



Agenda Date: 9/30/14
Agenda Item: 8D

STATE OF NEW JERSEY
Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, New Jersey 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)	
)	
BECTON, DICKINSON AND COMPANY)	DOCKET NO. QG14091013
)	
CAMDEN COUNTY TECHNICAL SCHOOLS)	DOCKET NO. QG14091014

Parties of Record:

Lorenzo Forlini, Facilities Leader, Becton, Dickinson and Company
James Clark, Business Administrator, Camden County Technical Schools

BY THE BOARD:

The New Jersey Board of Public Utilities' (the Board) Commercial & Industrial (C&I) Energy Efficiency Program includes nine (9) individual programs targeting the commercial and industrial market segments, consisting of New Construction, Retrofit, Pay for Performance - New Construction, Pay for Performance - Existing Buildings, Local Government Energy Audit, Direct Install, Combined Heat and Power Fuel Cells, Large Energy Users Program, and the Societal Benefits Charge Credit Program. 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, heating, ventilation and air conditioning, water heating and other measures in new or existing buildings.

In this Order, the Board considers the applications of Becton, Dickinson and Company, and Camden County Technical Schools for financial incentives under the Pay for Performance - Existing Buildings program. All proposed C&I EE financial incentives and rebates exceeding \$500,000 require explicit Board approval. See I/M/O the Comprehensive Energy Efficiency and Renewable Energy Resource Analysis for the 2009 through 2012 Clean Energy Program – Revised 2012-2013 Programs & Budgets – Revised Rebate Approval Process, BPU Dkt. No. EO07030203 (May 3, 2013).

The Pay for Performance - Existing Buildings program is open to existing commercial and industrial buildings with peak demand in excess of 100 kW in any of the preceding twelve months and requires the proposed project achieve a 15% source energy reduction. The program offers two types of incentives which are disbursed upon satisfactory completion of three program milestones. The first incentive is intended to help offset the cost of services associated with the development of the Energy Reduction Plan (ERP). An ERP detailing the set of measures that will achieve the performance target is required for each project. The second incentive type is performance-based and is related to the installation of recommended measures. The performance-based incentive will be paid out in two phases – the first at the completion of installation of the recommended measures, the second upon submittal of a Post Construction Benchmarking Report that verifies the level of savings achieved.

Becton, Dickinson and Company, in Franklin Lakes, Bergen County, submitted an application for a total financial incentive of \$907,412 under the Pay for Performance – Existing Buildings program. The application was received on July 2, 2013, and was thus enrolled under the program guidelines that were in effect from July 1, 2013 through June 30, 2014. The proposed project involves replacement of gas-fired hot water boilers, installation of variable frequency drives on exhaust fans, and electric chiller replacement in three buildings at a pharmaceutical office complex located at 1 Becton Drive in Franklin Lakes.

The estimated first incentive, for the energy reduction plan is \$50,000. The estimated second incentive, for completed performance-based installation of recommended energy efficiency measures is \$428,706. The estimated third incentive for the post construction benchmarking report, which is based on the one-year true up of the ERP, is \$428,706. This project has an estimated 17.6% total energy savings, which translates into an estimated annual energy savings of 6,099,141 kWh of electricity and 3,397 kW in electric demand. With an estimated first cost of \$3,105,853, this application will have an estimated annual energy cost savings of \$530,791, resulting in a payback period of 4.14 years and an internal rate of return of 17%.

Camden County Technical Schools, in Sicklerville, Camden County, has submitted an application for a total financial incentive in the amount of \$508,499 under the Pay for Performance – Existing Buildings program. The application was received on August 31, 2011 and thus falls under the program guidelines that were in effect in 2011. The proposed project includes lighting retrofits, addition of vending machine power controls, installation of boiler control systems, boiler replacement, replacement of hot water pumps, replacement of heating and ventilation units in the natatorium, replacement of motors with premium efficiency motors, piping insulation replacement, kitchen hood controller installation, installation of walk-in freezer controllers, replacement of a pre-rinse dishwasher unit, building management system upgrade, carbon dioxide sensor installation, building envelope installation, and transformer upgrades to a school facility at 343 Berlin Cross Keys Road in Sicklerville. The estimated first incentive, for the ERP is \$37,555. The estimated second incentive for completed performance-based installation of recommended energy efficiency measures is \$235,472. The estimated third incentive for the post construction benchmarking report, which is based on the one-year true up of the ERP, is \$235,472. This project has an estimated 20.9% total energy savings, which translates into an estimated annual energy savings of 1,176,124 kWh of electricity and 88,415 therms of natural gas. With an estimated first cost of \$2,075,000, this application will have an estimated annual energy cost savings of \$259,547, resulting in a payback period of 6.04 years and an internal rate of return of 10%.

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

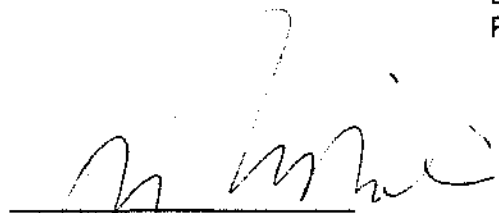
The Board **HEREBY ORDERS** the approval of the aforementioned applications for the total estimated incentive amounts of \$907,412 for Becton, Dickinson and Company and \$508,499 for Camden County Technical Schools, and **AUTHORIZES** issuance of standard commitment letters to the applicants identified above, setting forth the terms and conditions of these commitments.

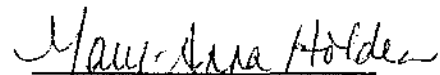
The effective date of this Order is October 10, 2014.

DATED: 9/30/14

BOARD OF PUBLIC UTILITIES
BY:


DIANNE SOLOMON
PRESIDENT



JOSEPH L. FIORDALISO
COMMISSIONER


MARY-ANNA 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 – BECTON, DICKINSON AND COMPANY AND CAMDEN COUNTY TECHNICAL
SCHOOLS

DOCKET NOS. QG14091013 and QG14091014

SERVICE LIST

Brian DeLuca
TRC Solutions
Program Manager
900 Route 9 North, Suite 104
Woodbridge, NJ 07095

Carl Teter
TRC Solutions
Associate Vice President
900 Route 9 North, Suite 104
Woodbridge, NJ 07095

Valentina Rozanova
TRC Solutions
Program Manager
900 Route 9 North, Suite 104
Woodbridge, NJ 07095

Michael Ambrosio
Applied Energy Group, Inc.
317 George Street
Suite 305
New Brunswick, NJ 08901

James Nappi
Applied Energy Group, Inc.
317 George Street
Suite 305
New Brunswick, NJ 08901

Caroline Vachier, Esq.
Deputy Attorney General
Division of Law
Dept. of Law & Public Safety
124 Halsey Street
Post Office Box 45029
Newark, NJ 07102-45029

T. David Wand, Esq.
Deputy Attorney General
Division of Law
Dept. of Law & Public Safety
124 Halsey Street
Post Office Box 45029
Newark, NJ 07102-45029

Kristi Izzo, Secretary
Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, NJ 08625-0350

Rachel Boylan, Esq.
Counsel's Office
Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, NJ 08625-0350

Elizabeth M. Teng
Office of Clean Energy
Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, NJ 08625-0350

Sherri Jones
Office of Clean Energy
Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, NJ 08625-0350

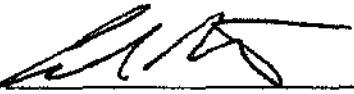
Allison E. Mitchell
Office of Clean Energy
Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, NJ 08625-0350

Lorenzo Forlini
Facilities Leader
Becton, Dickinson and Company
1 Becton Drive
Franklin Lakes, NJ 07417

James Clark
Business Administrator
Camden County Technical Schools
343 Berlin Cross Keys Road
Sicklerville, NJ 08081

Market Manager 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: 

Date: 8-20-14

Carl P. Teter, P.E., LEED AP, Associate Vice President
App# 21985

1. Application Number: **21985**
2. Program Name: **Pay for Performance – Existing Buildings**
3. Customer Contact (name, company, address, phone #):
Lorenzo Forlini, Facilities Leader
Becton, Dickinson and Company
1 Becton Drive, Franklin Lakes, NJ 07417
201-847-4962
4. Project Name and Address:
Becton, Dickinson and Company
1 Becton Drive, Franklin Lakes, NJ 07417
5. Rebate amount:
Incentive #1: \$50,000.00
Incentive #2: \$428,706.00
Incentive #3: \$428,706.00
Total: \$907,412.00

6. Brief description of measures

Measure Name	Measure Category	Measure Details
1 DHW boiler replacement (Campus Center)	Hot Water Boiler (Gas)	Replace electric Domestic Hot Water Boiler with a Gas Fired Condensing Domestic Hot Water Boiler, with a capacity of 195,000 Btu/h each / 92% efficiency
2 VFD Retrofit on EX Fans (Becton)	Custom Electric	Install VFD and controls on (2) existing constant volume exhaust fans
3 Chiller Replacement (Becton)	Water Cooled Chiller (Electric) - Partial Load	Replace chillers with (3) magnetic bearing water cooled centrifugal chillers, at 525 tons each, ILPV 0.307, with VFDs on the compressors. Refrigerant R134A will be used. VFD upgrade CHW pumps and cooling towers
4 Boiler replacement (Becton)	Hot Water Boiler (Gas)	Replace boilers in the Becton building with (4) 3000 mbh condensing level efficiency hot water boilers with 92% efficiency
5 Boiler replacement (Howe)	Hot Water Boiler (Gas)	Replace boilers in the Howe building with (2) 3000 mbh condensing level efficiency hot water boilers with 92% efficiency. Install will include two new distribution pumps which will come with VFDs

7. Annual Estimated Energy Savings:
6,099,141.00 kWh, 3,397kW
8. Annual Estimate Energy Cost Savings:
\$530,791

**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, Combined Heat & Power and Large Energy Users 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.

Maura H Watkins

By: _____

Date: 08-27-2014

Maura Watkins

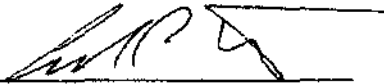
Quality Assurance Manager - Applied Energy Group, Inc.

Ref: _____
App # 21985
Applicant Becton Dickinson Co.
Payee Becton, Dickinson and Company

Committed Amount: \$907,412.00

**Market Manager 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: 

Date: 8-27-14

*Carl P. Teter, P.E., LEED AP, Associate Vice President
App# 14160*

1. Application Number: **14160**
2. Program Name: **Pay for Performance Existing Buildings**
3. Customer Contact (name, company, address, phone #):
James Clark, Business Administrator
Camden County Technical Schools
343 Berlin Cross Keys Road
Sicklerville, NJ 08081
856-767-7000
4. Project Name and Address:
Camden County Technical Schools
343 Berlin Cross Keys Road
Sicklerville, NJ 08081
5. Rebate amount:
Incentive #1: \$37,555.00
Incentive #2: \$235,472.00
Incentive #3: \$235,472.00
Total: \$508,499.00

6. Brief description of measures

	Measure Name	Measure Category	Measure Details (Describe Equipment/Controls to be Installed)
1	ECM 1 Lighting Retrofit	Custom Electric	Replace all light fixtures in all spaces
2	ECM 2 Vending Misers	Custom Electric	Add vending machine power controls
3	ECM 3 Burner Controls	Steam Boiler (Gas)	Install boiler control system
4	ECM 4 Boiler Replacement	Hot Water Boiler (Gas)	Replace boiler
5	ECM 5 HW Circ Pumps	Steam Boiler (Gas)	Replace hot water pumps - 5 & 7.5 HP, ODP Min. 92% Efficiency.
7	ECM 6 Natatorium AHU	Steam Boiler (Gas)	Replace H&V units
7	ECM 7 Prem Eff Motors	ODP Premium Motor - 3600 RPM	Replace motors with premium efficiency motors; Min. 92% Efficiency, 5,10, 15,20, 25 HP
8	ECM 8 Insulation	Steam Boiler (Gas)	Replace piping insulation. Existing insulation is fiberglass, 1", with paper jacket.
9	ECM 9 Kitch Hood Controller	Custom Electric	Install Kitchen Hood Controller
10	ECM 10 Walk in Freezer	Custom Electric	Install walk in freezer controllers
11	ECM 11 Pre Rinse	Custom Electric	Replace prerinse dishwasher unit. Existing equipment is in good condition. New sprayers will reduce water flow and does not have an efficiency rating.

12	ECM 12 BMS Upgrade	Custom Electric	Replace BMS Frontend & connect new units
13	ECM 13 CO2 Sensors	Custom Electric	Install CO2 Sensors
14	ECM 14 Building Envelope	Custom Electric	Seal envelope around glazing and seams
15	ECM 15 Transformer Upgrades	Custom Electric	Replace existing transformers with high efficiency units

7. Annual Estimated Energy Savings:

1,176,124 kWh

88,415 Therms

8. Annual Estimate Energy Cost Savings:

\$259,547

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

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Maura H Watkins

By: _____

Date: 08-27-2014

Maura Watkins

Quality Assurance Manager - Applied Energy Group, Inc.

Ref: _____
App # 14160
Applicant Camden County Technical Schools
Payee Camden County Technical Schools

Committed Amount: \$508,499.00