Lighting and Lighting Controls
- Fuel Switching: Non-electric AC
- Process Efficiency and IT/Datacenter Upgrades (Please see above Process Efficiency category)

For further information on measure eligibility and DMP requirements please see the *Technical Requirements for the Demand Management Program* document, available at: http://www.nyserda.ny.gov/demand-management-program.

Bonus incentives – Demand Management Program – Bonuses are available for large downstate peak load reduction projects that install quickly, as follows:

- Applicants who provide 500 kW or more of peak demand reduction, as defined herein, are eligible for a 10% bonus on per kW incentives.
- Applicants who provide 1 MW or more of peak demand reduction, as defined herein, are eligible for a 15% bonus on per kW incentives.
- Large project bonuses will be paid on a first installed; first paid basis.
- Large project bonuses are in addition to the % of project cost caps.

Applicants considering projects related to measures not listed above should contact NYSERDA to discuss eligibility.

NYSERDA's Industrial and Process Efficiency team can help identify and prioritize projects that will maximize energy productivity savings. NYSERDA's team is available to:

- Consult with Facilities and Applicants about eligibility
- Schedule site visits
- Assist Facilities and Applicants with the application process
- Applicants interested in Industrial and Process Efficiency opportunities should contact: IPEOutreach@nyserda.ny.gov

II. Incentives

Available Funds
Funds are available through this PON for Industrial and Process Efficiency incentives and will be paid out on a first-come, first-served basis. If additional funds become available, NYSERDA reserves the right to increase the total available funding under this PON.

Process and Energy Efficiency Incentives - Upstate

Incentive Type	Utility	Upstate Incentive
Process and Energy Efficiency	Electric	$0.12/kWh
	Natural Gas	$15/MM Btu
Operations & Maintenance (O&M)	Electric	$0.05/kWh
	Natural Gas	$6/MM Btu
Bonus Incentive		
Super Efficient Chiller Bonus	$1,400/kW – Full Load or $1,000/kW - NPLV	
Minimum Project Size	$30,000 incentive	
Maximum Incentive	50% project cost	
	Electric: no cap Natural Gas: $1 million/ Facility/ year	

Notes: The incentive rates shown above are based on annual energy savings. Incentives are determined by multiplying the annual energy savings by the rates shown.

Industrial and Process Efficiency Program has exhausted natural gas project funding and initiated a waiting list. Industrial and Process Efficiency will receive natural gas project applications until August 31, 2014 in case additional funds become available.

Process, Energy Efficiency, and Demand Management Incentives- Downstate

Incentive Type	Utility or Category	Downstate Incentive
	Process Efficiency/Chiller/HVAC/BMS/Controls	$0.16/kWh + $1,250/kW
	Lighting	$0.16/kWh + $800/kW
	Thermal Storage	$2,600/kW
	Battery Storage	$2,100/kW
	DR Enablement	$800/kW
	Fuel Switching: Non-Electric AC	$500 – 1,000/kW depending on equipment
	Electric (less than 50kW savings)	$0.16/kWh
	Natural Gas	$20/MMBtu
Operations & Maintenance (O&M)	Electric	$0.05/kWh
	Natural Gas	$6/MMBtu
Bonus Incentives		
Peak Demand Reduction	**Bonus Adder**	
500kW or greater	An additional 10% of kW incentive	

1MW or greater	An additional 15% of kW incentive
Minimum Project Size	50kW Savings or $30,000 incentive, whichever is less
Maximum Incentive	50% project cost
	Electric: no cap Natural Gas: $1 million/ Facility/ year

Notes: The incentive rates shown above are based on annual energy savings. Incentives are determined by multiplying the annual energy savings by the rates shown.

Industrial and Process Efficiency Program has exhausted natural gas project funding and initiated a waiting list. Industrial and Process Efficiency will receive natural gas project applications until August 31, 2014 in case additional funds become available.

NYSERDA Payment

Upon approval of all final deliverables, as outlined in Section IV, NYSERDA will provide payment (full payment for projects not requiring M&V[1] and partial payment for projects requiring M&V). Projects requiring M&V must complete it in accordance with the M&V plan in the approved Engineering Analysis (EA). When the M&V is completed, NYSERDA will review the results and release any remaining funds (which may be adjusted, based upon the M&V results.) At NYSERDA's discretion, progress payments may be made available upon request.

III. Program Eligibility Requirements

The Industrial and Process Efficiency Program is available to the manufacturing sector in New York State and targets key industries such as: chemicals and pharmaceuticals; primary metals, non-metallic minerals; pulp and paper; automotive; computers and electronics; food processing; and forest products. It includes manufacturing facilities, or support operations such as warehousing and distribution sites. Mining and extraction, as well as water and wastewater, are also included.

Data centers are eligible under the Industrial and Process Efficiency Program, and are found in nearly every sector. Key target sectors for data centers include financial services, technology services, cable and telecommunications, insurance and medical, as well as colleges and universities.

To be eligible for electric incentives a facility must pay into the System Benefits Charge (SBC) on their electric bill through one (1) of the below utility companies; to be eligible for natural gas incentives a facility must pay into the SBC for natural gas through one (1) of the following utility companies; to be eligible for peak demand reduction incentives a facility must be located within the downstate region and pay into the Monthly Adjustment Charge (MAC) on their Con Edison electric bill :

	Utility Company	**Electric**	**Natural Gas**
Downstate	*The Brooklyn Union Gas Company d/b/a National Grid NY*		X
	Consolidated Edison Company of New York, Inc.	X	X
	KeySpan Gas East Corporation d/b/a National Grid (KEDNY/KEDLI)		X
Upstate	*Central Hudson Gas & Electric Corporation*	X	X
	National Grid Generation d/b/a National Grid	X	X
	National Fuel Gas Distribution Corporation		X

[1] Measurement & Verification (M&V) details can be found in Section III – Program Eligibility Requirements.

	New York State Electric & Gas Corporation	X	X
	Orange and Rockland Utilities, Inc.	X	X
	Rochester Gas and Electric Corporation	X	X

Note: Only certain service rate classes are eligible. Please check the facility's current utility bill.

Projects at both existing and new facilities are eligible. This includes upgrades to equipment, processes, and building measures within new, existing, or substantial renovations to industrial and data centers facilities.

Definitions

Applicant: The entity receiving the approved incentive amount upon project completion, and will be responsible for delivering the energy savings. Applicants can include third parties such as Energy Service Companies (ESCOs), facility owners, management companies, and/or tenants with the authority to make improvements.

Facility: The building or structure where the energy efficient measures are being implemented. A Facility can also be the Applicant on its own behalf.

Project: The plan for the implementation of eligible measures at a specified facility. The Project may include multiple energy efficiency measures.

Important Program Notes

- Industrial and Process Efficiency projects require an EA to substantiate energy savings and may be subject to M&V. Each accepted project is assigned a NYSERDA technical consultant who provides support to Facilities throughout the process.
- Up to twelve (12) months of utility bills may be requested to verify the facility's annual SBC contribution and/or Monthly Adjustment Clause (MAC) contribution. The total incentive cannot exceed 50% of the project cost for most projects. Project cost may include equipment, labor, and engineering expenses. Multiple measures may be bundled into one (1) project application.
- Projects with simple payback periods greater than 18 years (excluding NYSERDA incentives) are ineligible.
- All measures are expected to achieve savings for at least five (5) years.
- Unless otherwise approved by NYSERDA, the minimum incentive size for Industrial and Process Efficiency projects is at least $30,000. Smaller projects may qualify for Pre-Qualified incentives through the Existing Facilities program. http://www.nyserda.ny.gov/existing-facilities
- Demand Management Program projects must achieve a minimum peak demand reduction of at least 50 kW.
- An Applicant or a Facility may receive only one (1) incentive per measure from any of NYSERDA's programs. Similarly, an Applicant or Facility may receive an incentive for a specific energy efficiency measure either through NYSERDA or one (1) of the utility companies listed on this page, but not both.
- All applications will be reviewed and accepted or rejected at NYSERDA's discretion. Applicants may be required to provide NYSERDA with additional information necessary to complete evaluation of the application.
- The applicant will have two (2) years from the issue date of the Purchase Order to complete the project.
- All equipment covered by ENERGY STAR® must meet the ENERGY STAR® minimum efficiencies.
- **Ineligible Projects** include Power Quality and Power Factor improvements. Projects that derive benefits from the decommissioning of equipment are not eligible for incentives. Projects that are already installed are not eligible for Industrial and Process Efficiency incentives but may qualify for Pre-Qualified incentives through the Existing Facilities program.

M&V

NYSERDA's technical consultant will develop an M&V plan in collaboration with the Applicant. NYSERDA will pay up to 60% of the incentive upon installation and the balance after NYSERDA receives and approves the final M&V report. Determination of installation payment is at NYSERDA's discretion and will take into account the complexity of the project and the predictability of energy savings. Installation payments on process projects will be limited to those based upon the production rate at the time of project installation and will not exceed 30% of the total estimated incentive. When the M&V is completed, NYSERDA will review the results and release any remaining

funds (which may be adjusted, based upon the M&V results and actual production rate.) Projects failing to perform to savings estimates may be required to reimburse NYSERDA for overpayment.

M&V is required for:

- Electric efficiency projects involving standard facility improvements to Building Systems such as motors, VFDs, vacuum and pumping systems, as well as HVAC and compressed air improvements saving more than 1,000,000 kWh annually
- Custom electric efficiency projects saving more than 500,000 kWh annually
- Natural gas efficiency projects saving more than 10,000 MMBtu annually
- Light Emitting Diode (LED) lighting projects saving more than 1,000,000 kWh annually

At NYSERDA's discretion, M&V may be required or waived for any project.

All O&M projects must provide documentation to verify ongoing projects savings to NYSERDA. Depending on project size, the Applicant may be required to perform M&V for a period up to two (2) years. Project specific M&V plans need to be agreed upon with NYSERDA's technical consultant.

IV. Application Requirements

The Applicant must complete and submit the following documentation before or within 90 days of project contracting, and prior to any demolition or removal of existing equipment or installation of new equipment for the project:

a. Consolidated Funding Application (CFA): http://www.nyserda.ny.gov/Funding-Opportunities/Consolidated-Funding-Application.aspx or Demand Management Program application: http://www.nyserda.ny.gov/demand-management-program.
b. NYSERDA Terms and Conditions signed by the Facility; generated by NYSERDA E-Commerce and sent to the Facility upon receipt and review of the CFA. (Not applicable for Demand Management Program applicants.)
c. Current, complete utility bill documenting the SBC or MAC
d. Proposed equipment specification sheets and/or additional supporting project information or eligibility criteria, if applicable
e. For lighting projects, a completed Industrial and Process Efficiency Program Lighting Form found on the NYSERDA website. For non-lighting projects, preliminary calculations of the anticipated energy savings
f. Timeline for implementing the project

NYSERDA evaluates the project based on the submitted documentation. If deemed eligible, a Purchase Order will be issued to the Applicant. The Applicant will have two (2) years from the issue date of the Purchase Order to complete the project. Projects without adequate energy savings estimates, will not receive a Purchase Order until after the EA is complete.

The Applicant submits an EA for NYSERDA's approval. The EA includes, but is not limited to, project description, detailed energy savings calculations, and economic evaluation. If an EA is not available, a NYSERDA assigned Technical Consultant will complete an EA based upon energy, production and/or computing data supplied by the applicant.

NYSERDA and NYSERDA's assigned Technical Consultant review the EA and conduct a pre-installation inspection. After the pre-installation site inspection and approval of the EA, NYSERDA will notify the Applicant and Facility contact(s) that the project implementation can begin. An Applicant proceeding with project demolition or installation prior to the NYSERDA conducted pre-installation inspection and the EA approval does so without confirmation of the approved incentive amount for the project, and assumes the financial risk that the project may or may not be approved at the anticipated amount.

The Applicant implements the project and notifies NYSERDA's Technical Consultant that the project is complete and ready for a post-installation inspection.

The Applicant, in coordination with NYSERDA's assigned Technical Consultant, conducts a post-installation inspection, revises the EA to reflect the post-installation conditions if necessary, and collects relevant project documentation (including invoices) and any other remaining items for submittal to NYSERDA.

Upon approval of all final deliverables, NYSERDA issues the full incentive payment for projects not requiring M&V to the Applicant, and partial incentive payment for projects requiring M&V. Those projects requiring M&V must complete the M&V Plan in accordance with the approved EA. When the M&V is complete, NYSERDA reviews the results and releases the remaining incentive funds. The final incentive payment may be adjusted based on data gathered during post-installation inspection and/or within the M&V Plan results.

V. 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 New York State 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 proposer 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. 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 may award a Purchase Order based on applications without discussion, or following limited discussion. NYSERDA may request additional data or material to support applications. A sample Purchase Order is available on request. NYSERDA will notify applicants whether the 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 PON when it is in NYSERDA's best interest.

Disclosure Requirement - The proposer 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 a proposer 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. Proposers 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.

VI. Attachments

Attachment A –Terms and Conditions, Prompt Payment Policy Statement, and General Conditions