



Agenda Date: 5/29/13

Agenda Item: 8B

STATE OF NEW JERSEY
Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, NJ 08625-0350
www.nj.gov/bpu/

CLEAN ENERGY

IN THE MATTER OF THE CLEAN ENERGY PROGRAM) ORDER
AUTHORIZATION OF COMMERCIAL AND INDUSTRIAL)
(C&I) PROGRAM ENERGY EFFICIENCY INCENTIVES)
EXCEEDING \$500,000 – BAYONNE MEDICAL CENTER) DOCKET NO. EO13050381V

Party of Record:

John Gilson, Director of Plant Operations and Security, Bayonne Medical Center

BY THE BOARD:

The New Jersey Board of Public Utilities' (the Board) Commercial and Industrial (C&I) Energy Efficiency Program, which is marketed as the New Jersey SMARTSTART Buildings Program (SSBP or SMARTSTART), includes the C&I New Construction, C&I Retrofit, Pay-for-Performance New Construction, Pay-for-Performance Existing Buildings, Local Government Energy Audit, Direct Install, Combined Heat and Power and Fuel Cells, and Large Energy Users Pilot. These programs collectively offer financial incentives to encourage the installation of energy efficient products and technologies. Eligible applicants may receive incentives for a portion of the cost of installing energy efficient technologies such as lighting, HVAC, water heating or other measures in new or existing buildings.

Bayonne Medical Center, Bayonne, NJ, has submitted an application for a total financial incentive in the amount of \$950,000.00 under the 2012 Combined Heat and Power (CHP) and Fuel Cells Program, for a project located at 29 East 29th Street, Bayonne, NJ 07002. Program participants are eligible to receive financial incentives for Combined Heat and Power and Fuel Cell installations to further enhance energy efficiency in their buildings through on-site power generation with recovery and productive use of waste heat, and reducing existing and new demands to the electric power grid. The applicant proposes to install new cogeneration plant equipment by a 950 kW Capstone C1000 natural gas-fired micro-turbine and a Cain ESG-1 heat recovery boiler, both with an overall combined annual efficiency at 72%. The CHP system is expected to provide about 85% of the facility's electric load based on historical analysis, which would exceed the minimum annual CHP system efficiency requirement of at least 60%. The first estimated incentive, in the amount of \$190,000.00, is to be paid upon proof of purchase of equipment. The second estimated incentive, in the amount of \$570,000.00, is to be paid upon project completion, review and acceptance of documentation, and successful

inspection. The remaining estimated incentive, in the amount of \$190,000.00, is to be paid one year after project inspection and acceptance, upon confirmation that the project is achieving its minimum efficiency threshold. The system is expected to produce 7,600,000 kWh of electricity annually and expected to produce 39,999 MMBtu of thermal energy recovered from waste heat, to be used for domestic water heating. Overall, this application is expected to result in an estimated first year cost savings of \$490,313.00 at an estimated project cost of \$3,457,450.00.

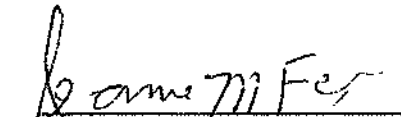
TRC, the Market Manager engaged by the Board to manage the New Jersey Clean Energy Program (NJCEP) C&I energy efficiency programs, has submitted certification that the incentive for which TRC now seeks approval to commit has been calculated in accordance with the program policies and procedures, and that the listed amount is the true and accurate estimated incentive for which the applicant is eligible. Further, Applied Energy Group, in its role as the NJCEP Program Coordinator, has reviewed the application and submitted certification that the incentive for which TRC now seeks approval to commit has been calculated in accordance with the program policies and procedures, and that the listed amount is the true and accurate estimated incentive for which the applicant is eligible. Based on the above, the Staff recommends that the Board approve the above-referenced application.


The Board **HEREBY ORDERS** the approval of the aforementioned application for the total estimated incentive amount of \$950,000.00 for Bayonne Medical Center, and **AUTHORIZES** issuance of a standard commitment letter to the applicant identified above, setting forth the terms and conditions of this commitment.

DATED: 5/29/13


BOARD OF PUBLIC UTILITIES
BY:


ROBERT M. HANNA
PRESIDENT



JEANNE M. FOX
COMMISSIONER


JOSEPH L. FIORDALISO
COMMISSIONER


MARYANNA HOLDEN
COMMISSIONER

ATTEST: 
KRISTI IZZO
SECRETARY

I HEREBY CERTIFY that the within document is a true copy of the original in the files of the Board of Public Utilities



IN THE MATTER OF THE CLEAN ENERGY PROGRAM AUTHORIZATION OF COMMERCIAL
AND INDUSTRIAL (C&I) PROGRAM ENERGY EFFICIENCY INCENTIVES EXCEEDING
\$500,000 – BAYONNE MEDICAL CENTER

DOCKET NO. EO13050381V

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**Program Coordinator Certification
(New Incentive Commitments > \$500,000)**

I, Maura Watkins, hereby certify that in its role as Program Coordinator, Applied Energy Group, Inc. has reviewed the referenced below, as required by the policies and procedures applicable to each program, that the standardized equipment incentives for which TRC now seeks approval to commit have been calculated in accordance with those policies and procedures, and that the amount shown below is the true and accurate estimated incentive for which the applicant(s) is (are) eligible.

For incentives based on uniquely calculated estimated energy savings, including the Custom Program, Pay for Performance and Large Energy Users Pilot Program, Applied Energy Group certifies locating documentation supporting the inputs used to calculate the rebate amount and evidencing TRC's evaluation of those inputs as required by the program's policies and procedures.

By: Maura Watkins Date: 5/17/2013
Maura Watkins
Quality Assurance Manager-Applied Energy Group, Inc.

Ref App#: 16580CHP
Applicant: Bayonne Medical Center
Payee: Bayonne Medical Center

Committed Amount: \$950,000.00

Market Manger Certification
(New Incentive Commitments > \$500,000)


I Carl Teter hereby certify that applications on the attached list have been reviewed by TRC or its subcontractors as required by the policies and procedures applicable to each program, that the incentives for which TRC now seeks approval to commit have been calculated in accordance with those policies and procedures, and that the listed amounts are the true and accurate estimated incentives for which each applicant is eligible.

By:



Carl P. Teter, P.E., LEED AP, Associate Vice President
App# 16580CHP

Date:

 5-6-13

1. Application Number: **16580CHP**
2. Program Name: **Combined Heat and Power**
3. Customer Contact (name, company, address, phone #):
John Gilson, Director Plant Operations/Security
Bayonne Medical Center
29 East 29th Street, Bayonne, NJ 07002
201-858-5283
4. Project Name and Address:
Bayonne Medical Center
29 East 29th Street, Bayonne, NJ 07002
5. Rebate amount:
Incentive #1: \$190,000.00
Incentive #2: \$570,000.00
Incentive #3: \$190,000.00
Total: \$950,000.00
6. Brief description of CHP to be installed (size, efficiency, emission, equipment to be replaced):
Project involves installation of a 950 kW Capstone C1000 natural gas-fired MicroTurbine, and a Cain ESG-1 heat recovery boiler. Overall electric plus thermal efficiency estimated at 72%.

New CHP system will replace three (3) existing dual-fuel steam boilers that have efficiencies of approximately 80%. The installation of the cogeneration plant will relieve the existing steam boilers of their hot water generation load as the cogeneration plant will directly address the hot water needs of the facility through a closed loop system with plate-and-frame heat exchangers. Generated electricity will provide approximately 85% of the facility's electric load based on historical analysis.

Emissions:

	Vendor supplied (lbs/MWh)	Annual Site Emissions Reduction (tons/yr)
NOx	0.4	(0.46)
SOx	-	(0.03)
PM-10	-	1.11
CO2	625	
CO	1.1	(27.2)
VOC	0.1	(2.13)

7. Annual Estimated Energy Savings:
Expected Annual Electricity Production: 7,600,00 kWh
Expected Annual Thermal Energy Production: 39,999 MMBtu of recovered heat for domestic water heating.

8. Project Cost: **\$3,457,450.00**

9. Annual Estimate Energy Cost Savings:
1st year cost savings: \$490,313
Average cost savings over 10 years \$339,690
10.74% IRR pre-tax, 4.88% post-tax.