



Agenda Date: 4/23/14
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 NEW JERSEY CLEAN ENERGY) ORDER
PROGRAM AUTHORIZATION OF COMMERCIAL AND)
INDUSTRIAL (C&I) PROGRAM ENERGY EFFICIENCY)
INCENTIVES EXCEEDING \$500,000 – US GENERAL)
SERVICES ADMINISTRATION) DOCKET NO. QG14030297

Party of Record:

Brian Burns, Contracting Officer, General Services Administration

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, Small Combined Heat and Power (CHP) and Fuel Cells (FC), 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.

The US General Services Administration, New York, NY, has submitted an application for a total financial incentive in the amount of \$665,147.20 under the 2012 Pay for Performance - New Construction program, for a project located at the Peter W. Rodino Federal Office Building at 970 Broad Street, Newark, NJ. The estimated first incentive, for the proposed energy reduction plan (ERP), is \$45,872.20. The estimated second incentive, for the as-built reduction plan, including upgrading of lighting fixtures, installation of occupancy controls, installation of high efficiency coolers and cooling towers, upgrading airside Heating Ventilation and Air Conditioning systems, and installation of variable frequency drives for demand controlled ventilation, is \$458,722. The estimated third incentive for the commissioning report is \$160,553. This application has an estimated 29% total energy savings¹ as compared to the current energy code used in New Jersey, American Society of Heating and Air-Conditioning Engineers (ASHRAE) 90.1.2007, and will save the customer an estimated 1,272,690 kWh of electricity annually, with

¹ Energy savings and cost savings are measured from a code-compliant building ASHRAE 90.1-2007 baseline.

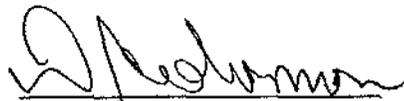
an estimated demand reduction of 103.79 kW annually. Through this project, the customer will also save an estimated 24,020 therms of natural gas annually. Overall, this application will have an estimated annual energy cost savings of \$209,642, with a 19% internal rate of return and a 5.1 year payback. This project has an estimated measure incremental cost of \$1,079,465.

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, Staff from the Division of Economic Development and Energy Policy, acting in place of the Program Coordinator, Applied Energy Group, Inc. (AEG) due to a potential conflict of interest, timely reviewed the application and submitted its certification to locating documentation supporting inputs used to calculate the within rebate amounts, evidencing TRC's evaluations of those inputs as required by the program's policies and procedures. Staff notes the listed amount is the true and accurate estimated incentive for which the applicant is eligible. Based on the above, Staff recommends approval of the application.

The Board **HEREBY ORDERS** the approval of the aforementioned application for the total estimated incentive amount of \$665,147.20 for the US General Services Administration, and **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 May 2, 2014.

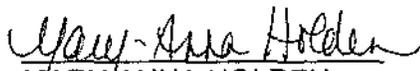
DATED: 4/24/14

BOARD OF PUBLIC UTILITIES
BY:

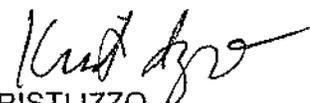

DIANNE SOLOMON
PRESIDENT


JEANNE M. FOX
COMMISSIONER

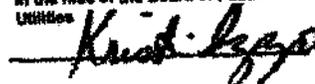

JOSEPH L. FIORDALISO
COMMISSIONER


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 NEW JERSEY CLEAN ENERGY PROGRAM AUTHORIZATION OF
COMMERCIAL AND INDUSTRIAL (C&I) PROGRAM ENERGY EFFICIENCY INCENTIVES
EXCEEDING \$500,000 – US GENERAL SERVICES ADMINISTRATION
DOCKET NO. QG14030297

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
Deputy Attorney General
Division of Law
Department 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

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

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

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

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

Veronica Beke
Deputy Attorney General
Division of Law
Department of Law & Public Safety
124 Halsey Street
Post Office Box 45029
Newark, NJ 07102-45029

Brian Burns, Contracting Officer
US General Services Administration
26 Federal Plaza
New York, NY 10278

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# 17796

Date: 2-18-14

1. Application Number: **17796**
2. Program Name: **Pay for Performance- New Construction**
3. Customer Contact (name, company, address, phone #):
Brian Burns, Contracting Officer
General Services Administration
26 Federal Plaza, New York, NY 10278
212-264-9926
4. Project Name and Address:
Peter W. Rodino Federal Office Building
970 Broad Street, Newark, NJ 07102
5. Rebate amount:
Incentive #1: \$45,872.20
Incentive #2: \$458,722.00
Incentive #3: \$160,553.00
Total: \$665,147.20

6. Brief description of measures

Energy Efficiency Measure	Brief Description of Measure	Manufacturer	Model	Capacity	Capacity Units	Quantity	Efficiency	Efficiency Units	Proposed Cost	Cost Source	Component Description	Baseline Cost	Cost Source	Incremental Costs	
															Proposed Components
1	Fluorescent Fixtures	Office Space - Solar Mechanical - Dayton Starwells - Dayton Holdings - Revelation	OS-776R2D2HG-XX-7 MR-V2WAE22Q-UNV-1ZEB S-STWCS22-CP-UNV-1ZEBD H-0M67H2RPLTWV-WH120Z77	OS-277 -120/277 H- 120/277	MR S H-	5775 Fixtures	N/A	N/A	N/A	\$425,000	Lighting Vendor	1, 2 & 3-Lamp Spec 78 25W & 28W Luminaires	\$390,000	Manufacturer	\$75,000
2	Occupancy Sensors - Wall Mounted (OSW)	West Stepper	DT-205	800 to 1200 FF	FF	Z27 ceiling mounted sensors 120 wall mounted sensors	N/A	N/A	\$177,000	Lighting Vendor	None Required	\$0	Manufacturer	\$177,000	
3	Water Cooled Chiller (Ejector)- Fan Load	York Chillers	CH-1 - YKRFESQZ-CSSS CH-2 - YNRFESQZ-CSSS CH-3 - YK0300CH-CSSS	CH-1 & 2 - 550 CH-3 - 250	Tons	3 Total	CH-1 & 2 - 38 NPLV CH-3 - 504 NPLV	NPLV	\$728,000	Vendor Quotes	Equipment Efficiencies Required by 901-2007	\$550,000	Manufacturer	\$78,000	
4	Unitary HVAC/SAH Systems	York/Johnson Controls	AHU-1.1 - Solution 38x38 AHU-2.1 - Solution 38x38 AHU-2.2 - Solution 48x72 AHU-2.3 - Solution 63x63 AHU-4.5,6,11 - Solution 78x86 AHU-9 - Solution 63x81 AHU-12.1 - Solution 63x81 AHU-12.2,5 - Solution 38x38 AHU-13.1 - Solution 72x80 AHU-14.1 - Solution 78x86	AHU-1.1 - 2000 AHU-2.1 - 4500 AHU-2.2 - 5600 AHU-2.3 - 11500 AHU-4.5,6,11 - 19000 AHU-9 - 19000 AHU-12.1 - 12500 AHU-12.2,5 - 2400 AHU-13.1 - 18000 AHU-14.1 - 18000	CFM	16 Total	AHU-1.1 - 91.7% AHU-2.1 - 91.7% AHU-2.2 - 91.7% AHU-2.3 - 91.7% AHU-4.5,6,11 - 94.1% AHU-9 - 91.7% AHU-12.1 - 91.7% AHU-12.2,5 - 88.5% AHU-13.1 - 91.7% AHU-14.1 - 91.7%	Motor Efficiency	\$1,200,000	Vendor Quotes	Performer FCUs and Upgraded AHU Controls	\$650,000	Manufacturer	\$550,000	
5	VFD - Variable Air Volume	Johnson Controls	Network Control Engine - MS-NC2550-D	N/A	N/A	85 CO2 Sensors, counting DA on 14 AHUs	N/A	N/A	\$120,000	Vendor Quotes	None Required	\$0	Manufacturer	\$120,000	

Measure incremental costs:	\$1,000,000
Partner fees for modeling:	\$38,400
Partner fees for inspection & verification:	\$27,565
Partner fees for other services related to the program:	\$13,500
Total Project Incremental cost:	\$1,079,465

7. Annual Estimated Energy Savings: SEE BELOW

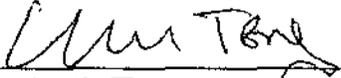
8. Annual Estimate Energy Cost Savings:

Energy Efficiency Measure		Annual Energy Savings (MMBtu) (kWh)		Most Affected Fuel	Demand Savings (kW)	Annual O&M Savings (\$)	Annual Cost Savings (\$)	Lifetime (years)	Payback (years)	IRR	Lifecycle Savings	Weighted Lifetime
1	Fluorescent Fixtures	-715	440,740	Electricity	50.31	\$0	\$52,343	15	1.4	70%	\$549,869	\$785,147
2	Occupancy Sensors - Wall Mounted (OSW)	-463	270,100	Electricity	20.04	\$0	\$31,746	15	5.6	16%	\$201,987	\$476,197
3	Water Cooled Chiller (Electric) - Full Load	108	783,920	Electricity	89.49	\$0	\$111,158	25	0.7	143%	\$1,857,615	\$2,778,956
4	Unitary HVAC/Split Systems	1,994	-203,860	Gas	-23.27	\$0	-\$2,424	15	-226.9	∞	-\$578,942	-\$36,366
5	VFD - Variable Air Volume	1,478	-18,210	Gas	-32.78	\$0	\$16,819	15	7.1	11%	\$80,782	\$252,282
TOTALS:		2,402	1,272,690		103.79	\$0	\$209,642		5.1	19%	\$2,111,311	20

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

I, Elizabeth Teng, certify that I have reviewed the file for the submitted application referenced below consistent with policies and procedures for the applicable 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 and Pay for Performance, the Division of Economic Development and Energy Policy, Office of Clean Energy Staff certifies locating documentation supporting the inputs used to calculate the rebate amount reflecting TRC's evaluation of those inputs.

By:  Date: 04/09/14
Elizabeth Teng
Rate Analyst - NJBPU Office of Clean Energy

Ref:
App # 17796

Applicant US General Services Administration

Payee US General Services Administration

Committed Amount: \$665,147.20