



Agenda Date: 2/24/16
Agenda Item: 8B

STATE OF NEW JERSEY
Board of Public Utilities
44 South Clinton Avenue, 3rd Floor, Suite 314
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)	
PROGRAM ENERGY EFFICIENCY INCENTIVES)	
EXCEEDING \$500,000.00)	DOCKET NOS.
)	
NEW JERSEY TRANSIT CORPORATION)	QG16010084
)	
NEW JERSEY AMERICAN WATER)	QG16010085

Parties of Record:

Steven Jenks, Manager, Energy & Sustainability Programs, New Jersey Transit Corporation
John Dunphy, Engineer, New Jersey American Water

BY THE BOARD:

The New Jersey Board of Public Utilities (Board) and its New Jersey Clean Energy Program (NJCEP) include nine individual Commercial & Industrial (C&I) Energy Efficiency (EE) 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 and Fuel Cells, Large Energy Users Program (LEUP), 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. All proposed C&I EE financial incentives and rebates exceeding \$500,000.00 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 Docket No. EO07030203 (May 3, 2013).

The purpose of the LEUP is to foster self-investment in energy efficiency, and combined heat and power projects while providing necessary financial support to large commercial and industrial utility customers in the State of New Jersey. Incentives will be awarded to customers

that satisfy the program's eligibility and program requirements to invest in self-directed energy projects that are customized to meet the requirements of the customers' existing facilities, while advancing the State's energy efficiency, conservation, and greenhouse gas reduction goals. To qualify, eligible entities must have contributed a minimum of \$300,000.00 into New Jersey's Clean Energy Program fund in the fiscal year prior to the application date (aggregate of all buildings/sites).

By this Order, the Board considers the applications of New Jersey Transit Corporation (NJ Transit), located at 1148 Newark Turnpike in Kearny, Hudson County, and of New Jersey American Water, located at multiple sites within its service territories.

NJ Transit has applied for an incentive of \$928,880.25, submitted under the 2015 LEUP program pursuant to the TRC FY 2015 Program & Budget Filing (September 17, 2014). The application was submitted and accepted under the above-referenced program guidelines in effect from July 1, 2014 through June 30, 2015. This project incentive is within the entity cap, based on the application approval date. The scope of the project entails replacing facility lighting with LED fixtures that include functionality such as occupancy and daylight sensors, wireless networking, and integrated controls to optimize light levels and fixture operation to reduce energy consumption. Installing these measures will reduce the annual electric usage by an estimated 3,398,109 kWh and will reduce the annual electric demand by 398 kW. The proposed project will have an estimated annual energy cost savings of \$386,062.00 at a total project cost of \$1,238,507.00. The applicant will also realize an operational and maintenance savings of \$18,830.00 per year. The simple payback period without incentive is 3.21 years; and when factoring in the energy cost savings and the avoided operational and maintenance costs, the payback period is reduced to 0.8 years.

New Jersey American Water has applied for an incentive of \$532,333.23, submitted under the 2015 LEUP program pursuant to the TRC FY 2015 Program & Budget Filing (September 17, 2014). The application was submitted and accepted under the above-referenced program guidelines in effect from July 1, 2014 through June 30, 2015. This project incentive is within the entity cap, based on the application approval date. The scope of the project entails installation of more efficient water pumps, internal epoxy coating of existing pumps, and installation of variable frequency drives. The new pumps will be sized appropriately for the needs of the system to reduce pump energy consumption. Epoxy coating the pump casing will improve performance and efficiency, and will reduce degradation over the life of the equipment. Lastly, variable frequency drives will allow speed control of the pumps based on demand on the system. Installing these measures will reduce the annual electric usage by an estimated 1,613,131.4 kWh. The proposed project will have an estimated annual energy cost savings of \$220,851.35 at a total project cost of \$1,173,502.00. The simple payback period without incentive is 5.3 years; and when factoring in the incentive and energy cost savings, the payback period is reduced to 2.9 years.

TRC, the Market Manager engaged by the Board to manage the NJCEP C&I EE programs, submitted certifications that the incentives were 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, also reviewed the applications and submitted certifications that the incentives were 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

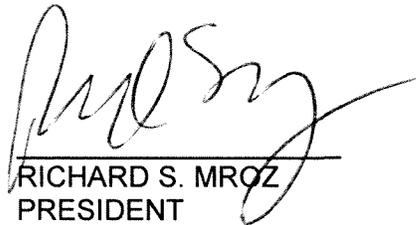
and Program Coordinator, Board Staff recommends that the Board approve the above-referenced applications.

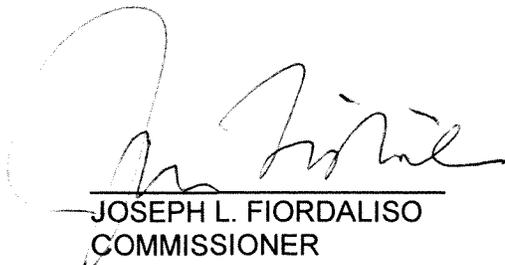
The Board **HEREBY ORDERS** the approval of the aforementioned application for the total estimated incentive amounts of \$928,880.25 for NJ Transit and \$532,333.23 for New Jersey American Water, and **HEREBY AUTHORIZES** issuance of a standard commitment letter to the applicant identified above, setting forth the terms and conditions of this commitment.

The effective date of this Order is March 5, 2016.

DATED: 2-24-16

BOARD OF PUBLIC UTILITIES
BY:


RICHARD S. MROZ
PRESIDENT

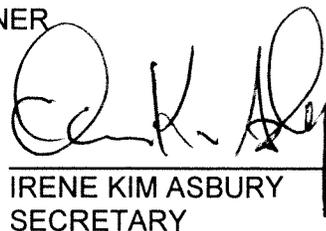

JOSEPH L. FIORDALISO
COMMISSIONER


MARY-ANNA HOLDEN
COMMISSIONER

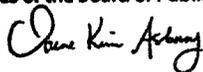

DIANNE SOLOMON
COMMISSIONER


UPENDRA J. CHIVUKULA
COMMISSIONER

ATTEST:


IRENE KIM ASBURY
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 – NEW JERSEY TRANSIT CORPORATION AND NEW JERSEY
AMERICAN WATER
DOCKET NOS. QG16010084 & QG16010085**

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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, 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: 01-08-2016

Maura Watkins

Quality Assurance Manager - Applied Energy Group, Inc.

Ref: _____
App # L16277

Applicant NJ Transit

Payee NJ Transit

Committed Amount: \$928,880.25

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: _____
Carl P. Teter, P.E., LEED AP, Associate Vice President
App# L16277

Date: 01-08-2016

1. Application Number: **L16277**
2. Program Name: **FY15 Large Energy Users Program**
3. Customer Contact:

Steven Jenks, Ph.D., Manager, Energy & Sustainability Programs
NJ Transit
One Penn Plaza
Newark, NJ 07105
(973) 491-8589
4. Project Name and Address:

Meadowlands Maintenance Complex Lighting Upgrade
1148 Newark Turnpike
Kearny, NJ 07032
5. Incentive Amount: **\$928,880.25**
6. Brief description of measures:

Replacement of (491) total existing 458 and 1100 watt high bay HID fixtures located throughout the interior of NJ Transit's Meadowland Maintenance Complex with new LED fixtures. A total of (451) high bay LEDs will be installed which consume between 234 and 487 watts per fixture. Each fixture will have built-in occupancy and day-light sensors, wireless networking, and integrated controls to optimize light levels and fixture operation to further reduce energy consumption.
7. Annual Estimated Energy Savings:

Electric: **3,398,109 kWh, 398 kW**
Gas: **n/a**
8. Annual Estimated Cost Savings: **\$386,062.00, including operational and maintenance savings**
9. Project Cost: **\$1,238,507.00**
10. Operational and Maintenance Savings: **\$18,830.00**
11. Simple Payback period: **3.21 years without incentives. 0.80 years with incentive.**
12. IRR: **30.6% without incentives. 124.7% with incentive.**

**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: 01-19-2016

Maura Watkins

Quality Assurance Manager - Applied Energy Group, Inc.

Ref: _____
App # L16270
Applicant New Jersey American Water
Payee NJAW

Committed Amount: \$532,333.23

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: 

Carl P. Teter, P.E., LEED AP, Associate Vice President
App# L16270

Date: 01-20-16

1. Application Number: **L16270**
2. Program Name: **FY15 Large Energy Users Program**
3. Customer Contact:

John Dunphy, Engineer
New Jersey American Water
1025 Laurel Oak Road
Voorhees, NJ 08043
(908) 791-3474

4. Project Name and Address:

New Jersey American Water Pumping Station Upgrade

	Building name	Address	Description / Use
1	Montgomery II Booster	Montgomery Rd & Rt 206, Montgomery, NJ	Booster Station
2	Otterbrook	Flood Gate Rd, Gloucester, NJ (B- 2907, L-50)	High Service & Well Station
3	Laurel Springs Booster	Trenton & Grand Ave, Laurel Springs Borough, NJ	High Service & Well Station
4	Delaware River Water Treatment Plant	213 Carriage Lane, Delran, NJ	Water Treatment Plant
5	Diamond Hill Booster	Diamond Hill Rd & Valley Rd, Berkeley Heights, NJ	Booster Station

5. Incentive Amount: **\$532,333.23**
6. Brief description of measures:

The ECMs to be installed at the various sites are all intended to reduce the energy to pump water. These measures include the installation of more efficient water pumps, epoxy coating of existing pump internals and VFD installation. Installing new, more efficient pumps sized appropriately for the needs of the system will reduce energy consumption. Furthermore, epoxy coating of the pump casing will improve performance/efficiency and reduce degradation over the life of the equipment. Lastly, VFDs will allow speed control of the pumps based on demand of the system (water flowrate, pressure, etc).

7. Annual Estimated Energy Savings:

Electric: **1,613,131.4 kWh**

8. Annual Estimated Cost Savings: **\$220,851.35**

9. Project Cost: **\$1,173,502.00**

10. Operational and Maintenance Savings: **None reported**

11. Simple Payback period: **5.3 years without incentives. 2.9 years with incentive.**

12. IRR: **16% without incentives**